This is the first complete and fully documented history of the tea industry in India – an industry which has proved of major importance in the economy of the country. The account begins with a survey of the historical background, from early tea drinking in Asia and Europe to the establishment of commercial tea growing in India. The second section is concerned with the production of tea, and describes the changes which have occurred from the first phase of activity in Assam up to the present day, with a chapter on tea growing in Pakistan. Many other important topics are dealt with in the latter part of the book, including labour in the industry, scientific research, technical developments, organization, transport, propaganda, and the role of the planters in the Second World War.

Sir Percival Griffiths uses extensive quotations from original sources, and the book is a fascinating and important study on an industry which has greatly affected both India and Great Britain. The book includes a large number of half-tone illustrations, and six maps.

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THE HISTORY OF THE INDIAN TEA INDUSTRY

by Sir Percival Griffiths, KBE, CIE

Indian Civil Service (retired)
Sometime Scholar of Peterhouse, Cambridge

WEIDENFELD AND NICOLSON
5 Winsley Street London W1

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To
Michael
and all other
Tea Men

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PREFACE

The documentary sources for *The History of the Indian Tea Industry* are official reports, standard works on the industry, the annual reports of the various associations concerned, and to a lesser extent the records of particular companies. For the modern period these have been supplemented by the writer's personal knowledge, gained over a period of twenty-six years during which he was Adviser to the Indian Tea Association either in Calcutta or London.

Unfortunately, the adequacy of the documentation varies considerably from one part of the field to another. In the case of North India there is almost an embarrassment of riches. There have been numerous reports by government officials or committees of inquiry from the earliest days and many of them delight the heart of the historian by their thoroughness and attention to detail. From 1882 these are supplemented by the admirable reports of the Indian Tea Association of Calcutta and some of its affiliated associations or branches.

In South India the task of delving for facts is much more difficult. Presumably because tea has never been as important there as in Assam, there have been relatively few official committees of inquiry, and perhaps for the same reason the annual reports of the United Planters Association of Southern India do not provide a conspectus of the history of the industry at all comparable to that given by the corresponding documents in North India. The officials of the United Planters Association have been most helpful, but they cannot manufacture records that do not exist. At one time the writer was in despair and wondered if he should confine this book to the North Indian tea industry. Fortunately Mr J. L. H. Williams of Brooke Bond & Company, who was for many years a leading figure in the South India tea industry, came to the rescue and placed his great store of knowledge at the writer's disposal. At the same time various members of the firm of James Finlay & Company gave much help. Nevertheless, it has not

been possible to give equal treatment to the North and the South and the writer hopes that his South Indian friends will not attribute this failing to any bias of his in favour of the North.

A further difficulty has arisen from the considerable gaps in the documentation at the London end. The voluminous records of the Indian Tea Association, London, were completely destroyed by enemy action in 1941, and in spite of repeated inquiries from everybody connected with tea, contemporary records with regard even to such important matters as the foundation of the Indian Tea Association, London, are not forthcoming. Fortunately, it has been possible to fill in some of these gaps by recourse to a work written when the records still existed. Few industries have been the subject of such outstanding and enlightened research as that contained in Uker's book *All About Tea*. It is a remarkable book and the writer has not scrupled to make free use of it.

It is always difficult in an historical work to decide how much use to make of quotations. In the case of the tea industry many of the most important documents are for all practical purposes inaccessible to the ordinary reader. The writer has therefore reproduced extensive extracts from some of the main authorities. He has followed a similar policy in dealing with highly technical matters where it seemed best to let experts explain their own mysteries.

The observant reader will detect inconsistencies in the spelling of Indian names in this work. Whenever he has been free to do so, the writer has followed the scientific and generally accepted Hunterian system, but there are many names so familiar to the planter that it would be pedantic not to use the form with which he is familiar, and in the case of quotations the original spelling has been maintained.

The writing of this book has been spread over a number of years and it was obviously necessary to have a deadline. The story of the Indian tea industry is therefore brought to an end in 1960.

It is only possible to name a few of the many individuals who have helped the writer with information or advice. First and foremost among them was the late Mr G. H. Mardon, whose knowledge of the London end of the industry was unrivalled. He contributed so much to this book that it is sad that he has not lived to see it completed. Mention must also be made of the late Mr H. F. Clark and Messrs J. L. Llewellyn and P. Crombie, all of them well-known figures in the tea world. In the scientific and technical field, Professor Sir Frank Engledow, Dr E. B. Hughes, and Mr R. W. Palmer have made their knowledge and experience freely available. Mr R. E. J. Hammond, joint secretary of the Indian Tea Association (London) has helped greatly with the hunting up of references. The debt of the writer to all these gentlemen, as well as to Mr H. E. Colvin, who read most of the book through and made valuable suggestions, is gratefully acknowledged.

Thanks are also due to my wife who once again has put up with many lonely evenings in order that this book might be written.

Finally, sincere thanks are due to Daphne Hammond, who has shown great patience over the secretarial work involved and has more than once stopped the writer from perpetrating a major 'howler'.

Wentworth
March 1967

P. J. GRIFFITHS

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FOREWORD

Tropical plantation crops developed by external enterprise in the past century have gained a significant place in world commerce. To producing countries they have brought employment, exports, and widespread use of once unproductive land: to the temperate climate consumers important foods, beverages, and industrial raw materials. A score or so in number, about a dozen of them ranking prominently, they are fascinatingly diverse scientifically, agriculturally and commercially. Tea has a distinctive place among them and Indian tea in particular, as the pioneer. Behind production techniques in field and factory, recruitment and care of workers, health, transport, selling, encouragement of consumption and other aspects lies an intriguing technical, social and political history. In the early years in India the initiative of a brilliant succession of practical planters and engineers effected steady progress despite immense difficulties. But from the start, science played a part, and for more than fifty years the tea industry maintained its own research station in Assam. Tea stands or falls by quality and for over twenty-five years the industry wholly supported basic chemical research in this subject by specialists in United Kingdom laboratories. Among both the practical and the scientific, men of eminence and great character have left their mark. The published story of these men and of the industry's development is dispersed over two centuries of incidental references and books limited in scope and now library rarities. Only a rare combination of aptitudes and experiences could fit a writer to present the history of Indian tea in all its aspects. The Indian Civil Service, political work for the Government of India, a central advisory position in the Indian Tea Association, many sided commercial and other connections with India and Pakistan, a deep interest in history with a flair for research and for writing, have uniquely fitted the author to be the historian of tea. In this volume

he has maintained the high, pleasant, literary quality of his other books on Indian subjects and brought into play a vast range of knowledge and a most discerning judgement.

Cambridge, March 1967. F. L. ENGLEDOW

Section 1

HISTORICAL BACKGROUND

CHAPTER ONE

EARLY TEA DRINKING: I. ASIA

During the twenty years of the Revolutionary and Napoleonic wars the English people were kept at their best by the stimulating sense of the danger of invasion. By the middle of the nineteenth century those hazards had been forgotten and if they were not to suffer the deadening effects of security, the British middle classes needed some new outlet for their energies. Thanks to the Industrial Revolution and to the dynamic economic theories of their age, they found that outlet in commercial expansion overseas and the exuberance of British energy led to the foundation of new industries in every quarter of the globe.

Nowhere were the qualities of the men of that age better displayed than in the establishment of the tea industry in India. From a purely logical view the odds were heavily against the pioneers. They knew nothing about tea and little about the country in which they were to work. They had to hew their way through trackless jungles, to cope with disease and the ravages of wild beasts, to recruit and maintain the morale of labourers from far distant provinces and last, but not least, to learn the technique of tea cultivation and manufacture. Only two things were in their favour. The first was their boundless belief in themselves. The second was the fact that, unlike the pioneers in many industries, they did not have to create a demand for their product. Tea drinking had behind it a history of nearly two hundred years in England, of rather longer in India and Persia, and of centuries in the Far East. In the thirties of the nineteenth century, political changes cut off the supplies from China to the West and left an established market for those who were enterprising enough to seize it. Prompted by the Governor-General and the East India Company, British business men rushed to fill the gap – but they could not have done so unless the demand for tea had already been well established. Our story of the history of the Indian tea industry must therefore begin with a brief examination of the tea market and the channels of its supply before the British grew tea in

India. Obviously we must begin with China, the immemorial home of tea.*

Nothing is known with any certainty of the early history of tea in that country. Tradition indeed ascribes the discovery of the tea bush to the Emperor Shin Nong, three thousand years before the Christian era, but nobody believes the tradition and Samuel Ball, in the standard English work on tea in China, shrewdly disposes of the myth:

> It is a common practice among empirics, even at the present day, to ascribe the discovery of their several nostrums to the Emperor Shin Nong, though all such pretension is treated as fabulous; and, with respect to tea in particular, receives no sanction from the more recent Chinese accounts of the history of that tree.

According to a much later legend, also quoted by Samuel Ball, tea was discovered in the time of the Tsin dynasty in the third century AD:

> In the reign of Yuen Ty in the dynasty of Tsin an old woman was accustomed to proceed every morning at daybreak to the market-place, carrying a cup of tea on the palm of her hand. The people bought it eagerly; and yet, from the break of day to the close of evening, the cup was never exhausted. The money received she distributed to the orphan and the needy beggar frequenting the highways. The people seized and confined her in prison. At night she flew through the prison window with her little vase in her hand.

These legends prove nothing except the antiquity of tea and the special place it came to occupy in the Chinese mind. The first authenticated references to tea in China are found in the fourth century AD and it is clear that its medicinal use was then well known. It was well regarded at the Imperial Court, and W. H. Ukers, whose book *All About Tea* has laid all students of the tea industry under a heavy debt, quotes from a fifth-century Chinese annalist who refers to a mountain 'on which grows the tea reserved for the Emperor as tribute tea'. Tea soon ceased to be considered as a medicine and its popularity as a beverage increased so steadily during the seventh and eighth centuries that the revenue authorities in China levied a duty on it. During this period the Chinese learned that tea must be matched with the water of the locality where it is to be drunk. In the eighth century, a Chinese scholar, Lu Yu, wrote a remarkable book, the *Ch'a Ching* or the *Tea Book*. Ukers has published a digest of a translation of this work and it is of such importance in the early history of tea that a few lengthy extracts seem justified. First comes an interesting passage about the plucking and manufacture of tea:

> Tea is generally plucked during March, April or May. On rich soil, the tea

* Although the original authorities have been consulted it will be obvious that this and the following chapter owe much to the treatment of the subject by Ukers and Ball.

shoots, (the flush), four or five inches long like the green stalks of the bracken and thorn ferns, are plucked. The best of the three, four or five tea shoots growing on the thick branches is plucked. It is not plucked on a rainy or cloudy day. It is plucked only when the weather is fine. It is steamed, pounded, patted, baked, packed, and repacked.

There are a thousand different appearances of tea leaves. Generally speaking, some look like the Tartar's boots [wrinkled], some look like the buffalo's breast [regularly shaped], some look like the floating clouds [curled] arising from the mountains, some look like the ripples on water caused by a breeze [slightly wrinkled], some look dull brown, and some look like a piece of newly cultivated land covered with puddles [uneven] after violent rain. These are good tea. Others are like the first leaves of the bamboo shoots; they are hard and stiff, and it is difficult to steam and pound them; again, there are others which look like the lotus under frost – both the stalk and leaves wither. These are old and bad tea . . . From plucking to final packing, there are seven processes. From the appearance of the Tartar's boots to that of the lotus under frost, there are eight grades. Those who attribute smoothness, darkness, and flatness to good tea are connoisseurs of an inferior order; those who attribute wrinkles, yellowness, and uneven surface to good tea are the ordinary connoisseurs; those who hold the opinion that these qualities may or may not belong to good tea are the superior connoisseurs. Because whether tea is good or otherwise depends upon its flavor. The tea leaves which contain the juice are smooth, and when it is squeezed out the wrinkles appear. The tea which is manufactured by a slow process [consuming more than a day] is dark. If it is manufactured in a day it is yellow. The tea which is steamed and pressed becomes flat, and if it is not pressed, then its surface is uneven.

Lu Yu goes on to say:

Drinking tea was very popular in the T'ang dynasty AD 620–907. In some parts of Honan, Shensi, Hunan and Szechwan the drink was universal. There is ordinary tea and ground tea. What is called cake tea is put in a jar or bottle after being pounded, and the boiling water is poured over it. Sometimes onion, ginger, ju-jube, orange peel, and peppermint are used and it is permitted to boil for some time before skimming off the froth. Alas! this is the slop water of a ditch.

Lu Yu had strong views as to the beneficial effect of tea:

The effect of tea is cooling. As a drink it suits very well persons of self-restraint and good conduct. When feeling hot, thirsty, depressed, suffering from headache, eyeache, fatigue of the four limbs, or pains in the joints, one should drink tea only, four or five times. The beverage is like dark red wine and sweet dew. If the tea leaves are not plucked at the proper season, are not properly prepared, and are mixed with herbs, they cause disease if consumed . . . In regard to drinks, boiled water is to quench thirst, wine to drown sorrow, and tea is to avoid sleepiness.

It appears that much of the early China tea was made by small farmers

and the stove for firing was frequently that used for culinary purposes. Thus Ball tells us that, even in the nineteenth century 'the vessel, which in the morning is employed to boil rice for their breakfast, is in the evening used to roast tea'. This domestic cultivation and preparation brought tea within the financial reach of every Chinese household and the methods employed are therefore worthy of study. Those methods changed little during the centuries preceding the modern era and the detailed description of them by Robert Fortune, a botanist who visited China in 1843 for the express purpose of studying the cultivation and manufacture of tea, applies also in the main to the earlier period.

The farms are small, each consisting of from one to four or five acres; indeed, every cottager has his own little tea garden, the produce of which supplies the wants of his family, and the surplus brings him in a few dollars, which are spent on the other necessaries of life . . .

In the harvest seasons the natives are seen in little family groups on the side of every hill, when the weather is dry, engaged in gathering the tea leaves. They do not seem so particular, as I imagined they would have been, in this operation, but strip the leaves off rapidly and promiscuously, and throw them all into round baskets made for the purpose out of split bamboo or rattan . . . When a sufficient quantity of leaves are gathered, they are carried home to the cottage or barn, where the operation of drying is performed.

The Chinese cottages, amongst the tea hills, are simple and rude in their construction, and remind one of what we used to see in Scotland in former years, when the cow and pig lived and fed in the same house as the peasant. . . Nevertheless, it is in these poor cottages that a large proportion of the teas, with their high-sounding names, are first prepared. Barns, sheds, and other outhouses, are also frequently used for the same purpose, particularly about the temples and monasteries.

The drying pans and furnaces in these places are very simply constructed. The pans, which are of iron, and are made as thin as possible, are round and shallow, and, in fact, are the same, or nearly the same, which the natives have in general use for cooking their rice. A row of these are built into brick work and *chunam*,* having a flue constructed below them, with the grating, or rather fire-place, at one end, and the chimney, or, at least, some hole to allow the smoke to escape, at the other . . . The pans become hot very soon after the warm air has begun to circulate in the flue beneath them. A quantity of leaves, from a sieve or basket, are now thrown into the pans, and turned over, shaken up, and kept in motion by men and women stationed there for this purpose. The leaves are immediately affected by the heat. They begin to crack, and become quite moist with the vapour or sap which they give out on the application of the heat. This part of the process lasts about five minutes, in which time the leaves lose their crispness, and become soft and pliable. They are then taken out of the pans and thrown upon a table, the upper part of which is made of split pieces of bamboo. . . Three or four persons now

* Plaster.

surround the table, and the heap of tea leaves is divided into as many parcels, each individual taking as many as he can hold in his hands, and the rolling process commences. I cannot give a better idea of this operation than by comparing it to a baker working and rolling his dough. Both hands are used in the very same way; the object being to express the sap and moisture, and at the same time to twist the leaves. . . This part of the process also lasts about five minutes, during which time a large portion of green juice has been expressed. . .

When the rolling process is completed the leaves are removed from the table and shaken out for the last time . . . and are exposed to the action of the air. The best days for this purpose are those which are dry and cloudy, with very little sun . . . There is no stated time for this exposure, as much depends upon the nature of the weather and the convenience of the work-people . . . the leaves, which are now soft and pliant, are again thrown into the drying-pans, and the second heating commences. Again one individual takes his post at the furnace, and keeps up a slow and steady fire. Others resume their places at the different drying-pans – one at each – and commence stirring and throwing up the leaves, so that they may all have an equal share of the fire, and none get scorched or burned.

Amongst much that is confused in the history of tea in China, three clear facts have emerged – it was indigenous to the country, it was discovered and used at a very early date, and the simplicity of the technique required for its manufacture led to the establishment of the almost universal habit of tea-drinking in China many centuries before the British thought of growing tea in India. In Japan, on the other hand, tea was an exotic, introduced by Buddhist priests between the sixth and eighth centuries AD and regarded initially as a medicine. Japanese priests, however, soon realized that apart from its medicinal qualities, it was a pleasant drink and it began to be cultivated in many temple gardens. This attracted the attention of the Japanese emperor, and in the ninth century tea became part of the Japanese imperial tribute. It was, nevertheless, a long time before tea drinking became at all general, and according to Ukers its growth was then helped by a spectacular incident which he thus describes:

The mighty Minamoto Shogun Sanetomo, AD 1203–19, became desperately ill from over-feasting and summoned Yesai to offer prayers for his recovery. Never doubting the efficacy of his petitions, the good abbot supplemented his prayers with his favourite beverage, sending in all haste to his temple for some of the tea grown there. He administered to the sufferer a drink prepared by his own hands and lo! the great general's life was spared. Naturally enough Sanetomo wanted to know more about tea; so Yesai presented him with a copy of his book and subsequently the Shogun became a tea devotee. The fame of the new remedy spread far and wide, nobles and commoners alike seeking its healing virtues.

From this time tea grew steadily in popularity and acquired a very

important place in Japanese social life. Tea in Japan, as in China, was to a great extent grown for domestic use by the small farmer 'in hedges and detached parts of his farm, which are less favourable for tillage'. At a later stage, as is well known, it became a commercial crop. It is interesting to note that the normal Japanese practice was to grind the leaves to powder and according to a nineteenth-century authority quoted by Ball, after infusion in a cup 'it is whipped with a split bamboo or denticulated instrument, till it creams, when they drink both the infusion and powder, as coffee is used in many parts of Asia'.

It is a reasonable guess that the habit of tea drinking, now universal in Central Asia, spread to that region from China and it is certain that it was well established there by the eighteenth century. A writer in the *Edinburgh Review* of 1817, quoted by Samuel Ball, states that:

> the Calmucs are great consumers of this tea . . . it is meat and drink to them. It is mixed with milk, salt, and butter, so that it forms a more substantial diet than the fragrant fluid which smokes on our tables . . . the *tea-cook* is an important domestic in the train of every substantial Calmuc.

An equally important part is played by tea in Tibet where it is said that a well-to-do Tibetan drinks from thirty to seventy cups of tea in a day. According to Sir Charles Bell, a well-organized government was first established in Tibet in the seventh century AD by Song-tsen Gampo whose Chinese queen introduced butter, cheese, and barley-beer. Song-tsen Gam-po's grandson carried the civilizing process a stage further and introduced tea from China. It soon became established as the national drink and played an important part in temple life. Waddell, the leading modern authority on the Buddhism of Tibet thus describes the place of tea in the temple:

> Before drinking, the Lamas, like the Romans, pour out some of the beverage as a libation to their *Lares* and other gods. A common grace before drinking tea (which is served out eight or ten times daily at the temples and cathedrals – the service being interrupted for this temporal refreshment) is: 'We humbly beseech thee! that we and our relatives throughout all our life-cycles may never be separated from the three holy ones. May the blessing of the trinity enter into this drink.' (Then sprinkling a few drops on the ground with the tips of the fore and little fingers the grace is continued) 'To all the dread locality, demons of this country, we offer this good Chinese tea! Let us obtain our wishes! And may the doctrines of Buddha be extended.'

When Captain Turner of the Bengal Army went on an embassy to the Tashi Lama in 1783 he found tea drinking almost universal in Tibet and the neighbouring countries, and in particular use on ceremonial occasions. He thus describes his entertainment by the Deb Raja of Bhutan:

> Three small benches, similar to that before the Raja, were brought and placed before us: and presently a servant came, bearing a large tea pot of

white metal, embossed, and highly ornamented with some other metal, of a yellow colour. He approached the Raja, and then giving a circular turn to the tea-pot, so as to agitate and mix its contents, he poured a quantity into the palm of his hand, which he had contracted to form as deep a concave as possible, and hastily sipped it up . . .

The Raja held out, upon the points of the fingers of his right hand, a shallow lacquered cup, of small circumference, which was filled with tea. Three cups had been sent, and were set down before us; the Raja directed his servant to fill them also; still holding the cup in his right hand, he repeated, in a low and hollow tone of voice, a long invocation; and afterwards dipping the point of his finger three times into the cup, he threw as many drops upon the floor, by way of oblation, and then began to sip his tea. Taking this as a signal, we followed the example . . . We found this liquor extremely unlike what we had been used to drink, under the same name; it was a compound of water, flour, butter, salt, and *bohea* tea, with some other astringent ingredients, all boiled, beat up, and intimately blended together. I confess the mixture was by no means to my taste, and we had hitherto shunned, as much as possible, these unpalatable libations, yet we now deemed it necessary to submit to some constraint; and having at last, with a tolerable grace, swallowed the tea, we yet found ourselves very deficient in the conclusion of the ceremony.

When he reached Tibet, Turner found some difference in the practice of tea-drinking as compared with Bhutan.

It is the custom in Bootan to eat whole roasted rice, or parched grain, with tea; in Tibet they take malt meal, reduced to a fine flour, which is stirred about, and mixed in the tea cup with an ivory chop-stick; this, when not in use, is associated with another, with a knife and toothpick, and sometimes a pair of dice, in a small case which hangs suspended to a girdle, and constitutes one of the constant appendages of the Tartar dress.

This repast, of which we all partook together, afforded our friends a hearty laugh; for, being novices to this new mode of taking tea, we mixed the flour imperfectly, so that when we began to drink, the dry meal flew into our throats, and made us cough violently, to their extreme diversion.

Turner soon came to appreciate the value of tea thus prepared in a cold country and he says later:

. . . buttered tea was not omitted in this repast, nor was it indeed the least acceptable part of it; for habit had not only reduced this composition agreeable to our tastes, but experience most fully proved, that warm liquids, at all times, contribute to alleviate the sensation of fatigue. I was never more disposed to praise the comfortable practice of the country, having constantly observed, that the first object of attention with every man, at the end of a long journey, is to procure himself a dish of hot tea. If you are expected, it is alway prepared, and brought to you the moment you arrive.

The fascinating subject of the spread of the tea-drinking habit from China cannot here be pursued in detail, but it can safely be said that tea

was drunk regularly throughout Central Asia at least as early as the beginning of the eighteenth century, if not earlier. The habit had certainly spread to Persia by the seventeenth century for Adam Olearius, the secretary to an embassy from the Duke of Holstein to Persia, refers to tea-drinking in some detail in his account of the journey.

On the other side of the *Maidan*, over against the great *Mosquey*, are the Wine Taverns, and other Drinking-Houses, whereof we spoke before. There are several kinds of them. In the *Scire Chanes*, they sell Wine; but those who have the least tenderness for their Reputation, will not come into those places, which are infamous, and the common receptacles of a sort of people, who divert themselves there with Musick, and the Dancing of some of their common Drabbs, who having, by their obscene gestures, excited the brutalities of the Spectators, get them into some corner of the House, or draw them along into some publick places, where they permit the commission of these abominations, as freely as they do that of ordinary sins.

In the *Tsai Chattai Chané*, they drink *The*, or *Tea*, which the *Persians* call *Tzai*, though the *Tzai*, or the *Cha* are properly but a kind of *Thé* . . . They are only persons of good repute who Drink of this, and frequent these Houses, where, in the intervalls of their drinking, they spend the time at a certain Game somewhat like our *Tick-Tack*.

In another place, referring more generally to Persian habits, he writes:

We said before, that the *Persians* are great frequenters of the Taverns or Tipling-Houses, which they call *Tzai Chattai Chané*, in regard there they may have *Thé*, or *Cha*, which the *Usbeques Tartars* bring thither from *Chattai*. It is an Herb which hath long and narrow leaves, about an inch in length, and half an inch in breadth. In order to the keeping and transportation of it, they dry it, so that it turns to a dark grey Colour, inclining to black and so shrivell'd up, that it seems not to be what it really is: but as soon as it is put into warm water, it spreads and reassumes its former green Colour. The *Persians* boyl it, till the water hath got a bitterish taste, and a blackish colour, and add thereto Fennel, Anniseed, or Cloves, and Sugar. But the *Indians* only put it into seething water, and have for that purpose either Brass, or Earthen pots very handsomely made, which are put to no other use. They drink it so hot, that they are not able to hold their Dishes, which are of Porcelane or Silver, in their hands: whence it comes, they that have found out a way of making them of Wood or Canes, done over with a Plate of Copper or Silver Gilt, and sometimes of Gold, so as that the heat not being able to penetrate them, they may hold them in their hands, even though the water were boyling. The *Persians*, *Indians*, *Chineses*, *and Japonneses* assign thereto such extraordinary qualities, that, imagining it alone able to keep a man in constant health, they are sure to treat such as come to visit them, with this Drink, at all hours. The quality it is, by experience, found to have, is, that it is astringent, and that it consumes superflous Humours, which incommodate the Brain, and provoke Drowsiness. They who have written of the affairs of the Indies, as *Massans*, *Linschooten*, *Trigault*, and others, tell Miracles of it: but this herb is now so well known

in most parts of *Europe*, where many Persons of quality use it with good success, that it must needs be known, what are both its good and bad qualities: which Dr *Tulp*, a Physician of *Amsterdam*, hath very strictly examined, in the last Chapter of the fourth Book, of his *Medicinal Observations*.

The tea-drinking habit grew rapidly amongst the well-to-do in Persia and impressed itself forcibly on the mind of Captain Mignan, an enterprising soldier who, in 1829, accompanied by his brave wife and two young children was adventurous enough to return to military duty in India by the overland route from Russia. After a journey of great hardship and danger, the party reached Tabriz, where Captain Mignan had an interview with Prince Abbas Mirza, the heir apparent. The description of the magnificent carpeted audience chamber, the brilliance of the Prince's sword, and the polished manners of the Court, is of absorbing interest, but, more relevant to our purpose is Mignan's reference to the place of tea in Persia:

During this interview, I was much surprised at having *tea* handed round to us in place of that universal beverage of the East, coffee. All who can afford it are now in the habit of drinking *tea* throughout the day: it is even usual, in Azerbijaun, for the people to greet their visitors with a cup of tea. The use of this beverage is becoming very general throughout the northern parts of Persia, although as yet it bears a high price. The trade is entirely monopolized by the Russians. If a few British merchants were established at Tabriz, they might carry on a very successful business; especially now that the Black Sea has been opened to all European vessels, and the old channel of communication with Persia resumed.

In view of the close connexion of India with China and the Far East, both by sea and by land, in the first millennium of the Christian era, it would be reasonable to expect to find the habit of tea-drinking firmly implanted in India at an early date. Curiously enough there is little evidence to this effect and tea is not mentioned in the writings of the best-known travellers in India at that time. Bernier, Tavernier, Manucci, Sir Thomas Roe, and many others give detailed descriptions of India in the age of the Mughals without reference to tea.

We have already seen a casual reference to tea drinking by Indians in Olearius' narrative, but we hear more about it from another member of the same embassy, John Albert de Mandelslo, of whom Olearius says:

Hearing of an Embassy intended for *Muscovy* and *Persia*, he would needs be one in it . . . During his aboad at *Ispahan*, he got acquainted with some *English* Merchants, who, speaking to him of the *Indies*, rais'd in him a desire to go thither. The King of *Persia*, to engage his stay at his Court, proffers him a Pension of ten thousand Crowns; he slights the favour of so great a Prince, gets on horse-back, with no great Sums about him, and sets forward on his Journey . . . It was also a very strange Adventure, which made him find civil entertainment and hospitality at *Surat*; made him subsist at the charge of

others; conducted him by Land to the Great *Mogul's* Court; brought him safely back again to *Surat*; preserv'd the ship he was in after so many tempests neer the Cape of *Good-Hope*, and miraculously deliver'd him at his first arrival into *England*, when he was given over for irrecoverably lost in the very haven, as may be seen neer the end of his Travels.

Mandelslo's own narrative is of absorbing interest, but its only relevance to our purpose arises from his description of social intercourse in Surat in 1638.

At our ordinary meetings every day, we took onely *Thé*, which is commonly used all over the *Indies*, not onely among those of the Country, but also among the *Dutch* and *English*, who take it as a Drug that cleanses the stomach, and digests the superfluous humours by a temperate heat particular thereto. The Persians instead of *Thé* drink their *Kahwa* which cooles and abates the natural heat which *Thé* preserves.

Less than thirty years after Mandelslo's visit to India, tea began to figure in the court minutes of the East India Company, but the references are always to consignments of teas from the Far East to England, either direct or via India. They throw no light on the use of tea in India at that time. For information on this subject, we next have to turn to *A Voyage to Surat*, by J. Ovington, who went to India as a chaplain in the East India Company's ship *Benjamin* in 1689 and spent nearly two and a half years in Surat. Ovington was fiercely criticized by a contemporary annalist, Captain Alexander Hamilton, as an unreliable and second-hand reporter, but he was a keen observer and his statements regarding facts which came under his personal observation can generally be accepted. He wrote in some detail about tea-drinking in India.

The *Bannians* are not restrain'd from the liberal Draughts of Tea and Coffee, to revive their wasted Spirits, any part of the Day: but in those they may Revel uncensur'd, as long as they please . . .

Tea likewise is a common Drink with all the Inhabitants of *India*, as well *Europeans* as Natives; and by the Dutch is used as such a standing Entertainment, that the Tea-pot's seldom off the Fire, or unimploy'd. This hot Liquor it may be suppos'd might not seem so proper and agreeable to so hot an Air, and yet we find is very convenient for our Health, and agreeable to the Habits of our Bodies. And even all the Arak Punch which is drunk there, is seldom toucht, 'till by a heated Iron, or Wedge of Gold, it is made luke warm. This both supplies the Vapours which are continually exhal'd from the Body, and helps the prevention of Fevers by keeping the Pores open.

Tea, with some hot Spice intermixt and boiled in the Water, has the Repute of prevailing against the Headach, Gravel, and Griping in the Guts, and 'tis generally drunk in *India*, either with Sugar-Candy, or, by the more curious, with small Conserv'd Lemons, And a Dram of double distill'd Arak, is prescrib'd likewise as an Excellent Remedy against the Gripes, and such inward Twistings of the Bowels. The frequent use of this Innocent Tea, and the per-

petual perspiration caus'd by the Heat, which is augmented by this Liquor, are the reason why the Gout and Stone, Agues, Rheumatisms and Catarhs are rarely heard of in these parts. The Heat indeed abates the vigour of our Spirits, and thereby induces a languid Faintness, which is the general, but withal a very tolerable Infirmity, in respect of those acute Distempers. The *Chinese*, among whom the Tea grows, take abundance of this Drink before their Meals, and are generally very plump and in very good likeing.

Our *English* President enquir'd much for the Flower of Tea, among those who had been conversant in *China*, but could never obtain a sight of any; and it seems very doubtful whether that Shrub bears any Flowers at all upon it. For a *Chinese Mandarine*, who arrived at Suratt in the quality of an Envoy from *Limpo*, brought with him several kinds of Tea, but no Flower; some of it was so valuable in China, that a single Catte of it was reputed a noble Present for the chief Ministers, and it was very rarely to be found, however he brought with him a Taste of it for our President, among several other kinds, wherein he gave him a Morning Entertainment . . .

As Musk and Amber grease are said to damage Pearl, so is tea prejudic'd by the approach of unsavoury Smells, and particularly of *Assa Foetida*, and is so delicate and tender, that it is injur'd by the very Breath of only the common ambient Air. For preventing which it is inclos'd in Pots of Totaneg, or in strong large Tubs of Wood, and in them is safely sent abroad.

Philip Anderson, who made a very careful study of European life in Western India in the early days, states in *The English in Western India* that:

We may glean a little here and there regarding the manners of the English in this generation. Their diet appears at present to be somewhat singular, even to their countrymen. Tea was drunk in great quantities. Amongst the Dutch, the teapot, we are told, was seldom off the fire. The English do not seem to have usually taken it with sugar and milk, although sugar-candy was occasionally dissolved in it; but it was more frequently drunk with hot spices or by the more curious with small conserved lemons.

It is not easy to reconcile the confident statements of Mandelslo and Ovington as to the habit of tea-drinking in India, with the remarkable absence of references to tea in nearly all of the principal writings on India in the seventeenth and eighteenth centuries. Perhaps the best guess is that it was used occasionally, but not commonly, by the well-to-do Indians with whom writers such as Ovington and Mandelslo would naturally come into contact.

CHAPTER TWO

EARLY TEA DRINKING: II. EUROPE

In view of the considerable intercourse between China and the West during the first millennium after the discovery of tea, it is strange that no knowledge of either the plant or the beverage reached Europe before the sixteenth century. In 1516, the Portuguese, who were the pioneers of eastern commercial expansion, reached China and in due course they were permitted to settle in Macao. In the middle of the century, reports of a somewhat 'bitter, red, and medicinall' beverage, called *ch'a* were brought back to Europe; while almost simultaneously Ramusio, the Hakluyt of Venice, published a Persian traveller's account of tea in which, as in most of the early writings on this subject, its medicinal qualities were strongly emphasized. From this time onwards, scattered accounts of tea occur in a number of European languages, particularly in the writings of the Jesuits. Ukers has dealt comprehensively with these early reports and we need only refer to the account of the Dutch writer, Linschoten, who served in Goa as secretary to the Portuguese Archbishop from 1583 to 1589. His *Itinerario*, published in 1596 and at once translated into English, fired the imaginations of the sea-faring peoples of England and Holland and was an important factor in turning men's thoughts to eastern trade. His account of tea-drinking in Japan therefore deserves quotation:

> Everie man hath a table alone, without tablecloths or napkins, and eateth with two pieces of wood like the men of *China*: they drinke wine of Rice, wherewith they drink themselves drunke, and after their meat use a certaine drinke, which is a pot with hote water, which they drinke as hote as ever they may indure, whether it be Winter or Summer . . . the aforesaid warme water is made with the powder of a certaine hearbe called *Chaa*, which is much esteemed, and is well accounted of among them and all such as of any countenance or habilitie have the said water kept for them in a secret place, and the gentlemen make it themselves; and when they will entertaine any of their friends, they give him some of that warme water to drinke; for the pots wherein they sieth it, and wherein the hearbe is kept, with the earthen cups

which they drinke it in, they esteeme as much of them as we doe of Diamants, Rubies and other precious stones, and they are not esteemed for their newnes, but for their oldnes, and for that they were made by a good workman.

Linschoten was, in a sense, a link between the old and the new, for from this time the influence of Portugal in the Far East declined and that of Holland took its place. In addition to undertaking the conquest of Java, the Dutch established trading settlements in Japan and there are some grounds for thinking that it was from that country, rather than from China, that they took the first tea to Europe – naturally to Holland – somewhere about 1610. It is possible that tea may also have been introduced into Portugal almost simultaneously, for it was well known at the Portuguese Court by the middle of the century and was indeed the favourite drink of Catherine of Braganza. A bitter attack on tea, written by a German doctor in 1635, suggests that it may have been used in Germany then, and there is reason to believe that it was known in Paris about the same time. By the middle of the seventeenth century tea was well known in Holland and was indeed a regular article of export by the Dutch East India Company to that country from China and Japan. Montgomery Martin in his *The Tea Trade in England*, published in 1832, states that in 1666 exports of tea from China to Europe amounted to seventeen million lb.

There is no definite evidence as to the date when tea was introduced into England. Mennell, in his interesting monograph, *Tea – A Historical Sketch*, states that the Dutch East India Company sent tea to England in 1645, while Arthur Reade in *Tea Drinking* states that tea came into England in 1610. The authority for these statements has not been traced. Ukers argues that tea cannot have been known in England in 1641, for, he says, an author of a *Treatise on Warm Beer*, published in that year, undertakes to chronicle the advantages of the known hot drinks as opposed to cold, and mentions tea only by quoting the Italian Jesuit Father Maffei that, 'they of China do for the most drink the strained liquor of an herb called *Chia* hot'. The one clearly established fact is that the first public sale of tea in England was conducted by Thomas Garway in 1657. The historic importance of this date is great enough to justify an extract from Garway's advertisement as printed by Ukers:

The Leaf is of such known vertues, that those very Nations famous for Antiquity, Knowledge, and Wisdom, do frequently sell it among themselves for twice its weight in silver, and the high estimation of the Drink made therewith hath occasioned an inquiry into the nature thereof amongst the most intelligent persons of all Nations that have travelled in those parts who after exact Tryal and Experience by all ways imaginable, have commended it to the use of their several Countries, for its Vertues and Operations, particularly as followeth, viz: The Quality is moderately hot, proper for Winter or

Summer. The Drink is declared to be most wholesome, preserving in perfect health until extreme Old age . . .

It maketh the body active and lusty.

It helpeth the Headache, giddiness and heavyness thereof.

It removeth the obstructions of the Spleen.

It is very good against the Stone and Gravel, cleaning the Kidneys and Uriters, being drank with Virgins Honey instead of Sugar.

It taketh away the difficulty of breathing, opening Obstructions.

It is good against Lipitude* Distillations and cleareth the Sight.

It removeth Lassitude and cleanseth and purifyeth adult Humors and hot Liver.

It is good against Crudities, strengthening the weakness of the Ventricle or Stomack, causing good Appetite and Digestion, and particularly for Men of a corpulent Body, and such as are great eaters of Flesh.

It vanquisheth heavy dreams, easeth the Brain, and strengtheneth the Memory.

It overcometh superfluous Sleep, and prevents Sleepiness in general, a draught of the Infusion being taken, so that without trouble whole nights may be spent in study without hurt to the Body, in that it moderately heateth and bindeth the mouth of the Stomack.

It prevents and cures agues, Surfets, and Feavers, by infusing a fit quantity of the Leaf, thereby provoking a most gentle Vomit and breathing of the Pores, and hath been given with wonderful success.

It (being prepared with Milk and Water) strengtheneth the inward parts, and prevents Consumptions, and powerfully assuageth the pains of the Bowels, or griping of the Guts and Looseness.

It is good for Colds, Dropsies, and Scurveys, if properly infused, purging the Blood by sweat and Urine, and expelleth infection.

It drives away all pains in the Collick proceeding from Wind, and purgeth safely the Gall.

And that the Vertues and excellencies of this Leaf and Drink are many and great is evident and manifest by the high esteem and use of it (especially of late years) among the Physitians and knowing men in France, Italy, Holland and other parts of Christendom.

In 1658, according to Ukers, the proprietor of the Sultaness Coffee House announced:

> That Excellent and by all Physitians approved *China* drink, called by the Chineans *Tcha*, by other Nations *Tay*, alias *Tee*, is sold at the Sultaness Head Cophee House in Sweetings Rents, by the Royal Exchange, London.'

As is well known, Pepys came across tea in 1660 and recorded in his *Diary* 'I did send for a cup of tee (a China drink) of which I have never drunk before': while seven years later, we find an entry in his *Diary* – 'Home and found my wife making of tea; a drink which Mr Pelling, the poticary, tells her is good for her cold and defluxions.'

* Soreness or bleariness of the eyes.

From 1663 onwards references to tea began to appear in the court minutes and other books of the East India Company. At this time all East India goods, even presents to private persons, had to pass through the East India Company's warehouse, and in the minutes of the Court of Committees of 17 June 1663, sanction was given for 'certain goods, sent by Henry Page at Bantam* in the *London* and consigned to Sir George Smith to be delivered to the latter, he giving his word that Page has no interest in them'. We learn from the company's letter books that the 'certain goods' included 'Seven potts of thea'. History does not record whether Sir George Smith invited the Committees to taste the new beverage, but on 27 July 1664, an order was given for some 'good tea to be provided for the Company's occasions'. On 22 August of the same year, 'the factors having failed in every place to send home anything suitable as a present for the King,' it was decided to present His Majesty 'with a silver case of oile of cinnamon which is to be had of Mr Thomas Winter for 7*l* and some good thea'. The suggestions may have been prompted by the knowledge of Queen Catherine's fondness for tea. On the 17 February 1666, His Majesty was duly presented with 'rareties' including 22¾ lb of *thea* at 50*s* a pound (besides *thea* to the value of 6*l* 15*s* given to his two chief attendants).

On 10 September 1664, in pursuance of the Committees' order, the company wrote to Bantam for one hundredweight of the best tea procurable. The Committees evidently took readily to tea and a few years later we read that Humphrey Edwin was 'to provide such a quantity of tea and sugar as is necessary for the use of the Committees and deliver it to Mrs Harris, one pound at a time'. This Mrs Harris figures several times in the company's records at this period and in one of the minutes we read that she was given 5*l* for her care in selling a parcel of the company's tea. It was indeed a valuable commodity and on one occasion 15*l* 10*s* was paid by the company for six pounds of tea and one China jar of preserved nutmeg.

From 1669 tea was imported regularly by the East India Company. The company at this time was well protected by law against others who might want to import goods in competition with it. All English ships sailing to the Indies went under charter from the East India Company and on more than one occasion the company had to remind shipowners that 'they were bound by charter party to deliver all private trade into their custody; until this is done no freight is due'. In 1657, their position was strengthened by an order of the Commissioner of Customs that 'no East Indies commodities are to be passed through the Customhouse without the consent of the Company under its seal'. In 1669, the import of tea from Holland into Britain was prohibited by law.

* In Java.

The tea imported by the company was bought partly by purchase from Chinese traders at Bantam and partly in Madras or Surat from Portuguese or other ships trading from China. In 1682, the seizure of Bantam by the Dutch closed that port to the East India Company. The quantities of tea required in England were, however, not yet large and it appears that an import of 4,713 lb in 1678 was so excessive as to depress the market. The following letter from Henry Savill to Secretary Coventry, quoted in Twining's *225 Years in the Strand*, shows that there was resistance to the growth of the new habit.

> Paris, Aug. 12, 1678.
> . . . These I hope are the charms that have prevailed with me to remember (that is to trouble) you oftener than I am apt to do other friends, whose buttery-hatch is not so open, and who call for TEA instead of Pipes and Bottles after dinner, a base unworthy practise.

The loss of the Bantam supplies was not therefore serious. There were, nevertheless, times when supplies were short and a law was therefore passed in the reign of William III, permitting the import of tea from Holland 'or any other country, not the place of its growth or usual shipping on payment of duty of two shillings per pound'. Tea so imported had to be sold in the East India Company's auctions in London. By 1716, the supply position was apparently secure and the right to import was again restricted to the East India Company. Relaxation of this restriction was contemplated in an Act of 1776, but not in practice effected. Except for the substantial smuggling which took place, the company enjoyed a monopoly of the tea trade until, in 1833, it ceased to exist as a commercial concern.

By a strange coincidence, tea and coffee were introduced into England at about the same time and the growth in the popularity of tea in the late seventeenth and early eighteenth centuries was largely due to the influence of the coffee houses. The first London coffee house seems to have been opened in St Michael's Alley in 1652. In his *English Social History*, Trevelyan tells us that

> from the reign of Charles II to the early Georges the London coffee house was the centre of social life. It afforded a much-needed relaxation of the severe drinking habits of the time, for alcohol was not to be had on the premises. A list of some of the coffee houses in Queen Anne's time runs to nearly five hundred names. Every respectable Londoner had his favourite house, where his friends or clients could seek him at known hours.

The statement that alcohol was not to be had is not correct for we know from the records of R. Twining & Company, that:

> A coffee-house proprietor was called upon to supply his patrons with a variety of goods . . . Besides coffee and tea (sometimes with bread and but-

ter), other liquid refreshments were brandy, rum, arrack, mum, nectar, cream tartar, ambrossia, and waters described as 'Bath', 'Bristol', 'Hungary', and 'Spa'. Other goods were snuff ('Portegal', 'Havannah', 'Barcelona', and 'Spanish'), wax candles, carraca nuts, allnutts, millett, hartshorne shavings, vanilla, vanilla chocolate, plain chocolate, arrowroot, camphire, sugar, sugar candy, oranges and lemons and oatcakes; also English and Continental newspapers.

Certain coffee houses, however, began to give special prominence to tea and, by 1704, tea-drinking in coffee houses had evidently become so normal that the departure from this habit on festive occasions called for comment. One such occasion was when the news of Blenheim reached England. Trevelyan quotes a contemporary annalist to the effect that:

> Only the Jacobite coffee houses were thronged at the very juncture when the news arrived; the poor fellows moved like mere engines and vanished in a hurry. But as these disappeared the loyal, honest Englishmen repaired in crowds to the loyal coffee houses and you might read satisfaction in every face. Bohee tea, coffee, chocolate, ratafia and Nants Brandy were insipid liquors. Away they adjourned to the tavern, every bumper was crowned with the Queen's or the Duke of Marlborough's health and the loyal citizens emptied the cellars so fast I think two-thirds were foxed next morning.

When, in 1706, Thomas Twining, the founder of the most famous of the early tea firms, established Tom's Coffee House in Devereux Court, near Temple Bar, he began to specialize in tea. A few years later, tea became sufficiently popular to induce Twining to open 'The Golden Lyon' in premises adjacent to Tom's Coffee House for the sale of dry tea and coffee. While the coffee-house was strictly a masculine preserve, ladies were welcome at 'The Golden Lyon', where they drank tea at one shilling for a small cup.

In the second decade of the eighteenth century, the importation of the cheaper, green tea led to the spread of tea-drinking to all classes. For a time there was a struggle between the traditional fondness for ale and the attraction of the new drink, tea, and the older people did not readily change. Arthur Reade, in *Tea Drinking* quotes the following passage from Dr Aikin's *History of Manchester*:

> About 1720, there were not above three or four carriages kept in the town. One of these belonged to Madame —, in Salford. This respectable old lady was of a social disposition, and could not bring herself to conform to the new fashioned beverage of tea and coffee; whenever, therefore, she made her afternoon's visit, her friends presented her with a tankard of ale and a pipe of tobacco. A little before this period a country gentleman had married the daughter of a citizen of London; she had been used to tea, and in compliment to her it was introduced by some of her neighbours; but the usual afternoon's entertainment at gentlemen's houses at that time was wet and dry sweetmeats,

different sorts of cake, and gingerbread, apples, or other fruits of the season, and a variety of home made wines

... Somewhat before 1760, a considerable manufacturer allotted a back parlour with a fire for the use of his apprentices, and gave them tea twice a day. His fees, in consequence rose higher than had before been known, from 250l to 300l and he had three or four apprentices at a time.

In 1721, the import of tea into England exceeded one million lb, and in 1722, Lacy, the anti-tea fanatic, wrote of 'the exhorbitant use of tea' and declared that 'tea has too great interest to be prohibited'. Arthur Reade also quotes a visitor from Italy who, in 1755, wrote: 'Even the common maid-servants must have their tea twice a day in all the parade of quality; they make it their bargain at first; this very article amounts to as much as the wages of servants in Italy.' According to the author of *English Social History*:

Early in the reign of George III all classes in town and country were drinking tea in their own homes ... Tea-drinking had become a national habit, a rival to the consumption of spirits and beer; 'the cups that cheer but not inebriate' were already as well known and as highly valued in the labourer's cottage as in the poet Cowper's parlour.

Trevelyan goes on to quote Sir Frederick Eden who, in 1797, wrote that 'any person who will give himself the trouble of stepping into the cottages of Middlesex and Surrey at meal-times, will find that in poor families tea is not only the usual beverage in the morning and evening, but is generally drank in large quantities at dinner'.

The growing demand for tea made adulteration and smuggling profitable and, in 1725, it was found necessary to legislate against the former practice. It was laid down that:

if a dealer in tea shall dye, fabricate or manufacture any Sloe leaves, Liquorice leaves, or the leaves of tea that have been used, or the leaves of any other tree, shrub or plant, in imitation of tea, or shall mix, colour, stain or dye such leaves or tea with terra japanica, sugar, molasses, clay, logwood, or with any other ingredients or materials whatsoever, or shall sell, offer, or have in possession any such dyed or fabricated leaves, such person shall for every pound forfeit and pay the sum of £10.

Nearly fifty years later adulteration was still prevalent and the adulterated tea was known as *English Tea*. The practice worried the authorities, not only because of the danger to health, but also because it led 'to the injury and distruction of woods and underwoods'. The penalty for the offence was therefore raised to twelve months' imprisonment.

The Revenue Authorities were apparently as quick off the mark in the seventeenth as they are in the twentieth century, for as early as 1660 they imposed an excise duty on tea. According to Mennell, 'at first the English practice was to infuse the leaves and keep the liquid in barrels,

from which it was drawn off like beer and then warmed for use'; in 1660 a tax of eightpence a gallon was placed on liquid tea. This was later replaced by a customs duty. The history of the duties on tea will be discussed in a later chapter.

In the eighteenth century the smuggling of tea into England presented the authorities with an even more difficult problem than adulteration. Smuggling directly from the East would indeed have been almost impossible as long as shipping from the East was controlled by the East India Company. Certain continental firms therefore bought tea in the London auctions, obtained a rebate of the import duty on re-exporting it to Europe, and thereafter smuggled it back into England. In a contemporary pamphlet, quoted by Mennell, it is stated that 'the East India Company have been so far deprived of their monopoly in tea, that upon the most moderate computation smugglers and the Company (in 1783) shared the tea trade equally between them; according to some calculations the smugglers had two-thirds of it'. To meet this situation, in 1784, the Government substantially lowered the duty. The sequel, according to an East India Company Report of 1784, was 'that whereas formerly almost one-quarter of the tea sold in the London auctions used to be exported, since the alteration of the duty only one twenty-sixth part had been shipped to the Continent'. The company concluded reasonably that 'the former exportation had been chiefly for smuggling back into the country'.

From our point of view these transactions are mainly important as showing the regular growth of tea-drinking in eighteenth-century Britain. Consumption rose from twenty thousand in 1700 to over one million lb in 1721, nearly six million lb in 1768 and nearly eleven million lb in 1785. The sale of tea was then handled largely by small dealers, and it has been stated that before the end of the eighteenth century there were thirty thousand wholesalers and retailers of tea in England. By 1816, imports had reached thirty-six million lb and a few years later, William Cobbett, never happy unless he was grumbling about somebody's bad habits, complained bitterly that the 'troublesome and pernicious habit of drinking tea' had been a curse to the working classes.

A study of the growth of tea-drinking in America in the seventeenth and eighteenth centuries would take us too far into the field of general history and is not essential for our purpose. It is sufficient to note that tea-drinking was probably first introduced into America from Holland and grew rapidly amongst the upper classes soon after New Amsterdam, later named New York, became English. The need for good water for tea-making seems to have exercised the New York authorities much in the middle of the eighteenth century and according to Ukers:

In order to make it possible to obtain good water for drinking and for preparing tea, the Corporation of New York erected a tea-water pump over the spring at Chatham and Roosevelt streets. This water was considered much more desirable than that from the other town pumps, and was peddled about the streets by carters whose cries of 'Tea water! Tea water! Come out and get your tea water!' were characteristic of the day. By 1757 this business had grown to such an extent that the Common Council was constrained to enact 'a law for the Regulating of the Tea Water Men in the City of New York'.

Unfortunately strained relations between Britain and America soon hindered this healthy development and at the time of the Declaration of Independence, the American people had developed a strong prejudice against tea, which lasted for a considerable time.

CHAPTER THREE

THE TEA CONTROVERSY

The establishment of the habit of tea-drinking in Britain was not achieved without a long and stern struggle by the trade and in these days when the value of tea is taken for granted it is interesting to recall the bitter controversy over it in the early days. We have already noticed the disparaging remarks of Henry Savill about tea. Very different was the attitude of John Ovington whose references to tea-drinking in India have been quoted. In 1699 he published *An Essay upon the Nature and Qualities of Tea*, and in a dedication to the Countess of Grantham, he states his view on tea in general:

> For it is generally acknowledg'd to be both Pleasant and Medicinal, at once to delight the Palate and correct the Disease, and to heal the Distemper without giving any Disturbance to the Stomach.
>
> And certainly were the Custom of Drinking it as Universal here, as it is in the Eastern Countries, we should quickly find that Men might be Chearful with Sobriety, and witty without the Danger of losing their Senses; and that they might even double the Days of their Natural Life, by converting it all into Enjoyment, exempt from several painful and acute Diseases, occasion'd very often by a pernicious Excess of inflaming Liquors, which render it rather a Burthen, than a Blessing to us.
>
> But in pity, Madam, to this tender Leaf, I must cease from Panegyrick, lest it should create a Satyr, and the innocent Praises of it be eccho'd back in sharp Invectives. For since its Constitution is so nice and delicate, as to be injur'd even by common Air, it will never be able to withstand the Malignity of an envious Breath, unless Your Honour and Goodness interpose, which are so conspicuous, that Malice it self would blush to fix an Imputation upon them.

In the body of this pamphlet he sets forth the medicinal virtues of tea. It is, he declares, a preventive of gout and of stone – hence 'those painful Diseases which so frequently torment the *Europeans*, are scarce known in *China*'. It aids the digestion and is thus of great value to the

Tartars whose ordinary food is raw horseflesh and to whom, not unnaturally:

> it sometimes happens that their Stomachs are oppress'd with *Crudities*, and mightily weaken'd through *Indigestion*, to cure which they readily apply themselves to *Tea*, without consulting any other Physick; and in this they find so much Relief, they soon recover their Digestive Faculty again, and remove the *languid Indisposition*.

'It may also,' says Ovington, 'prove a friendly remedy against the Scurvy, that common Northern Disease', and more important still, it has the same therapeutic virtues after excessive indulgence in alcohol as are claimed in the twentieth century by the advertisers of another beverage.

> For this admirable *Tea* endeavours to reconcile Men to *Sobriety*, when their Brains are overcast with the Fumes of Intemperance, and disorder'd with Excess of Drinking; by driving away the superfluous Humors that cloud the Rational Faculty, and disturb the Powers of the Mind. And therefore all those persons who have by this means lost their Senses, and have pass'd the Bounds of Moderation, ought presently to water their Veins with this Liquor, and refresh themselves with its sober Draughts, if they are willing to recollect their roving Thoughts, and be Masters of their Faculties again. For this is none of its meanest Triumphs, that 'tis able to subdue this conquering Liquor, that has foil'd so many wise and powerful; that it is an *Anti Circe*, can counter-charm the inchanted Cup, and change the Beast into a Man.

Ovington, however, was not content to make assertions on the strength of his own observations. He relied also on the statement of early and more professional writers and thus quoted the learned *Michael Etmuller*, Professor of Physick at Lipsick . . .*

> It powerfully corrects Indigestions and Crudities, so as that the very Chinese use this Drink to strengthen the first Digestion, and purify the Mass of Blood by a Flux of Urine. Whence it is that they rarely labour under the Hypocondriack Passion, descended from a deprav'd Stomach; for Tcha's Aromatick Virtue takes away all acid Crudities. Besides, it is a very famous Cephalick, adds a wonderful Strength to the Animal Spirits, and by that means opposes the Megrim, and admirably comforts the Memory, and other Faculties of the Soul. Moreover, it drives away Drowziness, and keeps a man awake without Weariness.

In addition to all this, the learned Professor of Lipsick tells us that tea 'is a most notable Antinephritick and Antipodagrick'.

Thus so learnedly commended, tea might have been thought to be safe from attack. In 1722, however, James Lacy wrote a long letter to a lady on the evils of tea-drinking. Lacy was clearly a dietetic faddist and he brings a wealth of medical lore to support the thesis that tea is the particular cause of the 'Hypochondriack Disorders'.

He declares, 'It is a Drug', 'which has of late Years very much insinuated

* Presumably Leipzig.

itself, as well into our Diet, as Regales and Entertainments, tho' its Operation is not less destructive to the Animal Oeconomy, than *Opium*, or some other Drugs, which we have at present learn'd to avoid with more Caution'.

He then puts forward three alarming propositions:

First, that Tea may attenuate the Blood to any Degree necessary to the Production of any Disease, which may arise from too thin a State of the Blood.

Secondly, That Tea may depauperate the Blood, or waste the Spirits, to any Degree necessary to produce any Disease, which may arise from too poor a Blood.

Thirdly, That Tea may bring on any Degree whatsoever of a Plethora necessary to the Production of any Disease, which may arise from a Plethorick State of Body.

To test these propositions he carried out many experiments, including the injection of about three ounces of a strong decoction of Bohea tea into a dog. He admits that it did the dog no harm, but, nevertheless, goes on to urge that incessant tea-drinking results in a 'prodigious Depression of the Spirits'. His argument is that 'the Chearfulness of our Minds depends upon the Quantity of Spirits secreted from the Blood'. He maintains that 'by the frequent use of Tea the Spirits are so far wasted as to be but just able to perform these necessary offices'. This leads on to a story so astonishing that it deserves extensive quotation despite its length.

A worthy and reputable Matron of Gryfwald in Pomerania, who was marry'd in her twentieth Year, and has now lived thirty Years in fruitless Wedlock, has for many Years labour'd under a very singular Kind of Melancholy. While she was in her perfect Senses, and had as yet shewn no Marks of a depraved Judgment, either in her Actions or Conversation; she was seized with an Aversion to all Kinds of Meat, Drink, Company and Cloaths; which, I think, may not improperly be termed a Hypochondriack Niceness. . The first Time of her feeling this Niceness in her self, was within a few Years after her Marriage: insomuch that she could hardly be prevailed upon to taste any kind of Meats or Drinks, howsoever prepared, or after what manner soever they were served up to her . . .

About sixteen Years after her being first seized with this Disorder, it happen'd that a young Lady, of whom she was prodigiously fond, both as she was her Relation and Bosom-Friend, was seized with an Epileptick Fit. The great Terror which this struck upon her Spirits, heighten'd her Disorder to such a Degree, as to make it unsufferable: For from that Time she would never admit any one but her Husband and his Nephew to enter her House, excluding all her Servants and Friends, for fear lest they should be seized with an Epilepsy, and give her the same Uneasiness, as she had suffered by seeing her Niece in the like Disorder . . . Her Aversion to Meat and Drink was also very much heighten'd by this Accident; nor could she give any other Reason for this her Aversion to them than that she fear'd they had been dress'd or

touch'd by Epileptick People. For several Years she eat nothing but Bread, which was to be bought of one certain Baker; and drank nothing but Water, which was likewise to be drawn out of one particular well. But at last she suspected even the Bread and Water of being capable of conveying this Disease to her; for which Reason she has ever since (which is now two Years) lived on Milk only: But this Milk must also be the Milk of one particular Cow, which she keeps at home in her own House; not daring to trust her abroad with the Herd, lest she should thereby catch the Epileptick Fit ... Besides this, she has not for many Years ventur'd to change her Cloaths; tho' by so long wearing, they are now nothing but Rags; for she is very suspicious that all Tailors, Weavers, and such sort of People, are Epileptick.

On this story Lacy makes the cogent comment that 'how uncommon soever this Case may seem, it certainly may arise from this sick and poor State of the Blood which may be owing to the too frequent Use of Tea'.

A quarter of a century later a much greater man took up the cudgels against tea. John Wesley's prejudice against tea-drinking is best illustrated in his own words, contained in *A Letter to a Friend concerning Tea* written in December 1748.

Twenty-nine Years, when I had spent a few Months at *Oxford*, having as I apprehended, an exceeding good Constitution, and being otherwise in Health, I was a little surprised at some Symptoms of a Paralytick Disorder. I could not imagine, what should occasion that shaking of my Hand; till I observed it was always worst after Breakfast, and that if I intermitted drinking Tea for two or three Days, it did not shake at all. Upon Inquiry, I found Tea had the same Effect upon others also of my Acquaintance: and therefore saw that this was one of its natural Effects (as several Physicians have often remarked) especially, when it is largely and frequently drank; and most of all on Persons of weak Nerves. Upon this I lessened the Quantity, drank it weaker, and added more Milk and Sugar. But still for above six and twenty Years, I was more or less subject to the same Disorder. *July* was two Years, I began to observe, that abundance of the People in London, with whom I conversed, laboured under the same, and many other Paralytick Disorders, and that in a much higher Degree; insomuch that some of their Nerves were quite unstrung; their bodily Strength was quite decay'd, and they could not go through their Daily Labour. I inquired, 'Are you not an hard Drinker?' And was answered by one and another, and another, 'No, indeed, Sir, not I; I drink scarce any Thing but a little Tea, Morning and Night.' I immediately remembered my own Case; and after weighing the Matter thoroughly, easily gathered from many concurring Circumstances, that it was the same Case with them.

I considered, 'What an Advantage would it be, to these poor enfeebled People, if they would leave off what so manifestly impairs their Health, and thereby hurts their Business also? ... Is there Nothing equally cheap which they could use? Yes, surely: And cheaper too. If they used *English* Herbs in its

stead, (which would cost either Nothing or what is next to Nothing) with the same Bread, Butter, and Milk, they would save just the Price of the Tea. And hereby they might not only lessen their Pain, but in some Degree their Poverty too. For they would be able to work (as well as to save) considerably more than they can do now. And by this Means, if they are in debt, they might be more just, paying away what they either earned or saved. If they are not in Debt, they might be more merciful, giving it away to them that want.

The economic aspects of the matter began to loom large in Wesley's mind and his disapproval of tea came to be mainly as aspect of his general belief in abstemiousness. Later in life, in this respect at least, Wesley's austerity softened and he seems again to have taken to tea.

Immediately after John Wesley had written his letter, a Dr Thomas Short wrote his *Discourses on Tea* which also dealt with sugar, milk, made-wines, spirits, punch, and tobacco, and contained 'plain and useful rules for gouty people'. Dr Short took a more balanced view than some of the earlier controversialists. 'We find', he declared, 'very few Things, either in Diet or Medicine, that are equally beneficial to all'. In an elaborate analysis he recommended tea as of service in Disorders of the Head, from cold and sluggish Causes', and as a 'proper Diet in a threatened Apoplexy'. It is good, too, for 'inflammatory Thicknesses of the Blood' and better still in 'several Disorders of the Eyes' or in 'Obstructions of the Lungs, arising from the Viscidity of the Humours' – and perhaps most of all for 'gravelly pains and the like'. It has also 'serviceableness . . . in a gross, moist, thick, foggy Air or fenny watery Places'. Moreover:

what should mightily recommend the use of Tea to Gentlemen of a sprightly Genius who would preserve the Continuance of their lively and distinct Ideas, is its eminent and unequalled Power to take off, or prevent Drowsiness and Dulness, Damps and Clouds on the Brain, and intellectual Faculties. It begets a watchful Briskness, dispels Heaviness; it keeps the Eyes wakeful, the Head clear, animates the intellectual Powers, maintains or raises lively Ideas, excites and sharpeneth the Thoughts, gives fresh Vigour and Force to Invention, awakens the Senses, and clears the Mind; perhaps because by its thinning the Blood, cleansing and clearing the Glands of the Brain, it encreases the Secretion and Distribution of animal Juices, which compensate the preceding Loss of Spirits, whether spent before on the bodily or intellectual Organs.

Above all 'to abundance of People we see it a good Cordial, cheers, revives and raises their Spirits'.

Dr Short tries very hard to be fair-minded and he tells us therefore of the 'inconveniences and mischiefs that follow its habitual Use'.

Such as have very sensible and springy Nerves, after a shorter or longer Use of Tea, in greater or lesser Quantity, stronger or weaker, have often a Tremor

or Shaking. Here Tea occasions Impediments in the Circulation of Humours, and produces sundry Defects; Bohea Tea especially, from the little remaining dry peculiar essential Juice, as well as Oil and Earth, which throw all the Nerves into those convulsive Vibrations . . . Cachectic, cacochymic leucophlegmatic, dropsical, and phlegmatic Persons, have little or no Good to expect from Tea . . . Nor is it good where the Stomach is weak, exquisitely sensible and delicate, whether from the Thinness or Loss of its mucous Coat, the Sharpness of some Humours, or the Delicacy and Sensibleness of the Nerves; here Tea gives often great Pain, Cholick, or Uneasiness.

Dr Short's conclusion is well balanced. After referring to 'Lowness of Spirit, Want of Sleep and Loss of Appetite' he says:

The last Disorders are no Exceptions to a moderate Use of Tea in general; for with how many Persons do Milk, Ale, Drams, Cheese, and many other Meats and Drinks disagree, yet all of them are good, and do well with such as they agree with. Nor it is possible to say before-hand, with what healthy Persons Tea will disagree, till they have used it; where it disagrees, it should immediately be left off; for there is no altering or compelling a Constitution. However, where it agrees, it excels all other Vegetables foreign or domestick, for preventing Sleepiness, Drowsiness, or Dulness and taking off Weariness or Fatigue, raising the Spirits safely, corroborating the Memory, strengthening the Judgment, quickening the Invention, etc. but then it should be drank moderately, and in the Afternoon chiefly, and not made too habitual.

The next propagandist against tea made no pretence at being objective or impartial. Jonas Hanway hated tea with all the fanaticism of an honest but narrow person who had a morbid suspicion of anything that people could enjoy, and, in 1756 he inflicted his views on tea drinking upon a lady of his acquaintance in a series of twenty-five letters. 'Tea without sugar', he declares, 'is very unpleasant to the taste; and with it, the taste of sugar prevails so much over the taste of tea as almost to destroy it. I fear tea will prove Bitter in the end.' It is, moreover, a destroyer of female beauty. 'Your very chamber maids have lost their bloom by sipping tea . . . and how many thousands', he asks, 'are annually poisoned by Tea, Gin and Wine?' There is, however, worse to come, 'How often', he asks, 'does it happen that the nurse by carelessly SPENDING her time, DESTROYS the child! . . . The poor infant expires whilst she is sipping her tea'.

Again he argues that all hot drinks are bad.

You have seen how the hands of your women-washers are shriveled by HOT WATER; you feel how HOT LIQUIDS give PAIN externally and internally, even when they do not SCALD: you are also sensible, when you go to the ROUTS, or to THEATRES, of the pernicious effects of HOT AIR to the lungs. Do you imagine, that nature requires our drinking liquids even so warm as our blood? Very hot, or very cold liquors, taken as MEDICINES, may produce effects, which, in the ordinary course of the animal operations, are not

necessary: the same as things very HOT, or very COLD, in Quality, are not therefore proper for COMMON FOOD.

The prevalence of adulteration is then dragged in to support his diatribe.

Coarse tea will certainly tinge the water deep, and give a bitter taste; and the tea-drinkers, of whom I am speaking, desire but little more. You have also heard that your maids dry your tea-leaves, and sell them: the industrious nymph, who is bent on gain, may get a shilling a pound for such tea. These leaves being dyed in a solution of JAPAN EARTH, converts green tea into bohea; it gives an astringency in the mouth, with a sweetish taste, and a brown color, to that which had neither color nor taste before: it also adds twenty-five per cent to the weight. This mock tea thus becomes an astringent, and often occasions a dry cholic: and what remedy for the cholic so good as GIN? or what remedy so CHEAP, or so EASILY procured? But whether the disorder arise from this, or any other kind of tea, we have too much reason to think that common nurses often drink DRAMS; and were it only a dram occasionally, the poor infant, if it is not starved for want of wholsome food, is poisoned with the noxious effects of such aliment.

Finally, the economic argument is deployed, and here Hanway's contentions throw so much light on social customs that they justify further quotation.

I compute that we consume in GREAT BRITAIN five millions of pounds weight of tea, of which I reckon two millions to be run in upon us.

Suppose then FIVE millions; the lowest price we may compute is two shillings and six pence, and the highest twenty shillings the pound. The greatest part of what is legally imported cost four to ten shillings, let us fix it at five shillings, and it amounts to £1,250,000

We have lately imported between 72,000 and 85,000 hogsheads of sugar annually, out of which 25,000 hogsheads are supposed to be expended with tea; these at twelve hundred weight each make thirty-three million six hundred thousand pounds weight, allowing a quarter part of what is lost in refining part of this quantity (observing that most of the common people drink raw brown sugar) it is reduced to 25,200,000 pounds, (being about five pounds of sugar to one of tea) of which three fourths being computed at four pence, and one fourth at eight pence, it makes £525,000

This may be considered as a trifling calculation to those who see and FEEL how much greater an expence of sugar is made in families on account of tea; but it is INTENDED to be rather under than above the mark.

I will suppose only one million of servants, mechanics, and labouring people, who lose their TIME by drinking tea. I will calculate only 280 days in the year, and one hour in twelve lost in such days. I will set their labor so low as six pence a day, the TEA costs the nation, in this instance only, the sum of £583,333

I pass over the article of time of FINE ladies and FINE gentlemen as invaluable. If out of nine millions of people in GREAT BRITAIN we have only

two millions of tea drinkers, at six in a family, these make 333,333 families, their tea equipages can hardly cost less than five shillings, is . £83,333

To this we must add the expence of tea kettles and coals, &c. considering what numbers make fires, at some seasons of the year merely on account of TEA, the annual charge must be at least fifteen shillings each, is £249,999

Thus I compute the amount or annual expence to be . . £2,691,665

. . . . . .

The ordinary computation among the poor is a HALF PENNY a time for TEA, and as much for SUGAR. Suppose it to be drank only once a day by one million two hundred thousand FEMALES, out of four millions; and eight hundred thousand males, out of five millions; the expence then would be annually £3,041,666, which still exceeds the calculation abovementioned. If I mistake as to the number of tea drinkers; how many drink tea TWICE or THRICE a day; and how many drink it at a much HIGHER CHARGE! In every shape you will find the expence PRODIGIOUS! FAREWELL. I am yours, &c.

After the author had worked himself up into a fine frenzy of condemnation, he gave his lady correspondent a last chance –

But, MADAM, you may still give a substantial proof of YOUR patriotism, if you endevor to promote the cause of virtue; if you attend to your domestic affairs; if you pay your taxes with a good grace; if you abstain from such customs as are INJURIOUS; and AMONG THE LATTER, REMEMBER THE LABORIOUS LESSON I HAVE GIVEN YOU UPON TEA.

This solemn excess of caution, however, was not in keeping with the English temperament and robust answers to it were soon given by Johnson and the poet Cowper. More interesting than these well-known and somewhat pompous answers is the considerable quantity of light verse written on the subject of tea during the eighteenth century. Most of it, considered as verse, is appalling and it has a strong moralist flavour, but it is of importance since it symbolizes the growing popularity of tea and other soft beverages at the expense of alcohol. Typical of this kind of verse is the *Poem on Tea* written by Duncan Campbell in 1735.

Tea is the sparkling Subject of my Song,
Come, fairer Sex, and listen to my Tongue;
For, what you love so dearly, I defend,
And thus its Virtues to the World commend.
Before the *Berry*, *Barly-Corn* and *Grape*,
TEA arrived at its natural shape:
Which we can prove: For ev'ry Body knows,
The Leaf, before the Berry, always grows.
So, TEA thus flourish'd on its Parent's Arms,
Before the *Grape* and *Apple* shew'd their Charms.
TEA is the Liquor of the Fair and Wise;
It chears the Mind without the least Disguise:

But Wine intoxicates, and wrongs each Sense;
Sweet, innocent, mild TEA, gives no Offence:
It makes the Blood run Sporting in the Veins,
Refines each Sense, and rectifies the Brains.
Dispersing those offensive Damps, that lye
On squeamish Stomachs, and the drowsy Eye;
Prevents, and cures, Diseases of the Mind,
And makes its Lovers to each other kind:
It makes them smile, and sip like pretty Bees,
Talk of *Marriages*, *Births*, and *Pedigrees*,
Sweet-hearts, and *Husbands*, and their Children dear,
As like *Papa*, as ever they can stare.
Love-Transactions, thus employ their Tongues,
Innocent their Talk, musical their Songs.
How ravishing a Sight! Pleasing to th' Eye,
When round their Cups, to be a Stander by:
For, there you may see, pictur'd in their Mien,
Sweet chaste *Diana*, and her lovely Train.

The poet then goes on in typical eighteenth-century style to describe a tea party and to contrast it with an alcoholic gathering.

The happy Foot-Boy oft in Transports stands!
And with delight the peaceful Cups he hands;
And if the Boy has but a taking Ear,
He grows polite, by hearing of the Fair.
Propitious TEA, more edifying far,
Than Clubs, Plays, Universities and War!
There, Folly, Wickedness, and Vice abound!
But here, Virtue, Sobriety, and Wit are found.
TEA thaws the freezing Veins, of Limbs, and Tongue,
And makes the Feeble, eloquent and strong:
The aged Lady, here, renews her Youth,
And pretty misses learn to speak the Truth.
Happy are they that on the Fair attend,
Their very Looks, their Office recommend;
For they look serene, with undisguis'd Face,
Unruffl'd Aspect, and peculiar Grace.
But the Wine-Bibber, storms, and stamps, and stares!
And kicks the Drawer headlong down the Stairs!
This Wine has some adulterated Taste,
Go, Sirrah, fetch a *Bottle of the Best.*
The Drawer thus, down the trembling Stairs reels!
As if Death pursu'd to catch him by th' Heels!
Sir! (to his Master) crys the frighted Lad!
Master Swiller-Tiple, I think, is mad!
He says, the Wine is old, and musty too,
Carry him up a Bottle of the new;
And that will swell his Corporation up,

And make him deaf, and blind, and dumb I hope!
I'll be revenged on him in my Bill
And charge the Drunken Sot, what e'er I will. –
But Tea has no such turbulent Effects;
'Tis really amiable in all respects;
It does not run our Senses all aground,
Nor makes the World thus, seemingly go round,
Nor yet, our nobler Faculties confound.
Ye sickly Souls, that languish on your Beds,
Call for the Kettle, and raise up your Heads:
Sip but a little of this *Nectar* rare,
Expect it will your Health, and Wit repair.

By the end of the eighteenth century the battle had been won, and only a few cranks still condemned tea-drinking. The market for tea had been well established in Britain, so that when China ceased to be the only source of supply, the incentive to grow tea elsewhere would be strong.

CHAPTER FOUR

TEA IN INDIA

DISCOVERY AND EXPERIMENTS

After the phase of short-sighted exploitation of Bengal by the East India Company's servants had ended, the practical mind of Warren Hastings clearly realized that if the company were to prosper it must promote industrial development. Silk, cotton cloth, indigo, and several other commodities received his attention and at the same time he devoted particular efforts to the promotion of trade with Tibet and other neighbouring countries. In 1774 he made provision by treaty for the duty-free sale in North Bengal of Bhutanese goods. It is not, therefore surprising to learn that when China tea seeds began to arrive in India Warren Hastings had a selection of them sent to George Bogle, the British emissary then in Bhutan. No practical result seems to have followed, but the general impetus to trade and industry given by Hastings had results in many directions. In 1778 Sir Joseph Banks was asked to prepare a series of notes for the East India Company on the cultivation of new crops, and in them he advocated the cultivation of tea in India. He began by discussing the geographical limits within which satisfactory tea could be produced and on the basis of the experience of China and Japan, arrived at the conclusion that black teas grew best between the 26th and 30th parallel of latitude, and green teas between the 30th and 35th.

> To search in the Territories of the East India Company for all the varieties of climate necessary for the Production of the various sorts of Tea would be useless as they do not extend over a sufficient number of degrees of Latitude nor were it Practicable would it be adviseable to attempt at once to dispossess the Chinese of the whole Tea Trade.
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> All undertakings of new manufacture should commence with Articles of Inferior Quality, they being less difficult in preparation and more certain (as they fall into the hands of the Lower orders of People) of being admitted into immediate use, than higher prizd commodities, intended for the

consumption of those who have more distinguishing palates and Fewer reasons for being economical in their purchases, moreover as the profit they bring is derived from the extent of Sale that Cheapness always commands, tho little upon each Bargain, it ultimately becomes an object of great magnitude and proportional importance.

Black Teas are exactly in this Predicament and they may certainly be cultivated with success in the Northern Parts of the Province of Bahar Rungpoor and Coosbeyhar for instance where the Latitude and the Cooling influence of the neighboring mountains of Boutan give every reason to expect a climate eminently similar to the Parts of China in which good Black Teas are at Present manufactured.

The Mountains of Boutan afford in a short distance all the Climates that are Found in the Cooler parts of the Empire of China and Consequently every variety necessary for the production of the Green Teas, if then the Culture of Black Teas is once established in the neighboring provinces of Bahar and the inhabitants of Boutan are invited by proper inducements they will certainly undertake that of the Green and thus by a gradual change the whole of the Tea Trade will be Transferred into that Quarter.

Banks even considered the possibility of having Chinese tea-makers and tea-growers for work in India:

The inhabitants of Canton are now in the Habit of shipping themselves on board our India-men whenever hands are wanted, we may therefore with safety conclude that their neighbors at Ho nan may be induced by the offer of Liberal Terms to follow their example and moreover to embark their Tea shrubs and all their Tools of Culture and manufacture and migrate with them to Calcutta where they will find the Botanic Garden ready to receive them 20 acres of which at Least might be allotted to their immediate reception, which is already cleard and prepard for similar purposes, and lying under very nearly the same Latitude as Canton, could not Fail to suit, in every particular, this infant adventure, and here the shrubs might be increased under the directions of the able and indefatigable superintendent and the natives taught the culture and manufacture of this article, who when fully instructed might be detached with a proper supply of Tools and Shrubs to the places ultimately destind for the Permanent Establishment of the manufacture.

Presuming you Sir and the Court of directors to agree in the Propriety of attempting the Execution of this Plan two things only remain to insure its success, which are to find out the proper means of getting access to the Cultivators and manufacturers of tea in Ho nan and to induce them to remove with their shrubs and their tools to Calcutta to instruct the execution of this business.

Banks then laid down the principle of a 'colonial' economy:

A colony like this blessd with advantages of soil, climate and Population so eminently above its mother Country seems by nature intended for the purpose of supplying her Fabricks with raw materials and it must be allowd that a Colony yielding that kind of tribute binds itself to the mother Country by

the strongest and most indissoluble of human ties that of common interest and mutual advantage.

Yet Evidently as this reason points to the discovery of the Real and Permanent interests of the East India Company Few if any steps have hitherto been taken to establish it on that Foundation and no public interference whatever has been exerted towards encouraging any one new species of Culture that has not been markd by the most rigid economy.

Banks had schemes for the production of other agricultural commodities, but he gave priority to tea as 'an article of the greatest national importance' to Britain. In spite of this enthusiastic report, nothing happened for a long time and historians of that period have been wont to say that the East India Company, having the monopoly of the China tea trade, took no interest in the possibility of tea-growing in India and indeed discouraged any such development. This statement does not seem to be altogether fair. It ignores the facts that most of what are now the North Indian tea districts were not then British territory; that as Banks himself pointed out, Bhutan then seemed to be a more hopeful area than India for tea cultivation; and, moreover, that many years passed before the indigenous Assam plant could be identified as tea by competent authorities. In reality much thought was given to this subject by a number of British officials. In 1793 Banks was sent with Lord Macartney's mission to China for the express purpose of obtaining detailed information about the cultivation and manufacture of tea, and seeds and plants were sent back to Calcutta. A little later, Abel, a well-known botanist, accompanied Lord Amherst's embassy to China, but unfortunately the tea plants collected by him were lost on board the *Alceste* on their way home.

The next two or three decades formed a troublous period, in which difficulties with the Marathas and the Burmese, the establishment of law and order, and many other matters of highest urgency, must have kept British administrators fully extended. Nevertheless, in 1815, Colonel Latter had time to notice the tea-drinking habits of the Assamese tribes and, in 1816 the British resident at Kathmandu in Nepal sent to Calcutta what he described as a tea plant. The experts in Calcutta may perhaps have been over-cautious and would not commit themselves.

The next stage of development confronts us with one of the most extraordinary controversies in the history of botanical discovery – a controversy bitterly but inconclusively fought out in the normally dignified forum of the Agricultural and Horticultural Society of India. There were, in 1841, two rivals before the Society for the honour of having first reported to the world that tea was indigenous to Assam. They were C. A. Bruce and Lieutenant Charlton. The curious reader may study the course of the argument in the *Correspondence Regarding the*

Discovery of the Tea Plant of Assam in the India Office collection of pamphlets, designated Tract 320. The present writer has no doubt that the statements of C. A. Bruce were substantially correct and the following account is based upon them together with corroborative evidence.

In 1819 David Scott, then agent to the Governor-General in Assam, had begun to take an interest in the possibility of growing tea and wrote to Dr N. Wallich, the botanist to the East India Company, asking for Chinese tea plants and seeds from the company's Botanical Garden in Calcutta, 'expressly for the purpose of trying them in the Hills to the Eastward of the Berhampooter'. The plants were sent, but apparently died. In 1824 Scott asked for a fresh supply. In the meantime, the brothers Bruce had entered the field. Major Robert Bruce was a venturesome businessman who went to Upper Assam in search of trade, and with the East India Company's permission became the agent for Purundar Singh, a Chief whom the company were backing in the struggle for the rulership of Upper Assam. In 1823 Robert Bruce learned of the existence of tea in Assam and made an agreement with a Singpho chief for a supply of the tea plant. Before the supply had been received, Robert's brother, C. A. Bruce, arrived on the scene. C. A. Bruce had already had sufficient adventure to satisfy most people, as appears from his own statement regarding himself in a letter to the Agent to the Governor-General.

> I left England in 1809, as midshipman, on board the H.C. ship Windham, Capt. Stewart, and was twice captured by the French on my way out, after two hard-fought actions; was marched across the Isle of France at the end of the bayonet, and kept prisoner on board of a ship until that island was taken by the British; thus I suffered much, and twice lost all I possessed, and was never remunerated in any way. I afterwards went as an officer of a troop ship against Java, and was at the taking of that place.

C. A. Bruce was, nevertheless, still restless, and when the Burma war broke out in 1823, he offered his services to David Scott and was appointed to command gun-boats. His command was at Sadiya near the home of the chief with whom Robert Bruce had made the agreement. C. A. Bruce claims that he 'was the first European who ever penetrated the forests, and visited the tea tracts in British Suddiya, and brought away specimens of earth, fruit and flowers, and the first who discovered numerous other tracts'. He collected the promised tea plants from the Singpho chief and made them over to Scott, who planted some of them in his own garden, sent others to the Government of India, and forwarded the balance to N. Wallich with the following letter dated 2 June 1825: 'I have the pleasure to forward some leaves and seeds of a plant which the Burmese and Chinese at this place concur in stating to be the wild tea. I had a much more perfect seed than any of those sent, but cannot now find it; it was of this shape agreeing with the plate in

the Encyclopaedia.' In a postscript, Scott added: 'I have found the triangular seed and forward it with the others in a tin box.'

Wallich was not convinced that the leaves and seeds sent were genuine tea rather than camellia and no further developments took place until 1831, when Lieutenant Charlton, then serving in Assam, sent what he described as tea plants to the Agricultural and Horticultural Society in Calcutta. These plants, too, failed to secure the official recognition of the experts as tea and unfortunately they died almost at once. In sending the plants, Charlton stated that

> the tea tree grows in the vicinity of Suddyah, the most remote of the British possessions towards the east, in Assam, and adjacent to the Burmah territory. Some of the natives of Suddyah are in the habit of drinking an infusion of the dried leaves, but they do not prepare them in any particular manner. Although the leaves are devoid of fragrance in their green state, they acquire the smell and taste of Chinese tea when dried; the tree bears a flower very like that of the wild white rose, but much smaller.

Shortly after Lord William Bentinck became Governor-General of India in 1828, he received in London from 'a very intelligent gentleman of the name of Walker' a memorandum on the desirability of undertaking the cultivation of tea upon the Nepal Hills and elsewhere in India. Walker's case was based upon the uncertainty of the China trade and the importance of tea in English life. Japan had severed trading relations with the West and there was considerable ground for apprehension that China would do likewise. Walker stated:

> The commercial relations of this country with China have lately assumed a character of uncertainty, by no means corresponding to the importance of the trade, or consistent with the dignity, of the British empire. This unsatisfactory state of affairs has originated from a combination of causes and occurrences spread over a long series of years, amongst which may be enumerated: the jealous policy of the Chinese Government in her intercourse with all nations; the apprehension which she has always entertained of our formidable empire in the East Indies; the ignorance, pride, and prejudice of the Government; a consciousness of her own strength in some points, and her weakness in others; the rapacity and corruption of her officers, and occasionally the misconduct of our own people.
>
> For many years the consumption of tea has been increasing in this country; it has become a luxury to all, and almost a portion of food to the common people, who in some districts drink it three or four times a day. Its use is so intermingled with our habits and customs, that it would not easily be dispensed with.
>
> It is, therefore, of considerable national importance, that some better guarantee should be provided for the continued supply of this article, than that at present furnished by the mere toleration of the Chinese government, which, although the Chinese have at present a monopoly, it will be easy for us to destroy.

Walker went on to urge that tea had been successfully grown in Rio de Janeiro, St Pauls, and St Helena, and that the plant had been found in Nepal. 'If in future we are not rendered independent of the Chinese by producing tea from our own territories and colonies, it will', stated Walker, 'be our own fault' and he therefore proposed that 'the East India Company should resolutely undertake the cultivation upon the Nepaul hills and other districts, where the camellia and other plants of a character similar to the tea plant are indigenous.' The low price of labour in India would facilitate this enterprise and at the same time the East India Company would thus be able to provide occupation for the many thousands of Indian weavers who had been ruined by the import of cotton and muslin from Manchester.

Wallich wrote a note generally supporting this proposal. He explained the climatic and other unsuitabilities which had led to the failure of attempts to cultivate tea commercially in Penang, Java, and Ceylon and recommended experiments in the provinces of the Kamaon, Gurwal, and Sirinore since they 'contained situations corresponding entirely with what we know of those of China and Japan in which the cultivation of the tea shrub is carried on to the greatest extent and perfection'. Bentinck was much attracted by these proposals and minuted as follows:

> The only real difficulty that occurs to me, is the impossibility of having access to the tea countries, and of thus having personal and local knowledge of all particulars relating to the cultivation and manufacture. If I had not been to the eastward, when the opportunity was given me of observing the character of the Chinese adventurers there, their superior energy, their industry, their spirit of speculation and calculation of profit, quite equal to that of any European nation, I should never have entertained the conviction, which I did from that moment, that this or any other scheme was perfectly practicable through Chinese agency. I therefore now most strongly and confidently recommend that the attempt should be made; and I propose that a Committee, of which I will present a list hereafter, shall be formed, for the purpose of submitting to Government a plan for the accomplishment of the object, and for the superintendence of its execution.
>
> My own idea is, that an intelligent agent should be selected, who should go down to Penang and Singapore, and in conjunction with the authorities there, and the most intelligent of the Chinese agents, should concert measures for obtaining the genuine plant, and the actual cultivators, who upon inspection of those spots, that upon their representation of the requisite peculiarities of soil and climate, shall have been selected as the most eligible, shall then be employed, under the promise of a liberal remuneration, to carry on the cultivation. I know no one better qualified to select the best means adapted to the end than Mr Gordon, of the late firm of Mackintosh & Company.

The Tea Committee was appointed on the 1 February 1834 and was soon expanded to include seven servants of the East India Company, three Calcutta merchants, Wallich, and two Indian gentlemen. It met for the first time on the 13 February 1834 and took a far from hopeful view of its task. The secretary, George James Gordon, of the firm of Mackintosh & Company, thus expressed his doubts:

> Our hopes of success must, therefore, mainly rest on the discovery, within our own territories, of localities corresponding closely in point of soil and climate with those of the best tea districts in China. I know of no part of India in which these are so likely to be met with as amongst the Himalia Mountains; even there, however, we may possibly meet with disappointment; for it is not to be concealed, that a lofty wall of mountains, separating a vast alluvial plain on the one hand, from the interminable table lands of Tartary on the other, presents a very different aspect, and is likely to be very differently affected in point of temperature and moisture from hills centrically situated in a country nowhere presenting wide tracts of level land, either at low or considerable altitudes. My fears, in short, are turned towards the effects of the rainy season, which in our present ignorance of the quantity of rain which falls during the same months in the interior of China, may, I apprehend, be found deleterious from excess of moisture. Fogs, too, are exceedingly prevalent at the same season, at most of our hill stations in that range, a circumstance easily accounted for by the peculiarity of their positions above adverted to, and which though it may exist in the tea provinces, is not so likely to be prevalent there.
>
> The object proposed, however, is far too vast in importance to be abandoned on mere surmise. It might be proper, therefore, in the first instance, to take a general survey of the Himalia stations.

It will be remembered that the indigenous plants produced from various places in India up to this time had not been accepted by Wallich and his colleagues as being genuine tea and the committee were thus confronted with the task of introducing from China what they believed to be a foreign plant. The sub-Himalayas and the Nilgiris seemed to them to provide the most favourable areas and they probably remembered that in 1816 Dr Govan – the Civil Surgeon who established the Botanic Gardens at Saharanpur in the United Provinces – had expressed surprise that tea cultivation had never been tried in that area. Dr Falconer, Civil Surgeon in charge of the Botanic Gardens at Saharanpur, confirmed this view. They felt, nevertheless, that they must first collect more information as to soil and climatic conditions in those areas and then make a further study of the position in China.

The committee set to work promptly and on 3 March 1834 issued a circular to local officials calling for information. Few government circulars can ever have elicited such a striking response. In 1832 Captain F. Jenkins – who in 1834 became agent to the Governor-General for the North-eastern Frontier with his headquarters at Jorhat – had been

deputed to report on the economic potentialities of Assam. Jenkins had an alert mind and an observant eye and had been studying Assam for two years. His reply to the circular is of great interest:

I am so fully impressed with the belief of the fitness of the mountainous region which divides Cachar from Assam for the growth of tea, that I beg to attempt to call the attention of the Committee to that region in the most favourable manner I can, with a view to its examination by a competent individual.

Camellias are found in every part of this hill country; and within our jurisdiction in the Singpho district of Beesa, a coarse variety of the tea plant is, as I am informed, undoubtedly indigenous. A plant was given to me at Sudya, which I have reason to suppose was a genuine tea tree, and I intended to have brought it to Calcutta for examination, but I received it in a sickly state, and from the prevalence of great heat, I was unable to succeed in taking it to the Presidency. I shall endeavour to procure another plant or two for the satisfaction of the Committee. However, having no doubt myself of the fact of the tea shrub being found wild in the eastern parts of Assam, I would beg to recommend the expediency of some well-qualified person being at once sent up for the identification of the plants beyond any objection, for the examination of the soil in which it grows, as reported, and an inspection of the tract of mountains between Cachar and Assam.

At the same time Jenkins showed the tea committee's circular to his assistant, Charlton, who at once wrote as follows to Jenkins:

I was informed about three years ago of its being found growing wild in the vicinity of Beesa, at the foot of a low range of hills, and in the subjacent plains, from whence I obtained three or four young trees, which I gave to Dr John Tytler, in Calcutta, with a view of their being planted in the Government botanical garden. I have since understood they decayed soon after . . . I am sorry I cannot give you a minute discription of the plant, not having it now before me; but so much I recollect, the leaves were about two inches in length and one in breadth, alternate eliptic-oblong and serrate. The flower white, very like that of the wild white rose, but much smaller. The seed I have not seen; it was described to be contained in a red, round, three-lobed capsule. the lobes detached or bursting along the upper sides, with a single seed in each. From what I have seen of the tea plant in different parts of the world, and lately in New Holland, propagated by seeds brought direct from China, I have little doubt but that that found near Beesa is a species of tea, and though it may be spurious or even a camellia, as Dr Wallich suggests, its growing there indigenous and in great abundance affords good grounds for supposing that the introduction of the Chinese plants into Upper Assam would be attended with success. I have not had an opportunity of making any experiments on the leaves; they are devoid of smell in their green state, but acquire the fragrance and flavour of Chinese tea when dried. The Singphos and Kamptees are in the habit of drinking an infusion of the leaves, which I have lately understood they prepare by pulling them into small pieces, taking out

the stalks and fibres, boiling and then squeezing them into a ball, which they dry in the sun and retain for use. I have written to Suddya for a specimen of the tea prepared in this manner, and for plants and seeds; I will send you some if I am able to procure them, and write to you on this subject more fully by-and-by.

A few months later, Charlton sent Jenkins from Sadiya 'some seeds and leaves of the tea tree of Assam' and excused himself the delay on the ground that:

the leaves you could have had before, but I was anxious to make them into something like tea, the best test that the tree is not a camellia as Dr Wallich imagines. . . . The tree I now find is indigenous to this place as well as Beesa; and grows wild everywhere, here and there, all the way from this place, about a month's journey to the Chinese province Younan, where I am told it is extensively cultivated. One or two people from that province have assured me, that the tea tree grown there exactly resembles the species that we have here, so I think there can be no longer any doubt of its being *bona fide* tea.

Wallich and the committee were at last convinced. 'We have at length obtained the fruit of the Suddya plant from Lieutenant Charlton,' they informed the Revenue Department of Government, and 'we are now enabled to state, with certainty, that not only is it a genuine tea, but that no doubt can be entertained of its being the identical tea of China'. The committee waxed lyrical as they announced to his Lordship in Council, on the 24 December 1834:

that the tea shrub is beyond all doubt indigenous in Upper Assam, being found there, through an extent of country of one month's march within the Honourable Company's territories, from Suddya and Beesa, to the Chinese frontier province of Yunnan, where the shrub is cultivated for the sake of its leaf. We have no hesitation in declaring this discovery, which is due to the indefatigable researches of Captain Jenkins and Lieutenant Charlton, to be by far the most important and valuable that has ever been made on matters connected with the agricultural or commercial resources of this empire. We are perfectly confident that the tea plant which has been brought to light, will be found capable, under proper management, of being cultivated with complete success for commercial purposes, and that consequently the object of our labours may be before long fully realized.

It is a pity that in this triumphant letter they made no reference to the brothers Bruce, or to David Scott, who nearly ten years earlier had insisted that the shrub they had found in Assam was genuine tea. It was this omission which led to the dispute before the Agricultural and Horticultural Society in 1841, when Charlton claimed to be the discoverer of tea in Assam.

A few months before the tea committee's announcement, Gordon, the secretary of the tea committee, had been sent to China in the *Water Witch* not only to secure tea plants and seeds but also to bring back 'a

select rather than a numerous body of planters; men qualified to conduct every operation connected with the production of good tea, from the selection of a proper site for a plantation, to the gathering of the leaf, its preparation and packing'. At this stage it was made clear that the only object of the Government was to demonstrate the practicability of producing tea for commercial purposes; thereafter it would be for private enterprise to pursue the matter. For this limited objective it was thought that it would be sufficient to bring fifty Chinese to India and that even a smaller number might do. In Macao, Gordon soon learned of the great difficulties experienced by the Dutch Government in procuring Chinese experts in the manufacture of tea. Cultivators could be obtained easily enough, but the Dutch had only been able to engage about a dozen tea-curers all of whom had since been murdered.

> Those whose employment is the manufacture of tea are too well paid for their labour to be desirous of bettering their fortune by emigration, particularly under all the perils that attend such a breach of the laws by those from whose families anything can be extorted by the mandarins.

Before Gordon had overcome these difficulties, the existence of indigenous tea in Assam was acknowledged by the Tea Committee and they hastily recalled him from China on the following grounds:

> The discovery of the growth of the tea in Upper Assam, and the reports which we have received of the facility of multiplying it to any extent by seeds, render all supplies from China unnecessary, inasmuch as there is every reason to suppose, that seeds, even of the best sorts of tea, will produce only inferior sorts of plants when removed from their native soil; and the extensive supplies of the *bohea* kind, which we have lately received from Mr Gordon, together with those of the tea which may be expected to arrive soon, will answer all purposes of a trial. Besides, there is this great advantage in favour of the seeds produced within our own territories, that they may be had in a perfectly fresh state, and with comparatively little or no expense. With regard to the importation of Chinese cultivators and manufacturers we are of opinion, that the plan suggested by Captain Jenkins, in the letter which accompanied our officiating secretary's letter of the 19th ultimo, for procuring that class of people from Yunnan, is far preferable to bringing them from China; at any rate it holds out an auxiliary resource in case Mr Gordon, on the receipt of our instructions, should not have succeeded in procuring people willing to proceed to Bengal.

By the time Gordon returned to Calcutta, however, the committee had changed their minds regarding the second of the arguments used by them, and Gordon was sent back to China to clinch arrangements for engaging properly qualified Chinese to superintend the cultivation and manufacture of tea. During Gordon's stay in China he had despatched three batches of seed to Calcutta, but not all were well selected, as we learn from an article in the *Calcutta Courier* of 14 September 1835, quoted

by Dr Mann in his admirable book *The Early History of the Tea Industry in North East India*:

The first parcel of the seed was despatched personally by Mr Gordon, in very good condition and having been procured from the Bohea Hills, is supposed to have been collected from plants bearing only the good sorts of black tea. This seed on its arrival in Calcutta was distributed partly for cultivation in Assam, partly on the Himalaya hills. The second and third batches were both despatched from Canton during Mr Gordon's absence, and from the channels through which they were procured are supposed to have been only the seeds of inferior kinds of tea. Both these parcels were sown in the Botanic Garden here; the last of them arrived out of season and in such a state as not to vegetate, but from the second batch about a lac of plants were procured, of which about twenty thousand were sent up to Assam, as many more to the garden at Mussourie, and a couple of thousands to Madras.

The same article also sets forth the then accepted view that black tea and green tea came from plants of different stock.

We have noticed an impression that black and green teas are derived from the same stock, which is as great a mistake to imagine the same seed would produce black or white grapes – black, red, or white currants – red or green gooseberries – the sweet or sour lime and orange, etc. The black tea in all its varieties, we learn from Mr Gordon, is peculiar to one part of China the green tea to another.

The committee were now determined to follow up the Assam discovery with vigour and a scientific panel consisting of Wallich, Assistant Surgeon M'Clelland, and Assistant Surgeon Griffith was deputed to proceed to Assam, while C. A. Bruce was appointed under Lieutenant Charlton to have charge of the nurseries to be established there.

The scientific panel assembled at Sadiya in North-east Assam at the beginning of January 1836 after a journey of four and a half months from Calcutta, and Bruce, with his great local knowledge was attached to them. They searched systematically for tea jungles, they analysed soils, and they collected seeds. Tea was found to be far more widely scattered in Assam than had been realized and the new discoveries were set forth in the *Asiatic Journal* in 1836.

The result of the researches of the tea-deputation despatched to Assam under Dr Wallich, respecting the tea plant in that country, gives every reason to expect that tea will become in a short time a prime article of export from India. The plant has been found in extensive natural plantations and the localities are such as to encourage the belief that it exists far more extensively than has been actually discovered, and to warrant the conclusion that Assam, and our northern frontier generally, will afford the most ample field for tea-cultivations of every variety. Two of the localities in which the tea has been found

are beyond Sudiya, in the tract of country occupied by the Singphos; and the natural presumption is, that it has migrated into the neighbourhood from the Chinese provinces to the eastward. If this be correct there is every reason to expect that, on further investigation, it will be found to be plentifully diffused through the neighbouring mountains. The Singphos are tributaries, who acknowledge our paramount authority and little difficulty need therefore be anticipated in extending the regular cultivation and manufacture of the tea into their country. At the same time, it is gratifying to know, that the tea produced on the adjoining frontier of China is very highly valued by the Chinese themselves. Other two localities of the tea are found in the Muttuck, or Mooamareea country which extends, on the South bank of the Bramhaputra, from the district of Sudiya to Upper Assam. The Mooamareeas are tributaries to us, like the Singphos, and more direct under our influence. Their country more nearly resembles the rest of the valley of Assam, which is immediately under our own government; and therefore the natural growth of the tea-plant in it affords the most gratifying assurance of the practicability of extending the cultivation through the province. The last tea locality examined lies amongst the Gabhroo Purbut group of small hills, within a few miles of Jorhath Raja Poorunder Singh's capital. As the Raja holds its territories by treaty from the British Government, and expressly during good behaviour only no difficulty can be experienced in extending the tea cultivation in them; and if any did occur similar localities skirt on both sides the whole plain of Lower Assam which is under the administration of our own officers. Over the Naga Hills there is a line of communication between Upper Assam and Munipoor and as Major Grant has brought to light the existence of the tea-plant on the south side of the range, and it has now been found also on the Assam side, we may expect that it likewise occupies many intermediate spots.

In March 1836, Wallich reported thus to Jenkins, the agent to the Governor-General:

. . . at the time when I left Calcutta, on my present tour, the Committee were not in possession of any data on which they could found a supposition that tea existed anywhere in this province, except on its remotest frontier to the southward and eastward of Suddeya. It was not until I reached Assam that I heard from you that forests were to be met with lower down the Berhampooter, in countries subject to British control and influence. We have fortunately been able to examine all these forests personally, as far as we had any positive knowledge of their existence . . . The gamers or chiefs who own the Singfo tea tracts, will not object to our purchasing or leasing them. Such a measure would, moreover, have a very beneficial effect on the tribe; it would improve and strengthen the impression which, I trust, my party has left among them, that there are other objects than those of war and punishment which may bring them into close contact with their neighbours . . .

Under the preceding views, I most anxiously recommend, that all the tracts which I have enumerated above should be put under a systematic course of management in our own hands, in order that we may be enabled, with far less cost, and with vast saving in point of time, compared to what would be the case were we to depend exclusively on artificial plantations, to arrive at a

satisfactory conclusion as to the capability of the Assam tea of yielding a good and merchantable produce.

The Government of India considered that Wallich's proposal to establish a large number of tea plantations in forest areas – which in some cases would have to be leased or purchased from the chiefs – was far too ambitious and they therefore limited operations to two or three areas. In May 1836, C. A. Bruce was promoted to be Superintendent of Tea Forests on a salary of four hundred rupees per month, but the Government of India, ever mindful of economy, cut down considerably the tea committee's proposal regarding his staff.

Some of the most suitable areas were in the territory of semi-independent chiefs whose attitude towards plans for tea-growing varied greatly. Raja Poorunder Singh:

> makes no hesitation in placing the Gubroo hill at the disposal of the Government; but he is anxious to retain one-half of the hill, that he may carry on the cultivation of the tea plants, on that half, simultaneously with us on the other, and that the superintendent and overseers of the Government should instruct his people in the management of the plant and manufacture.

This was an acceptable proposal since the Government wished, according to Jenkins, to do no more 'than show the feasibility of producing a marketable tea within our own provinces ... the sooner they can abandon the proposed tea plantation to private enterprise the better'.

Other chiefs, however, were more unco-operative and the difficulty of handling them may be illustrated by the extract from the Tea Committee's letter of the 6 August 1837 to the secretary to the Governor-General:

> It appears that Mr Bruce, unappalled by the discomforts, difficulties, and even dangers of travelling in the rainy season through the jungly country of Singfos, on the south side of the Burhampooter, made an excursion amongst those tribes as far as Beeralakum, on the Terappanee, beyond the Burra Dehing river, from which he returned in the beginning of July.
>
> Confiding in his own extraordinary talent for conciliating the goodwill of these rude people, he took with him only one servant, and two other attendants. Before reaching Koojee, on the Debru river, where tea had been found by Dr Wallich, Mr Bruce heard that there were other spots producing tea near that place, and on his arrival there, he sent for the *gaum*, and questioned him on the subject. At first the *gaum* denied that any more tea grew in that neighbourhood than he had shown when Mr Bruce was there with the deputation. By presenting him with a little opium, and the use of a 'few soft words', however, Mr Bruce prevailed upon him to promise that he would make further inquiries. Next morning he told Mr Bruce that he had got information of a large patch not far from his house, and people having been immediately set to work to clear it, Mr Bruce proceeded to Ningrew, on the

Burra Dehing river. There the *gaum*, though very kind and civil, denied at first that he knew of any more tea in that neighbourhood than had been already shown to the deputation; Mr Bruce made him a small present of opium, and told him how much he would be thought of by the Commissioner if he forwarded his views, seated himself cross-legged amongst his people, smoked a Singfo pipe, addressed the chief as 'elder brother', and conducted himself altogether so as to completely ingratiate himself with him. The chief took up Mr Bruce's double-barrelled gun, and begged him to ask the Commissioner to grant him one, as he had already made similar presents to the Tow and Bunwah *gohains*. Mr Bruce said presents had been made to those chiefs on account of services they had rendered Government, and if the *gaum* would do the same, he would apply in his behalf to the Commissioner. By this means Mr Bruce obtained information that tea was growing at Jagundoo, further down the Burra Dehing. To this place he proceeded forthwith in a canoe manned by Singfos, and on his arrival, persuaded the *gaum* to set about clearing the tea trees from the low jungle and creepers amongst which they were buried; some of the produce of those trees was prepared and compared with some Chinese tea brought by Mr Bruce, which the *gaum* declared was not equal to his own. A payment of twenty rupees, with the promise of a further payment of twenty rupees as soon as the ground should be cleared, sufficed for the expense of that operation. Returning to Ningrew, Mr Bruce found that considerable progress had been already made in clearing the jungle from the tea trees at that spot, and a similar payment, and further promises were made there, as at Jagundoo. A little more opium, and 'sweet words', induced that chief to make a futher disclosure of the existence of tea trees at a place called Phakial, and distinguished by Mr Bruce from another village of the same name, as Big Phakial.

A similar entry is contained in C. A. Bruce's report of the 1 October 1836:

On my arrival at Rungah Gurrah I called on the Rajah Burrah Sunna Putty, and asked him to let me have an elephant and a few coolies to enable me to proceed to Tingri, to examine the tea there. He gave them to me with coolness and reluctance, and shortly afterwards told me that as he was going to bathe and take some refreshment, that I had better do the same. I immediately took the hint, and was off on my way to the tea, and at Tingri I lost no opportunity of gaining all the information I possibly could, by kindness and making a few presents, and by free access to my person of all the village people, who came flocking in to see me, so much so that I seldom retired to my humble couch of paddy-grass on the ground before midnight; however, I was richly repaid for all this by my success in being informed of one tea tract after another, although they had been strictly prohibited from giving me any information whatever. I told all these people that I had come to do their country good, by instructing them how to cultivate and manufacture tea; but I do not think any of them believed me, so strongly had they been prejudiced and assured to the contrary. . . .

On my return from Tingree, with tea seeds for yourself and other gentlemen in Assam, to be distributed to every one that would use them, and which

I did myself the honour of sending off express on the 27th ultimo, that they might reach them fresh and sound, I called upon the Rajah, and explained to him that our Government was at a deal of trouble and great expense about this tea on his account; that, as soon as we had taught them the method of rearing and making tea, we would leave it to them, and then purchase from them as much as ever they could cultivate and manufacture in our way; that he and his country were to reap all the benefit, he ought to go to the expense of clearing and manufacturing it. As soon as he understood that it was for his own interest, and the good of his country, he entered into the spirit of the thing and said that he would find out every place where it grew, and make everyone in his country cultivate it, and that I may inform you that such was his intentions, but that I must instruct him all about it. Rely on it, in this he is perfectly sincere; the love of gain will induce him to fulfil his promise.

This report ends on a very human note. Pioneering in Assam was a risky business and Bruce was a family man. He therefore begs that 'as I am exposed to all weathers, and at all seasons, in these unhealthy jungles, should I unfortunately be taken off by a jungle fever, that Government would kindly make some provision for my family, as I am an uncovenanted servant'. This kind of appeal seldom stirs the bureaucratic heart and although the Government of India agreed to augment Bruce's salary, their last word on the subject of provision for his family was 'His Lordship in Council understands that the Uncovenanted Servants' Fund has not been formed, and he is not aware of any means by which provision could be secured to the family of Mr Bruce in the event of his death'.

The scientific panel unfortunately disagreed about many major matters, foremost amongst which was the choice between Assam and China seeds. Wallich, for reasons already recorded, favoured the indigenous teas, while Griffith and M'Clelland strongly urged the importation of China seed. In 1837 Griffith in a report of great importance and cogency – in spite of its advocacy of a course now generally recognized as having been disastrously mistaken – stated emphatically that the most important step to be taken was 'the importation of Chinese seeds of unexceptionable quality and of small numbers of the finest sorts of tea plants'. He wrote:

> I imagine, and I think that most persons will agree with me, that the importation of even the inferior kinds would be more likely to lead to the produce of a marketable article than the cultivation of a wild, or (to use our Indian notions) a more expressive term, jungly stock. . . . The importation was still more necessary from the total annihilation of those previously imported.

He ridiculed the idea that an Assam tea industry could compete quickly with that of China. It must inevitably be a slow business, but ultimately if good China seeds and plants are introduced, 'It may be expected that

the indigenous plant of Assam will lose most or all of those bad qualities that may with reason be supposed to exist in it. . . . 'The pollen of the Chinese plant must be applied to the stigma of those of Assam' and the process must be repeated indefinitely.

Griffith displayed the professional jealousy so often found amongst specialists and strongly disapproved of Bruce, the Superintendent, whom he regarded as an enthusiastic amateur. He did not succeed in displacing Bruce, but he carried his point with the Tea Committee as regards the choice of seed, and the tea industry in Assam was thus established with China seeds.

The committee were also hopelessly divided as to the most suitable localities in India for the growing of tea. Wallich, Royle, and Falconer consistently maintained that the sub-Himalayan regions, where tea from China seed had already been grown, were the obvious choice, while Griffith and M'Clelland considered Assam much more hopeful. Falconer, indeed, stated dogmatically at an early stage that the cultivation of tea good enough to be an object of commercial importance 'could be expected in no part of the plains of India'.

The mean annual heat of the climate from 30° north down to the parallel of Calcutta is much beyond that of the tea cultivation in China. We have, in addition, an excessive summer heat, with either hot winds or a close scorching air during the day, a barely temperate winter, cold and heavy periodical rains. We certainly get some Chinese fruits, such as the *lechee*, the *loquat*, and the *wampee* to grow, but the tea plant appears to require a greater cold to thrive in. It has been seen that the annual heat of the southern limit of the tea cultivation in China, assumed to extend to Canton, is 73° Fahrenheit. At Saharunpore, which may be considered as at the northern limit nearly of the Hindoostan, 8° of latitude higher, and 1,000 feet above the sea, the mean temperature of the year is 73° Fahrenheit, the temperature of June is 90°, and of January 52°.

In the Himalia Mountains the case is widely different, excepting periodical rains; here all the conditions of a temperate climate are found, and here, above all parts of India, we may look for the successful cultivation of tea.

The most likely spots appeared to Wallich to be Sabathu and Mussooree.

Griffith, on the other hand, in his main report, stated:

That the Himalayas are not so well adapted as Assam for the cultivation, cannot likewise be doubted; for if 'it cannot be a difficult task to transfer from one country to another a plant, which grows naturally and is cultivated extensively, to one which possesses so many of the plants which are common to the two' it will, I presume, be allowed to be a much less difficult task to do so, when, with the same similarity in the associated plants, we have the plant referred to itself occurring naturally and extensively. If these premises be correct, it follows that the culture of the tea plant should be restricted entirely to Assam.

The Government of India, confronted with this conflict of expert views, wisely decided to try all the areas that had been suggested and the available China seeds were divided between the sub-Himalayan areas, Upper Assam, and South India.

In the south, six boxes of the first batch of seedlings were sent to the Nilgiris, six to Coorg, six to Mysore, and two to the Agricultural and Horticultural Society at Madras. The seedlings sent to the Nilgiris appear to have been kept too long in boxes on the way and most of them died. A few were then planted in the Wynaad district of Malabar and did well. The Coorg experiment was a complete failure – only 132 of the 541 plants despatched to Mercara survived the journey and they were soon destroyed by small white grubs. Mysore proved almost equally unsatisfactory and, generally speaking, the attempts to introduce tea to South India at this period were unsuccessful.

The experiments in the sub-Himalayas were reasonably successful and will be discussed later, but it was in Assam that the most satisfactory results were obtained. Even there, many unexpected difficulties arose. In 1835–6 twenty thousand plants from Gordon's China seed were sent to Wallich in Assam, but over half of them died on the way. Rats in the boat were partly responsible for these casualties, but another cause was lack of experience in the packing of the seedlings. Moreover, Berry White tells us that, when the first nursery was established in Assam towards the end of 1835:

> An extraordinary mistake was made, such as appears to be inevitable with all new enterprises. The land selected was at Sadiya, on a *char* near the confluence of the Koondil and Bramahputra rivers. It was a mere shifting sandbank with a crust of a few inches of alluvial deposit, and the plants of course died so soon as their tap roots reached the sand. In fact, the scientists selected the only patch of soil a furlong square in Upper Assam, in which tea would not grow and thrive. The garden proved a lamentable failure, and within a few years the Bramahputra flowed over its site.

On the 1 October 1836 Bruce recommended the abandonment of the Sadiya plantation since 'the money now being expended in this might be employed in a far better manner in clearing the Singpho forest' and in a later letter he comments that 'as long as coolies can get Rs4 per month at Suddeeyah, they will never go to the Singphos for that sum'. The Agent-General supported this proposed abandonment since:

> we are now certain, I think, from the great quantities of tea plant lately brought to light, of securing a sufficiency of the indigenous plants, without having recourse to any artificial plantations of these plants whatever, at least at the expense of Government, for it appears certain that if the Chinese manufacturers succeed in making a tea that will be in demand for exportation, the native chiefs will take care to propagate the plants to any required extent, on being remunerated for the leaves supplied.

Certain of the surviving plants from Sadiya were replanted at Jaipur. In 1837 a new plantation was established at Chabua eighteen miles from Dibrugarh and proved successful. It, too, was planted with the China variety and it is worth quoting the classic lament of J. Berry White on this event:

It is a matter for profound regret that this garden did not share the fate of its predecessor, for it proved the Chief means of disseminating the pest of Assam – the miserable China variety – all over the province, not only by means of seed, but, owing to its prolific inflorescence, the indigenous Assam plants in the vicinity were impregnated with its pollen, and thus produced the hybrid variety which now forms the great bulk of the plant found not only in India but also in Ceylon.

Berry White, in his lecture to the Society of Arts in 1887, goes on to refer to another mistake made in the course of these transactions:

The selection of Kundil Mukh was not the only mistake made by Government in their initial efforts to establish tea culture in Assam. Acting presumably on the belief that every Chinaman must be an expert in tea cultivation and manufacture, they transplanted all the Chinese shoemakers and carpenters that they could induce to go from Cositollah and other bazaars in Calcutta to Assam; these men were nearly all from the sea-port towns of the Celestial Empire, and many had never seen a tea plant in their lifetime.

In spite of all these mistakes, invaluable experience was being obtained not only in the growth of the bush, but also in the manufacture of tea, and on the 5 October 1837 Jenkins submitted to the Tea Committee Bruce's *Account of the Manufacture of the Black Tea as now Practised at Sudeya, in Upper Assam, by the Chinamen sent thither for this Purpose.* This account of the manufacture of tea in India by other than the primitive methods of the Singphos is of such historic importance as to warrant extensive quotation:

In the first place, the youngest and most tender leaves are gathered; but when there are many hands, and a great quantity of leaves to be collected, the people employed nip off, with the forefinger and thumb, the fine end of the branch with about four leaves on, and sometimes even more, if they look tender. These are all brought to the place where they are to be converted into tea; they are then put into a large, circular, open-worked bamboo basket, having a rim all round two fingers broad. The leaves are thikly scattered in these baskets, and then placed in a framework of bamboo, in all appearance like the side of an Indian hut, without grass, resting on posts, two feet from the ground, with an angle of about 25°. The baskets with leaves are put in this frame to dry in the sun, and are pushed up and down by a long bamboo, with a circular piece of wood at the end. The leaves are permitted to dry about two hours, being occasionally turned; but the time required for this process depends on the heat of the sun. . . .

People are now employed to soften the leaves still more, by gently clapping

them between their hands, with their fingers and thumb extended, and tossing them up and letting them fall, for about five or ten minutes. They are then again put on the frame during half an hour, and brought down and clapped with the hands as before. This is done three successive times, until the leaves become to the touch like soft leather; the beating and putting away being said to give the tea the black colour and bitter flavour.

The tea was then heated in pans and thereafter rolled by hand and the process of rolling is thus described by Bruce:

The art lies here in giving the ball a circular motion, and permitting it to turn under and in the hand two or three whole revolutions, before the arms are extended to their full length, and drawing the ball of leaves quickly back without leaving a leaf behind, being rolled for about five minutes in this way. The ball of tea leaves is from time to time gently and delicately opened with the fingers, lifted as high as the face, and then allowed to fall again. This is done two or three times to separate the leaves; and afterwards the basket with the leaves is lifted up as often, and receives a circular shake to bring these towards the centre.

The application of this advanced Chinese technique to tea in Assam was a great step forward. On 21 November 1836 the *Calcutta Courier* reported that 'a small quantity of tea (of the green species, from indigenous seed) prepared at Suddaya in Assam by the Chinese tea-planters brought round by Mr Gordon has arrived in Calcutta' and was pronounced good. Two months later we learn from *The Englishman* that further specimens sent down from Assam were considered passable: 'These were prepared out of season, merely to give the Chinese an opportunity of teaching some of the people of Assam how to render us independent of the Celestial Empire.'

On 12 December 1837 a large sample of Muttock tea was sent to the Government of India. It was, of course, made from the Assam *jat* since the imported China bushes had not yet reached maturity. The Governor-General was pleased to observe that 'the tea would be considered as of a marketable quality, if it could be landed in Europe in the same state in which it had been received here, and he trusts that measures will shortly be taken for sending a few chests, upon trial, to the Honourable Court'. On 20 March 1838 the Tea Committee informed the Government of India, with pardonable pride, that twelve boxes of Assam tea were now ready for transmission to the Honourable Court of Directors in London. The committee were aware of the great care taken by the Chinese 'in preventing consignments of tea from being shipped on board vessels that have cargoes consisting of articles of strong savour, and which are known to be injurious to the delicate and fugacious aroma of tea' and since much of the cargo of the homeward bound ships at that time apparently consisted of ox-hide, each box was put in a soldered tin case. The tea was shipped on board the *Calcutta* in May 1838. The committee

had indeed already had practical experience of the results of improper packing, as may be seen from their letter to the Government of India:

The consignment from which these samples were taken, arrived in Calcutta on the last day of January. Owing to a deficiency in the original packing, and the great degree of dampness to which the box had been exposed during the passage from Assam, a considerable portion of the tea amounting to what would have filled five boxes more, was either wholly spoiled, or so much deteriorated, that no process, we believe, could have restored it to anything like a fair quality. We have, therefore registered all that portion as unfit to be sent home – at least with the present supply – deeming it a matter of primary importance that the value of the first sample transmitted to Europe, should not be diminished by anything that might add to the many disadvantages under which they must necessarily arrive at a destination where they will, in all probability, have to be subjected to the severe test of examination by the first tea inspectors in London. . . .

The tea in question arrived here under the designation of paho and souchong. In assorting each of these into three qualities, our secretary has been guided, partly by the opinion of the Chinese assistants now here, and partly by his own discrimination of the difference in the flavour and appearance of the teas after they had undergone preparations for being repacked; likewise, and in the first instance, by the various degrees of preservation in which he received the cargo from Assam. The process of preparation alluded to above, consisted in gradually drying the tea over a nicely-regulated coal fire, covered with ashes, in baskets made on purpose by the Chinamen, having the form of two inverted cones, with their ends truncated and having an open sieve in the centre (as described and figured in Mr Bruce's *Memoir of the Manufacture of Tea in Assam* p. 5): this is a precautionary measure our secretary deemed absolutely necessary, to prevent mouldiness and, consequent damage to the tea during the sea voyage.

The comments of the Court of Directors in their letter of 23 January 1839 on the consignment are of interest:

We receive with much satisfaction the samples of Assam tea (twelve chests) alluded to in your letter dated 23 May 1838, and which arrived in November last, under the designation of *paho and souchoung*. Specimens of each sort have been very extensively distributed, and it affords us much pleasure to communicate to you, that we have received very favourable reports regarding it, as well from the most respectable brokers and tea dealers as from several individuals and various corporation towns and scientific bodies to whom it has been submitted.

We do not, however, consider that the specimens will have afforded the British public an opportunity of judging of the real merits of the tea which the Assam districts are, we have no doubt, capable of producing, inasmuch as we find the best judges concur in opinion that the process of refiring, to which, owing to the damaged state in which the tea arrived in Calcutta, was of necessity subjected, has very materially injured the present sample. Neverthe-

less, we resolved to direct eight chests of the tea to be offered for public sale, the result of which is given in the margin. The result here exhibited will not of course, lead to the formation of any correct opinion as to the real marketable value of the tea, should it arrive in quantities sufficient to be considered a staple article of commerce; on the contrary, it can only be considered as a fancy price, occasioned by a great excitement and competition created by the novelty and curiosity of the sale.

The directors then went on to report the first offer of a private contract in the history of Indian tea:

For the formation of a more accurate judgment, we refer you to the report of Mr Thompson, and to the letter addressed by Messrs. Steams and Rowley to the Mayor of Liverpool wherein an offer is made to contract for five hundred or a thousand chests at 1s 10½d to 2s per lb.

The maker of the offer commented on the tea as follows:

as good tea as may be usually imported into this country from Canton, the only difference appearing to us being in the method of curing or drying the leaves, and the sample submitted to our inspection has been over-dried and evidently has not been treated in the way the Chinese prepare their teas. We character the tea in question as preferable to *but middling tea* or *brisk* slightly burnt flavour (not objectionable) and possess strength; the leaf is of a large dull black pekoe kind value 1s 10½d to 2s and at this valuation we should have no objection to enter into a contract for five hundred or a thousand chests.

The tea was, however, put up to auction in London on 10 January 1839. We shall return to this subject in a later chapter.

The Government of India had repeatedly affirmed the principles that 'the Government are eventually to withdraw from the further prosecution of the scheme, and as soon as it may appear expedient, to entrust its future success to private speculators'. With the successful manufacture of tea in Assam by the Chinese technique, the experimental stage could be considered at an end.

It will be convenient here to review the position which had been achieved in Eastern India by 1839. There were at that time East India Company's nurseries planted with China seed at Jaipur, Chabua, Chota Tingri, and Hukanpukri. Bruce also appears to have established a nursery with the indigenous plant at Sadiya, near the official China nursery. At the same time, tracts of indigenous tea had been discovered in many parts of Upper Assam and native chiefs had been encouraged to care for them. A report by C. A. Bruce on these tracts, written at Jaipur in Assam on 10 June 1839 and published in the *Journal of the Asiatic Society*, throws much light on these developments. One hundred and twenty tracts of indigenous tea had been discovered and Bruce rightly stated that 'a sufficiency of seeds and seedlings might be collected from these tracts in the course of a few years to plant off the whole of Assam'. Bruce

himself inspected many of these tracts and a few extracts from his report will give some idea of the magnitude of his task.

Last year in going over one of the hills behind Jaipore, about 300 feet high, I came upon a Tea tract, which must have been two or three miles in length, in fact I did not see the end of it; the trees were in most parts as thick as they could grow, and the Tea seeds (smaller than what I had seen before) fine and fresh, literally covered the ground; this was in the middle of November, and the trees had abundance of fruit and flower on them. One of the largest trees I found to be two cubits in circumference, and full forty cubits in height. At the foot of the hill I found another tract, and had time permitted me to explore those parts, there is no doubt but I should have found many of the Naga Hills covered with Tea . . .

Again in going further to the south-west, just before I came to *Gabrew* hill, I found the small hills adjoining it, to the eastward, covered with Tea plants. The flowers of the Tea on these hills are of a pleasant delicate fragrance, unlike the smell of our other Tea plants; but the leaves and fruit appear the same. This would be a delightful place for the manufacture of Tea, as the country is well populated, has abundance of grain, and labour is cheap. There is a small stream called the *Jhangy* river, at a distance of two hours walk; it is navigable, I am informed, all the year round for small canoes, which could carry down the Tea; and the place is only one and a half day's journey from *Jorehaut*, the capital of Upper Assam. South-west of *Gabrew* Purbut (about two days journey) there is a village at the foot of the hill, inhabited by a race called *Norahs*; they are Shans, I believe, as they come from the eastward, where tea abounds. I had long conversations with them, and the oldest man of the village, who was also the head of it, informed me, that when his father was a young man, he had emigrated with many others, and settled at *Tipum* opposite *Jaipore*, on account of the constant disturbances at *Munkum*; that they brought the Tea Plant with them and planted it on the *Tipum* hill, where it exists to this day; and that when he was about sixteen years of age, he was obliged to leave *Tipum*, on account of the wars and disturbances at that place, and take shelter at the village where he now resides. This man said he was now eighty years of age, and that his father died a very old man. How true this story is, I cannot say, and do not see what good it would do the old man to fabricate it. This was the only man I met with in my journeys about the country who could give any account of the Tea plant, with the exception of an Ahum, who declared to me that it was Sooka, or the first Kacharry Raja of Assam, who brought the Tea plant from *Munkum*; he said it was written in his *Putty*, or history. The *Ahum-Putty* I have never been able to get hold of; but this I know, that the information about the Tea plant, pointed out by the old Norah men as being on the *Tipum* hill, is true; for I have cleared the tract where it grew thickest, about 300 yards by 300, running from the foot of the hill to the top. The old man told me his father cut the plant down every third year, that he might get the young leaves.

There is room for speculation as to whether these tracts were really wild tea, or as Dr H. H. Mann suggests, 'remnants of former tea gar-

dens'. In any case, their development under British supervision was limited by the availability of Chinese black tea-makers, who were considered essential.

Bruce reports:

Until lately, we had only two Chinese Black-Tea makers; these men have twelve native assistants. Each Chinaman with six assistants can only superintend one locality, and the Tea leaves from the various other tracts, widely separated, must be brought to these two places of manufacture. The consequence is, that an additional number of labourers must always be employed to bring the leaves from the remote tracts. The leaves suffer when brought in large quantities from a distance, as they soon begin to ferment, and the labour of only preparing them so far in process that they may not spoil by the morning, is excessive . . . The leaves last gathered are also much larger than they ought to be, for want of being collected and manufactured earlier; consequently the Tea is inferior in quality. I mention this, to shew the inconvenience and expense of having so few Tea makers . . .

We have also had an addition to our establishment of two Chinese Green-Tea manufacturers, and twelve native assistants have been placed under them as learners; but what are these compared to the vast quantity of Tea, or the ground the Tea plants cover, or might be made to cover in three years, but a drop of water in the ocean? We must go on at a much faster pace in the two great essentials – Tea manufacturers, and labourers, – in order to have them available at each garden, when the leaves come into season.

If I were asked, when will this Tea experiment be in a sufficient state of forwardness, so as to be transferable to speculators? I would answer, when a sufficient number of native Tea manufacturers have been taught to prepare both the Black and the Green sort; and that under one hundred available Tea manufacturers, it would not be worth while for private speculators to take up the scheme on a large scale; on a small one it would be a different thing. In the course of two or three years we ought to have a number.

Bruce found himself much hampered by the lack of satisfactory local labour and his comments on the 'Opium-smoking Assamese' are scathing:

An extent of 300 by 300 will cost from 200 to 300 rupees; i.e. according to the manner in which the miserable Opium-smoking Assamese work. This alone ought to point out the utility of introducing a superior race of labourers, who would not only work themselves, but encourage their women and children to do the same; in plucking and sorting leaves they might be profitably turned to account for both parties. This I have not been able to instil into the heads of the Assamese, who will not permit their women to come into the Tea gardens. Indeed, unless more labourers can be furnished a larger amount of Tea must not be looked for at present. Last season it was with the greatest difficulty that I could get a sufficient number of hands to gather the leaves. The plucking of the leaves may appear to many a very easy and light employment, but there are not a few of our coolies who would much rather be employed on any other job; the standing in one position so many hours

occasions swellings in the legs, as our plants are not like those of China, only three feet high, but double that size, so that one must stand upright to gather the leaves.

Bruce was indeed so bothered about the unsatisfactory state of local Assamese labour that he even contemplated sending green tea to England for manufacture there.

After a year's instruction under Chinamen, it might be left to the ingenuity of Englishmen to roll, sift, and clean the Tea by machinery, and, in fact, reduce the price of the Green-Tea nearly one-half, and thus enable the poor to drink good unadulterated Green-Tea, by throwing the indigo and sulphate of lime overboard. At all events the experiment is worthy of a fair trial, and the first step towards it would be to manufacture the Tea at Calcutta; or perhaps it would be better to let the China Green-Tea makers go direct to England along with it, and have it manufactured there at once.

This plan of course came to nothing, but in spite of all the difficulties mentioned by Bruce, the industry grew steadily. Bruce's figures for the tea tracts worked by him show that production in 1838 was 4,220 lb: that it rose to 5,274 lb in 1839 and that it was expected to reach 11,160 in 1840. No corresponding figures for the indigenous tracts still with the chiefs are available. Bruce's figures indicate that his work was purely experimental. It was, however, clear to Bruce that the time when tea should be grown and manufactured commercially was at hand and he therefore prepared a careful costings account.

Now let us suppose a new settler were to take land in these parts what would be his expenses if he were only to cultivate Tea, and had to clear forest land (in the vicinity of the Tea) ten times the size of *Nowholeah*, which is, say 400 by 200 yards, and which would cost him 200 Rupees to clear. Ten such tracts would cover 800,000 square yards. Now, to cover this surface of ground with Tea plants, and the plants six feet apart each way, 355,555 plants would be required; but if two plants were to be placed together, as I would recommend, then 711,110 plants would be required. The cost would probably be at the rate of five annas for 300 plants; thus:

	Rs	a	p
The clearing of 10 tracts, each 400 by 200 yards	2,000	0	0
711,110 Tea plants, at 5 annas for 300	740	11	8
Planting the above	474	0	0
Weeding each tract 3 times each year, at Rs 30 each tract	900	0	0
5 Tea houses, at Rs 50 each	250	0	0
200 hoes at one Rupee each	200	0	0
100 Axes at one Rupee each	100	0	0
100 Daws at one Rupee each	100	0	0
Dollahs, Challonis, etc., bamboo apparatus	200	0	0
8 Saws at Rs 5 each	40	0	0
Charcoal and firewood for baking the Tea	200	0	0

	Rs	s	p
40 Cast-iron pans, at Rs 4 each	160	0	0
Paper for Tea boxes	100	0	0
Chalk and Indigo	50	0	0
3 Maunds of Nails of sizes, at Rs 10 per maund	30	0	0
2 Elephants at Rs 150 each	300	0	0
2 Elephant mahoots at Rs 6 each per month	144	0	0
2 Elephant mates at Rs 4 each per month	96	0	0
Rice for 2 Elephants	96	0	0
Lead for 888 boxes, at 3 seers per box containing 20 seers, at Rs 8 per maund	532	12	0
A Cooly sirdar at Rs 10 per month	120	0	0
10 Duffadars, or Overseers of coolies at Rs 3 per month	360	0	0
Coolies to collect leaves, 30 to each tract, 20 days to each crop; for 3 crops, or 60 days at Rs 3 for each man per month	1,800	0	0
4 Native carpenters, at Rs 12 ditto	576	0	0
8 Sawyers, at Rs 4 ditto	384	0	0
2 Native Lead-canister makers, at Rs 12 ditto	288	0	0
Coolies to bring in timber for Sawyers	150	0	0
5 Chinamen at Rs 30 each per month	1,800	0	0
120 Native Tea makers at Rs 5 each, for 5 months, or one season	3,000	0	0
Freight to Calcutta	400	0	0
Ditto to England	1,000	0	0
Carried over, Total outlay for 10 tracts, Co's.	Rs 16,591	8	5

Deduct charges that are not annual, viz:—				
Clearing of tracts	2,000	0	0	
Purchase of Tea plants	740	0	0	
Planting ditto	474	0	0	
Building Tea houses	150	0	0	
Purchase of Hoes	200	0	0	
Do. Axes	100	0	0	
Do. Daws	100	0	0	
Do. Saws	40	0	0	
Do. Bamboo apparatus	200	0	0	
Do. Elephants	300	0	0	4,304 0 0
Total annual outlay on 10 tracts				12,287 8 5
Average produce of 355,555 tea plants at 4 Sa.Wt. each plant, is 444 Mds or 17,777 Srs., or 35,554 lbs at 2s, or 1 rupee, per pound, would be				35,554 0 0
Annual profit on 10 tracts, Co's.				Rs 23,266 7 7

Annual outlay	*Co's Rs*	*Annual profits*	*Co's Rs*
For 10 tracts	12,287	On 10 tracts	23,266
For 100 tracts	1,22,870	On 100 tracts	2,32,660
For 1000 tracts	12,28,700	On 1000 tracts	23,26,600

N.B. – The deduction of Rs 4,304 not being annual outlay is not included in this calculation above 10 tracts.

	Tea tract	*Duffadars*	*Takelah*	*Coolies*
Required for	1 ...	1 ...	10 ...	30
„ for	10 ...	10 ...	100 ...	300
„ for	100 ...	100 ...	1000 ...	3000

It must be remembered that this calculation has been made on 355,555 plants, not on double that number as I proposed, viz. to plant them in pairs, which would certainly, on the lowest calculation, increase the profits thirty per cent. It should be borne in mind also, that 4 sicca weight is not the full produce of each plant; when full grown it will yield double that, or 8 sicca weight, and some even as high as 10 to 12 sicca weight. I have calculated at the rate of 4 sicca, which was absolutely produced in 1838. The plant will, I should think, produce 25 per cent more this year, and go on increasing to what I have above mentioned. But then, on the other hand, the items which I have set down, are not all that will be required to carry on this trade on an extensive scale. The superintendence, numerous additional artizans that will be required, and a thousand little wants which cannot be set down now, but which must necessarily arise from the nature of the cultivation and manufacture, will go far to diminish the profits, and swell the outlay; but this of course will last but a few years, until the natives of the country have been taught to compete with Chinamen. It should also be remembered, that the calculation I have made on ten tracts is on a supposition that we have a sufficient number of native Tea-makers and Canister-makers, which will not be the case for two or three years to come. It is on this point alone that we are deficient, for the Tea plants and lands are before us. Yes, there is another very great drawback to the cultivation of Tea in this country, and which I believe I before noticed, namely the want of population and labourers. They will have to be imported and settled on the soil, which will be a heavy tax on the first outlay; but this, too, will rectify itself in a few years; for, after the importation of some thousands, others will come to themselves, and the redundant population of Bengal, will pour into Assam, as soon as the people know that they will get a certain rate of pay, as well as lands, for the support of their families. If this should be the case, the Assamese language will in a few years be extinct.

Bruce's conclusion was that the tracts should now be handed over for commercial development. 'Many individuals might be induced to take Tea grounds, were they sure that the soil was ours, and that they would be protected and permitted to cultivate it in security.' To this consummation Bruce looked forward eagerly, since it might not only be of benefit to Britain but also 'help a little to impel the Tea forward to enrich our own dominions, and pull down the haughty pride of China'.

Section 2

PRODUCTION

CHAPTER FIVE

THE FIRST PHASE: I. ASSAM*

The high prices fetched by the tea sent home in 1838–9 to the Court of Directors at once attracted the attention of enterprising business men, alike in Calcutta and London. Early in 1839 the Bengal Tea Association was formed in Calcutta and a few weeks later preliminary steps taken by a separate group of individuals for the formation of the Assam Company in London were thus reported in the London *Times*:

A joint stock company is forming in the city for the purpose of cultivating the newly discovered tea plant in Assam. Their intention is, in the first instance, to open a treaty with the supreme Government in India for the purchase of the East India Company's plantations and establishments in Assam, and afterwards to carry on the cultivation of tea there, for the purpose of importing it into this country. The project has been taken up with so much avidity, principally by the mercantile houses trading with India and the leading firms in the tea trade, that all the shares were appropriated in a few days and before any public notice of it had appeared. A division of the territory into large farms or estates, adapted for superintendence and cultivation by private capitalists, which might be either let or sold by the India Company, would be likely, perhaps, to accomplish sooner the great object of establishing a rivalry with the Chinese in this traffic. Ultimately, indeed, this may be the course adopted under the management of the Assam Company, but in that case the actual cultivators could hardly expect to fare so well as under direct holdings from the Indian Government. The capital to be raised is 500,000£., and it is stated that a communication has already been opened with the Board of Trade and the East India Company, preparatory to a negotiation for the purchase of the Assam territory.

It is in some ways a pity that the two concerns did not remain

* The quotations in this chapter from Indian newspapers were obtained from a large private collection compiled by Dr Mann, who has generously allowed the writer to make use of them. A number of the extracts have already been quoted in Dr Mann's admirable brochure – *The Early History of the Tea Industry in North East India* – but as that work is now almost unobtainable, some of them may well be reproduced here.

separate, but it is possible that each of them feared that the other aimed at securing a monopoly of the industry and perhaps for this reason they at once decided to amalgamate. The healthy rivalry between London and Calcutta, which was to remain a permanent feature of the Indian tea industry, manifested itself at the outset and the Bengal Tea Association stipulated that the local management of the combined concern should be in the hands of the Committee of Calcutta Directors. At this period the incorporation of a company in the United Kingdom required an Act of Parliament, and as this was likely to take time, a deed of settlement regulating the constitution of the company in the meantime, was executed. According to this deed, the Calcutta directors were to be responsible for 'superintending and conducting all the business of the company in India' subject to any directions for their guidance given by the London directors. In the end the company was incorporated in India under an Act of the Indian Legislature and it was not until 1865 that it was incorporated in the United Kingdom, so that, in effect, a rupee company then became a sterling company and control definitely passed to London.

The *Englishman* of Calcutta, in its issue of 29 June 1839 reported a meeting of the Bengal Branch Assam Company in the following terms:

> Mr W. Prinsep, the provisional secretary, read a report, in which the proceedings of the Bengal Tea Association (formed in February 1839, with the approbation of the Government) were stated, and the motives which led to a connection with the London Assam Company, which he notified to the Government, informing them of this circumstance, and 'trusting that the junction of such interests as were now combined would induce his honour in Council to consider that no better guarantee could be given to the government of Bengal for the early establishment of this important trade upon a bold and energetic scale, should they think fit at once to make over the means they possessed to the company now in action. No answer has yet been received from government; but having prayed for an early notice, it is hoped that the question is under their immediate consideration. In the meantime, letters have been addressed by me to Capt Jenkins in Assam, and also to Mr Bruce, the uncovenanted superintendent; to the latter no answer has yet been received; to the former Capt. Jenkins has replied that there is an unlimited field for such operations as were contemplated; abundance of tea-plants in a country (to use his own expression) flowing with milk and honey; provisions were abundant and easily procured, and that all that was required to bring forth the resources of that rich country, was labour and capital. He further states, that there exists at this time plants in cultivation capable of yielding 100,000 lb of tea, if means were supplied of manipulation; coolies were scantily procurable from the neighbourhood, but were expected to come in more freely as our measures advanced.'

The Government of Bengal gave the project a certain degree of encouragement without committing itself too far, but when the matter

came up before the proprietors of the East India Company in June 1839, some opposition to the proposal was experienced. Sir Charles Forbes asked if the Assam Company had been promised a charter to the exclusion of any other party who might require a similar privilege, and expressed the view that this would be a most dangerous monopoly. He was given an assurance on this point and Sir J. Briant enthusiastically supported the project on the grounds that 'to an abstemious people like the Hindus and Mussulmans, abstaining generally from spirituous liquors and the expressed juice of the grape, the diffusion of cheap tea would be an inestimable blessing and he hoped therefore that every effort would be made to promote the cultivation of tea in Assam'. Sir Charles Forbes was unconvinced and expressed astonishment that a man of the age and experience of his friend, Mr Weeding, should lend his support to a project which, notwithstanding all that has been said, 'would all turn out to be a humbug'. This remark provoked laughter, but Weeding again expressed the pious belief that the project would promote the interests of India and in the end, the proprietors of the East India Company decided in favour of the scheme. To understand the apparent devotion of these hard-headed business men to the interests of India it must be remembered that the East India Company had ceased to be a trading corporation and was the Government of India.

In March 1840 practically all the East India Company's plantations, except those at Chubwa and Dinjoy and two other small gardens were handed over to the Assam Company, rent free for ten years. The East India Company already had tea in stock ready for sale and in March 1841 the first government sale of tea in India took place. The auction was held in Calcutta by Mackenzie Lyall & Company and it appears that the sale consisted of thirty-five chests manufactured by the Singpho chiefs and ninety-five chests produced on the government tea plantations in Assam in the season 1840. Unfortunately there is no record of the prices obtained.

The Assam Company now divided its properties into a Northern and Southern Division, and placed these divisions under the charge of C. A. Bruce and J. W. Masters respectively. In addition to cultivating the plantations handed over by the Government, the Assam Company took leases from the Government of jungle lands containing tea bushes, and set to work to prune and recondition them. The leases were presumably taken under the Assam Waste Lands Rule of 1838, which provided for twenty years' rent-free occupation, to be followed by an increasing scale of rent for the next twenty-five years, at the end of which period the land would be assessed at a rate not higher than that of the neighbouring rice lands.

It was soon necessary to create a new Eastern Division, and one,

J. Parker, was placed in charge of it. By 1842 there were 1,645 acres of tea in the Southern Division, and 666 acres in the Northern and Eastern Divisions.

The company's first troubles arose from their attempts to import labour. It was stated in the company's reports of 1840 that all Bruce's exertions had been checked and baffled by the want of labourers. The *Friend of India* in its issue of 9 September 1841 reproduced the following extract from the Assam Company's Report:

Assam, before it came under British protection had been almost depopulated by internal discord and Burmese invasion. The population of a country in such circumstances is but slowly renewed. The great want in Assam, to which nature has been so bountiful, is that of men; and it is to supply this deficiency, which threatens the failure of every exertion, that the Assam Society have given their closest attention; but they have been baulked in almost every instance. A large number of Chinese labourers was brought round from Singapore; but they were selected without discretion. Every man with a tail was supposed to be qualified to cultivate, manipulate and prepare tea. They were sent up without adequate control. At Pubna they quarrelled with the natives, or the natives with them; some sixty were captured by the Magistrate, and consigned to jail, and the rest refused to proceed without their brethren. Their agreements were therefore cancelled and they returned to Calcutta, committing depredations in their progress. On their arrival in the City of Palaces, they seemed to revenge themselves on society, for the papers were daily filled with police reports of the outrages they committed. They were at length caught and sent off to the Isle of France, the planters of which will doubtless consider that it is an ill wind indeed, which blows no one any good. Then again, the Society engaged a large body —we hope the new Secretary will exclude the hated word *gang*, with all its convict and slave associations,—of *Dhangar Coles*; and we were hoping that the tide of their emigration might be turned to our own provinces; but cholera broke out among six hundred and fifty-two of them, who were proceeding thither, and the survivors disappeared one night, and no trace of them has ever been found. A large proportion of the labourers sent from Chittagong also proved entirely unserviceable; and a great mortality pervaded the whole body of labourers actually employed in the plantations.

Masters's letters to the company at this period contained graphic accounts of his difficulties and problems. Some of them are quoted in Dr Mann's brochure, but they deserve reproduction here. The first extract relevant to our purpose deals with Masters's struggles to clear the tea jungles and indicates the tremendous difficulties of working in such country.

I have now been in this district eighteen months, and know comparatively little about it, owing to the dense tree forest and coarse high grass jungle with which the land is all overrun, so that when travelling one can see nothing but what lies in his immediate route and I am continually finding fresh patches of ground occupied by the sites of former villages or gardens or temples or

tanks of beautiful water or small patches of tea plants and immense tracts of waste land . . . It was with great difficulty that I could procure elephants when I first came here: I could not purchase one at any rate. . . . A herd of elephants, however, having gone off from Jorehaut in that direction [towards Gabro] they were followed and thirteen of them secured.

Masters found his Chinese tea-makers and his European assistants almost equally troublesome.

You will please to observe that these tea makers (Chinese) are very great gentlemen; even those who receive but Rs 3 per month consider themselves so, and object to do anything else but make tea. When spoken to, they threaten to leave the service if they are insulted by being asked to work. Gradually this will wear away as we shall soon have them under our control, and if they continue saucy, we may take a convenient opportunity of making a strike for two or three months, and when they lose their pay, they will probably become sensible that they are dependent on the Assam Company for their livelihood . . .

Hitherto I have been overwhelmed with assistants many of whom have been unaccustomed to agricultural employment, but the greatest inconvenience attending the assistant establishment is the unhealthiness of the climate; it so often happens that after much difficulty has been experienced, and the assistant is becoming acquainted with his duty, and he and the natives are becoming a little reconciled, the assistant falls sick, and is obliged to leave his post: if another is sent, the same difficulties and inconveniences are repeated . . . It must be evident to the Directors that a passionate European entirely ignorant of the language and entirely ignorant of every part of his duty can but be worse than useless.

In spite of these difficulties early results seemed not unhopeful. In 1840 the area under tea was 2,638 acres, and 10,202 lb of tea were shipped to London on the *Helen May*. Needless to say, production on this small scale could not be profitable, but in the Annual Report for 1840 the directors estimated that production would rise rapidly and would reach 320,000 lb by 1845. They expected handsome dividends in the years to come. In the meantime, money was sent from England to finance the operations in India, and expenditure in India for the year 1841 amounted to Rs 4,20,000, or at 2s/– to the rupee, £42,000 sterling, in addition to expenditure of nearly £13,000 in England. Some part of this was accounted for by the purchase of a saw-mill to assist in the manufacture of chests, and a small steamer for use between Calcutta and Assam. The directors contemplated that in addition to serving their own use the steamer would carry goods for payment. There is a ring of confidence about the directors' statement that the Cherrapoonjee coal will be available 'for the use of this vessel and of others which it may be necessary to employ when the cultivation has been permanently established and widely expanded throughout those regions'.

The steamer soon proved disappointing and, in 1842, after she had made one trip, the company tried to sell her. They were unsuccessful and therefore made various readjustments with more or less satisfactory results.

In August 1841 there was a good deal of excitement about the appointment of a secretary to the Assam Company, and although, according to the *Friend of India* 'all jobbery was disclaimed' in connexion with the selection, three candidates were put forward and each received three votes. By the chairman's casting vote, Buckland became the first secretary of a tea company in India.

When Buckland surveyed his new prospects he may have been encouraged by the Report of the Agricultural and Horticultural Society of India on the company's tea. Valuations were good, though there were references in some cases to the tea being 'rather burnt and oily'. His satisfaction must have been considerably lessened, however, when he considered the company's financial position and prospects. The crop for that year was only 29,000 lb and with all the expenses of a new venture, it was clearly impossible to make a profit. There was, moreover, a good deal of extravagance in the administration of the gardens. Nor can the health of the new company's staff have failed to give the new secretary grave cause for anxiety. In September 1842 the *Friend of India* stated with restraint 'that the present season has been very unfavourable to the officers employed on the establishment of the Assam Tea Company' – so unfavourable, indeed, that three of them died of fever in that year. Their names, J.W. Scott, E. Lynch, and J. Ward, may be recorded for the pious remembrance of successful tea men in modern times.

Whatever Buckland may have felt, the directors began to be seriously worried, and J.M. Mackie 'a gentleman of high standing and character', was sent to Assam to investigate. It is not clear who Mackie was or what were his qualifications to assess the situation, but he was gravely dissatisfied. Bruce and Masters were dismissed, and in the company's report for 1843, the directors wrote of diminished confidence in future prosperity and referred particularly to mounting expenditure and unsatisfactory yield. They promised retrenchment, and pledged themselves 'that no further call shall be made upon the shareholders until your directors have shown sufficient grounds for recommending you to prosecute the enterprise in which we have embarked with renewed vigour'.

It may have been wise to dismiss Bruce and Masters, but the real causes of the trouble were more fundamental than the failures of individuals on the spot. Undue optimism and the inevitable mistakes of inexperience were amongst the prime causes of the difficulties. Nassau Lee, a somewhat harsh critic writing in 1863, states that the Assam Company

commenced operations on a scale of expense in keeping with the existing idea, that the profits of the undertaking would be so rapid and so enormous, as to render any attempt at economy imprudent and unnecessary . . . The soil in one place [he continued] was not selected with reference to the requirements of the plant – *labor* in another was insufficient – the *cultivation* in a third was bad – the *superintendence* in a fourth was inefficient – ignorance everywhere was rampant, – and to crown all, the *tea*, when manufactured, was pronounced by the London brokers to be *bad*!

The last statement was not true, and altogether a fairer judgement would be that the Assam Company undertook all the risks of a new venture and that the experience so dearly bought by them was of great value to those who began later.

The official report of the Bengal Government in 1873 states the position more temperately.

The unsatisfactory state of affairs which was expressed by this depreciation may be thus explained. Under the ideas respecting the cultivation of tea which at first obtained, an undue importance was attached to the localities where the indigenous plant was found growing: the most inaccesible and unhealthy places were often occupied merely on account of a few acres of straggling indigenous shrubs being discovered in the neighbouring forests. The planting out of forest land was not sufficiently attended to, and the most extravagant outturns were expected from the small and sparsely covered patches of tea actually existing.

At the same time the establishments maintained were on the most expensive scale, and even a steamer was purchased to convey the scanty crops of the Company from Assam to Calcutta. Of course, so large an outlay with no corresponding return seriously affected the resources of the Company, and it was compelled to close several of its factories and to retain only a few which could be cultivated and worked at the least expense.

Drastic retrenchment was now undertaken and certain gardens were closed. In 1846 an unjustifiable dividend was paid, presumably to boost the morale of the shareholders. Shares, nevertheless, became almost unsaleable, and opinion amongst the London directors was divided as to the wisdom of continuing to operate. In their Report for 1847 the directors stated the position objectively

The General Directory . . . think it proper to mention to you that they find among the proprietors, and even among their own body, a difference of opinion prevails upon the vital question whether it is desirable or not to continue the operations of the Company. On the one hand it is contended that under the present system of management there is at all events no loss, and that the last year was the first in which the expenses in the province were kept within the estimate or nearly so, and the anticipated outturns of produce were not only realised but exceeded, while at the same time there is every reason to expect an annual increase in produce from seedlings, and the vacant spaces

in our present cultivation being filled up . . . and therefore it would be unwise to throw away all that has been spent on the enterprise at a moment when there appears so little chance of further loss and much reason to hope that some part of the money spent may be redeemed. On the other hand, it appears to be thought by many that there are too small hopes of success and too limited an amount of profit to be anticipated to render it advisable to continue our operations.

The case for liquidation was strong and the London directors would have been glad to sell, but neither the Calcutta directors nor any other persons were prepared to buy. There were, indeed, amongst those in charge of the company's affairs, men who still believed in the future. Henry Burkinyoung, perhaps the most prominent of the Calcutta directors of that time, was one of these men of faith. He was typical of his age, enterprising and versatile, and it is a pity that materials for his biography are not forthcoming. H. A. Antrobus, in his *History of the Assam Company*, throws a little light on him, for he tells us that Burkinyoung owned a music shop in Calcutta in 1814, that he married a Miss Hamerton, whose father was in the same line of business, and that before he interested himself in tea, Burkinyoung was associated with the firm of Stewart & Company, wheelwrights, in Calcutta – but of what led him to tea we know nothing. It was fortunate for Burkinyoung that the Deputy Secretary of the Assam Company at this time was Henry Mornay, whose visit to India to inspect gardens in 1845 was the turning point of the Company's fortunes. In 1847 Henry's brother, Stephen, was appointed as Superintendent in Assam. Nothing appears to be known about Stephen's antecedents, but Burkinyoung and the two Mornays soon made their mark and the Company's fortunes rapidly began to improve.

Burkinyoung does not seem to have known anything about tea, but he was a born business organiser and under his firm control, together with the work of a first-class 'man on the spot', Mornay, things soon began to improve. Mornay found that the plantations were choked with weeds and that 'large sowings had been very regularly made, but, unfortunately, had as regularly been suffered to be destroyed by the jungle and rank vegetation which springs up in Assam with magic rapidity'. This state of affairs was quickly remedied and on the 13 January 1848 the *Friend of India* thus comments on the Report of the Assam Tea Company's meeting:

It appears that the zeal, integrity and assiduity of Mr Burkinyoung have arrested the downward progress of the Company, and given the unfortunate shareholders some prospect of a future dividend. The Report states that the tea obtained from the Southern division in the last year, amounted to 160,000 lb which was 24,000 lb in excess of the quantity obtained in that

division in the previous year, and 16,441 lb more than the quantity obtained from all the divisions. At the same time that the produce of the lands has thus increased, the expenditure has diminished; in the present year it was Rs 1,16,359 being less than that of 1846, by Rs 74,618.

At the meeting of the company in Calcutta on 3 January 1948 it was resolved that 'under existing circumstances it is inexpedient to adopt the recommendation of the London sub-committee to dissolve the local board, particular with reference to the satisfactory nature of the report read at the Annual Meeting, so creditable to the local management'.

The company made a profit in 1848; in the following year Tingri and other gardens were reopened in spite of the protests of the London directors. By 1850, the company's debt was cleared. A true dividend was paid in 1852 and at last it had been shown that tea in Assam could be made to pay even though yields averaged only about 200 lb per acre.

Up to about 1850 the experience of the Assam Company had not been such as to encourage competition and its only rival was the East India Company which had retained a few small gardens, including Chubwa. The East India Company, however, had always declared its intention of retiring from the tea industry as soon as the experimental stage was over, and in 1849 it therefore sold its remaining gardens for a little over Rs 900 to a Chinese employed at Chubwa. The new proprietor's financial resources were slender, and when his teas were stolen on their way down the river by country boat to Calcutta, he resold Chubwa (and presumably the other small gardens started by the East India Company) to James Warren, the founder of a distinguished family of tea proprietors. Warren was an East India merchant, trading in dried fruits, spices, and other agricultural produce. He was one of the original syndicate who formed the Assam Company, and it was probably through his connexion with that company that he heard that Chubwa was for sale.

A rival company was apparently started by a local proprietor in the territory of the Singphos, but 'their manager quarrelled with these people and was burnt out of his house at night and narrowly escaped with his life and the scheme was shortly afterwards abandoned'.

Next in the field was Lieutenant-Colonel F. S. Hannay, who opened up a garden near Dibrugarh in 1850–1. His example was soon followed by one, Wagentreiber, and when Mills, a judge of the Sudder Court, was deputed to Assam on special duty in 1853 he found three private gardens in existence in Sibsagar and six in the Lakhimpur District near Dibrugarh. In no other district of Assam had tea-planting then begun.

At about this time, George Williamson, perhaps the greatest of the

tea pioneers, appeared on the Assam scene. As there is often confusion between the Williamsons it should be explained that there were three of them – George Williamson senior and his cousins, two brothers, George Williamson junior and Captain J. H. Williamson. What first took the two Georges to India does not appear from the records, but Captain Williamson went to that country in 1853 as the captain of an inland trading steamer. H. A. Antrobus, the author of that admirable book *A History of the Jorehaut Tea Company*, tells us that 'these steamers were run by Government and were used originally for the transport of troops, but the captains were allowed to do their own trading en route up the Brahmaputra, with such communities as existed then, chiefly tea planters and district officials in the Government service'. All the three Williamsons were men of great enterprise. George Williamson senior began to lease land and establish tea gardens, while in 1853 George Williamson junior succeeded Stephen Mornay in charge of the Assam Company's affairs in Assam. Pluralism was the order of the day and George Williamson junior's new appointment did not stop him from acquiring interests in other gardens. In 1853 the three Williamsons applied for a lease of seven hundred and twenty acres of land at Cinnemara and began cultivation at once although the formal lease was not taken until 1856. By 1857, two hundred acres of tea were in production with a yield of 45,000 lb and, according to Antrobus, it was estimated that if sufficient numbers of labourers could be procured a crop of 100,000 lb might be expected at Cinnemara in 1859. Again and again in the early days labour was to prove the limiting factor in production. Individual gardens had been importing labour from Bihar and Chota Nagpur through Calcutta contractors and it was not until 1859 that the industry began to organize recruitment collectively.

The Williamsons went rapidly ahead to purchase other properties, but they were not the only candidates for land. In 1851 or 1852 for example, Henry Burkinyoung, then at the head of the Assam Company's affairs in Calcutta, began to plant tea at Numaligarh.

There were others like him, too, and by 1859 there were in Assam fifty-one tea gardens owned by private individuals or private firms—ten in Lakhimpur, fifteen in Sibsagar, three in Durrung, and the remainder in Kamrup and Nowgong.

These developments made it necessary for the Government of Bengal (which then included Assam) to pay attention to the conditions under which waste lands were to be leased for clearance and cultivation. The original rules, framed in 1838, were not considered quite suitable, and after Mills of the Sudder Court visited Assam, he drew up what came to be known as the Old Assam Waste Land Rules, 1854. No grant of less than five hundred acres was normally to be made under these rules, though the limit was reduced to two hundred acres in 1856 and collec-

tors were empowered in particular cases to lower it to one hundred acres. The lands were to be properly surveyed at the cost of the lessee; one-quarter of the area was to be rent free for ever, while the remaining three-quarters was to be rent free for fifteen years. Thereafter, the assessable three-quarters of the land was to pay three annas an acre for ten years, and six annas an acre for the remainder of the ninety-nine years term of the lease. On the expiry of the ninety-nine years the grantee was to be entitled to a renewal at 'such moderate assessment as may seem proper to the Government of the day'. The grantee was thus assured of long continuity at a reasonable rent, but was under an obligation to clear one-eighth of the land in the first five years, one-quarter within the first ten years, one-half within the first twenty years, and three-quarters before the expiry of thirty years.

The rules were reasonable, and as long as the demand for land was limited, worked fairly well, but as we shall see when we study the tea-mania of the early sixties, they were in a sense too liberal, particularly when the authorities ceased to require applicants to show that they had the means to cultivate the land. The administrative machinery for making the necessary surveys did not exist, and in many cases the requirements regarding clearance compelled purely nominal and useless extensions. E. Money in his prize essay on tea says that 'gardens might be seen in those days (that is in the years preceding 1866) with 200 acres of so-called cultivation, but with 60 or even 70 per cent vacancies, in which the greater part of the labour available was employed in clearing jungle for 100 acres further extension in the following Spring'. The Commissioner of Assam, Colonel Jenkins,* wrote emphatically about this practice in 1859; 'It is certain that planters have been attempting to push on their cultivation to a greater extent than the means of procuring labour in the province render judicious and prudent'. Nevertheless, as J. W. Edgar pointed out in his report to the Government of Bengal in 1873, the clearance conditions were not altogether useless since after the tea-mania and subsequent crash 'they enabled Government to resume many hundred thousand acres of land, most of which should never have been granted'.

In 1861 the Governor-General, Lord Canning, published new rules, which provided for the redemption by the grantees of the revenue of waste-land grants and for the purchase of the fee simple in new grants. The Secretary of State disagreed with the rules in several important respects—possibly because he thought that the rules had been too liberal and that greater stringency was now required. As a result of his intervention, a new set of rules, known as *The Fee Simple Rules*, were published in 1862. The fee simple in waste-land grants was put up to auction,

* Formerly Captain Jenkins, Agent to the Governor General.

no lot to exceed three thousand acres. The system worked badly and some of its disadvantages were subsequently described by Edgar.

This provision (requiring auction of the fee simple grants) was very distasteful to speculators, who complained that after they had spent time, trouble, and money in searching for a suitable piece of land, they were liable to lose it altogether, or to have to pay more than its value for it at the auction-sale; and from the time of the introduction of the system there was an agitation for the re-introduction of leasehold tenures, which had been discontinued under a clause in the fee-simple rules. Another provision, which was much objected to, was one requiring the demarcation and survey of each lot previous to sale; and in consequence of the pressure brought to bear on Government in this matter, the survey condition was subsequently suspended by a supplementary rule. The consequences of this were most unfortunate.

An Act (XXIII of 1863) had been passed for the adjudication of claims to waste land disposed of under the rules. It provided that after waste land had been once sold, no claim to it should be allowed to affect the title of the auction-purchaser, but that any rights proved to exist, if claimed within three years of the date of delivery of the land, should be bought out by a payment from the Government treasury. If, therefore, a native having an interest in land applied for under the fee-simple rules, failed to establish his claim previous to the auction, he lost all his right to the land itself; and when the survey rule was suspended, it became practically impossible for him in many cases to find out that his own rights were imperilled till the auction was over and delivery of the land given. On the other hand, it has happened that a grantee has purchased and received possession of one piece of land and got a title deed describing one quite different.

The agitation against this system of auction was so effective that in 1864 Government reverted to the earlier system of leases. Thirty years was fixed as the term of the leases, but no details were laid down and the local officers were left to cope as best they could with the resulting problem.

We shall have to return to this subject when we study the tea-mania and subsequent crash. The important point here is that the rules under which lands were granted encouraged rapid, though sometimes unhealthy, development.

Up to 1858 the Assam Company's only competitors had been private individuals or firms but in that year preliminary steps were taken for the establishment of a second tea company in India. The Jorehaut Tea Company was incorporated in 1859 with a capital of £60,000 and chose William Roberts, who had for a time been managing director of the Assam Company, as its first chairman and moving spirit. Its capital was used in buying the Cinnemara, Oating, and Koliabar gardens from the Williamsons and Numaligarh from Henry Burkinyoung, who became a director of the new company. According to the *History of the Jorehaut Tea Company*, the acreages and yields of these gardens were as follows:

Garden	*Acres*	*Estimated yield in 1859* (lb)
Cinnemara	343	86,400
Numaligarh	289	11,200
Oating	99	6,640
Koliabar	100	52,160

The original plan was for George Williamson senior, to become superintendent of the Jorehaut Company, and this was indeed to be a condition of the purchase of the Williamsons' gardens, but eventually it was agreed that George Williamson junior should take his place. George Williamson junior did in fact become superintendent on 10 February 1860. He continued, however, to manage a garden in Cachar – a district south of the Assam Valley in which tea cultivation had begun in 1855 or 1866 – and also to acquire on his own behalf certain lands which, in 1861, he contributed to the formation of the East India Tea Company. His acceptance of the post of superintendent of this new company was not unnaturally resented by the Board of the Jorehaut Tea Company, and the strained relations which resulted led to his resignation, ostensibly on the grounds of ill-health, from the post of superintendent of the Jorehaut Company. During his two years with the Jorehaut Company he put cultivation and manufacture on a sound basis and applied a highly analytical mind to the problems of labour.

Williamson was impressed from the beginning with the need for limiting cultivation to the area which the labour force could adequately maintain and his conviction sometimes brought him into conflict with William Roberts, who from 1860 onwards aimed at large extensions of the four properties already acquired. Roberts demanded extensions amounting to ten thousand acres. Williamson acquired three thousand acres for the Jorehaut Company and then warned the board that 'our attention must be kept steadily fixed upon the weak point in our enterprise, want of labour, and the means of remedying it'. He argued stoutly against acquiring more land until labour could be imported, since local supplies of labour were decreasing, and set forth his views in a letter dated 4 March 1861.

> Taking a fresh survey of our position, however, considering the absolute necessity of importation on a large scale to ensure anything like satisfactory progress, considering the fact that coolies of a suitable class are not readily procurable at existing rates, that they can obtain as high a rate of wages much nearer their own homes, under what they consider more agreeable circumstances, that the *nericks* (tasks) are about as high as the majority of men can, day by day, good weather and bad weather, favourable and unfavourable circumstances, perform, that the coolies when they arrive in Assam are

seriously discontented (one and all affirming that they were led to believe they would earn much more than they find to be the case) and manifest a very inconvenient anxiety to get away; all these things considered I think the time has arrived when a concession made to changing circumstances may avert future sacrifices, for if the cause once becomes thoroughly unpopular, greater expenditure and larger concessions might be necessary to recover our lost ground.

He doubted whether an increase of wages from Rs 4 to Rs 5 per month would suffice to attract labour from distant provinces and was quite prepared to offer Rs 6 if necessary. He then considered how he would employ immigrant labour.

Supposing five hundred immigrants to be safely landed at Cinnemara, after alloting the number required for the current work, I would employ the remainder in bringing the Old Cultivation into proper order; in giving a thorough deep hoeing to the land so as to destroy as far as possible the noxious weeds and place the land in the most favourable condition for yielding a large crop; in removing dead wood, rooting out stumps, filling up holes, bridging ravines, etc., so as to be able to use agricultural instruments to best advantage, for I should look largely to their employment for a restoration of the equilibrium somewhat disturbed by so large and sudden an increase in wages . . .

In the first season I should expect little or no profit; not a very palatable result certainly, but in the second, the better cultivation would tell in the increased produce; as you are aware, the margin in yield between bad cultivation and very good may range to more than three hundred lb per acre. There would also be an improvement in the quality of the produce from the same cause and being able to sort and pack it sooner . . .

In the third year the Gardens ought to be yielding fully not under five hundred lb to the acre, perhaps more. The agricultural implements would also have made some progress in the right direction, so as to admit of a considerable retrenchment in the item of 'cultivation'. The benefits of a more general and perfect organisation would likewise become apparent. The Old Cultivation once brought into proper trim, I would employ the surplus labour in clearing and sowing new land in the cold season and in the rains in removing the timber, rooting out stumps and levelling the inequalities of surface of the land cleared, so as to fit it for the passage of implements, I would thus go on importing and extending, or stop at a certain limit as circumstances might determine.

Notwithstanding the large increase to the coolies' wages, I firmly believe, not only that the general results would be largely increased from greater expansion but that the profits per acre would be at least equal to what they now are.

Under this kind of thoughtful care, coupled with Roberts's intense determination to expand, the company prospered and the figures for the first five years published in *The History of the Jorehaut Tea Company* are most revealing.

Year	Acreage of grants	Acreage under tea			Crop	Crop per acre in bearing	Average price		Dividend	Profit per bearing acre	Tea seed	
		Bearing	Non-bearing	Total	(lb)	(lb)	s	d	(%)	£	(maunds)	£
1860	2,919			716	118,949	166	1	9½	5	4·51	173	520
1861	6,000			778	193,476	253	1	11	11	8·70	515	1,715
1862	8,539			1,021	262,260	338	2	2½	13	15·47	501	2,308
1863				1,373	295,224	342	2	3	36	17·77	830	8,486
1864	22,920			1,561	270,948	314	2	7¼	34	12·97	459	4,693
1865	22,920	1,021	910	1,931	327,050	320	1	8	12	8·86	534	2,277

At this period, packing tea presented considerable difficulties. Plywood had not been invented, and each box plank had to be sawn by hand. Antrobus writes interestingly on this subject:

It must have been a problem to the manager to decide whether to put on larger numbers of labourers to make boxes in which to pack what tea he had made previously, or to put all hands on to pluck leaf to make as much crop as he could for that season, relying upon the cold weather, when plucking has ceased, to be able to catch up his box making and packing. The latter was the practice adopted generally, though the manager had to face then transport problems that came with the cold weather. The roads, such as they were then, were dry and carting was made easier, but there were available for this work only the limited number of elephant carts, bullock traction did not become common until some time later. Most gardens relied upon boating down the small local streams, as the means of getting their invoices to the main river, these dried up at that time of the year. It had to be reckoned also that the river steamers ran more irregularly still in the cold weather, with the less volume of water in the Brahmaputra, and they were subjected to the not uncommon mishap of striking a sandbank where they were held up for days.

In these circumstances it is hardly surprising that, not until the opening months of 1863 was it possible to know the result of season 1861.

Nevertheless, dividends for the first five years amounted to 5 per cent, 11 per cent, 13 per cent, 36 per cent, and 34 per cent respectively and the Company experienced no difficulty in increasing its capital in 1862.

By this time annual tea production in Assam had risen to 1,250,000 lb. Fifty-seven private individuals or private companies and five public companies owned one hundred and sixty gardens. The public companies were the Assam Company, the Jorehaut Tea Company, the East India Tea Company, the Lower Assam Tea Company, and the Central Assam Tea Company.

The majority of these concerns were sound, but their success soon encouraged a dangerously rapid and unhealthy growth which led before long to disaster.

CHAPTER SIX

THE FIRST PHASE: II. OTHER DISTRICTS IN NORTH INDIA

THE KUMAON AND GARWHAL

When Bishop Heber visited the Kumaon in 1824, he reported in his journal that:

> The tea plant grows wild all through Kumaon, but cannot be made use of, from an emetic quality which it possesses. This perhaps might be remedied by cultivation, but the experiment has never been tried. For the cultivation of tea I should apprehend both the soil, hilly surface, and climate of Kumaon, in all which it resembles the tea provinces of China, extremely favourable.

Investigations by Dr Royle, who succeeded Govan as Superintendent of the Government Botanical Gardens at Saharanpur in the United Provinces, showed that the plant to which Heber referred was not tea, but another plant known botanically as *Osyris nipalensis*. Govan had already grown tea in the Saharanpur gardens and Royle believed firmly in the suitability of the Himalayan foothills for tea cultivation, and pressed this view repeatedly on the Government of India in the years immediately preceding the formation of the Tea Committee. In view of the conflict of scientific opinion in that committee as to the relative potentialities of Assam and the Himalayan districts, the Government of India wisely insisted on experimenting in both localities with the first batch of Gordon's China seeds and seedlings. Unfortunately, they suffered severely in transit. None of the seeds germinated and only two thousand seedlings reached the North-west Provinces safely.

Dr Falconer, who succeeded Dr Royle, was a born enthusiast, a fine scientist, and a great believer in the possibilities of tea-planting in the North-west Provinces, and was enthusiastically backed by G. W. Traill, the Commissioner of the Kumaon. As a result of their work in the Kumaon, small nurseries were put out at Bhurtpore and Lutchmaissuri, and subsequent experience was to show how well chosen those localities

were. At about the same time, four nurseries were opened by Falconer in Garwhal, at Guddowlee, Koath, Ramsarai, and Kaolagir.

Shortly afterwards, Falconer went away on other duties. Moreover, as he tells us:

> The brilliancy of the discovery of the indigenous plant in Assam very naturally concentrated the attention of the Tea Committee upon that quarter; and after the recall of Mr Gordon from China but feeble efforts were made towards furnishing the Himalayan nurseries with fresh supplies of China seed. They were left in great measure to work on with the weakened remains of the first despatch.

The nurseries, however, were well cared for – those in the Kumaon by Falconer's assistant, Blinkworth – and when in 1841 Falconer again visited the Kumaon, he established two more nurseries, and sent to Government an encouraging report, the conclusion of which was that 'on the whole, the experiment, in so far as the possibility of rearing the tea plant in the provinces of Garhwal and Kumaon is in question, may be safely pronounced to have been completely succeeded'.

The experiments had so far been confined to cultivation. No attempt at manufacture had been made, since Falconer held that 'were unpracticed hands to attempt it by following written directions, although they might ultimately blunder into expertness, still a failure in the first instance would, in all probability, be the result, and discredit would naturally, though unfairly, fall on the produce'.

He therefore recommended that 'two complete sets of Chinese tea manufacturers be supplied for the nurseries at Kumaon and Garhwal, special care being taken to see that these workmen be of the best description'. Chinese tea manufacturers at work in Assam were not willing to go to the hills of the north-west, but nine Chinese artisans who had returned from Assam were recruited in Calcutta. On reaching the plantations in April 1842 they recommended that the bushes, which had in many cases grown to a height of five or six feet, should be drastically cut down preparatory to plucking in 1843. They expressed the view that the Kumaon tea plant was far superior to the wild Assam bush. A small quantity of tea was manufactured in the autumn of 1842 and W. J. Thompson & Son, of Mincing Lane, reported that it was 'fine flavored and strong . . . equal to the superior black tea generally sent as presents, and better for the most part than the China tea imported for mercantile purposes'. As regards another sample of the 1842 Kumaon tea they went into great detail.

> The tea brought by Dr Falconer as a specimen of the growth of the China plant in the Himalayan mountains, resembles most nearly the description occasionally imported from China under the name of Oolong. This resemblance is observable in the appearance of the leaf before and after infusion.

The color of the liquor is also similar, being paler, and more of a straw color than the general description of black tea. It is not so high-flavored as the fine Oolong tea with which we have compared it, and has been too highly burnt in the preparation, but it is of a delicate, fine flavour, and would command a ready sale here.

The Chinese tea-makers were said to 'amuse the *paharree* (hillman) by their strange figures and still stranger propensities' and it was subsequently discovered that they were by no means in the first rank as experts. Nevertheless, their work completed the demonstration that good tea could be both grown and manufactured in the Himalayan foothills.

In 1842 Falconer had to retire on account of ill-health and in 1843 Dr William Jameson succeeded him as Superintendent of the Saharanpur Botanical Gardens with the consequent charge of the tea plantations in the North-west Frontier Province. Jameson's name is mentioned by J. H. Batten, at one time Commissioner of the Kumaon, as the 'central name . . . associated . . . with tea culture in the mountainous districts of India'. Jameson at once put out new nurseries on sites elected by his predecessor at Kooasar, Anoo, Chular, and Hawalbaugh. Unfortunately, it was not then realized that wet rice lands, with a copious supply of water for irrigation, were not necessarily right for tea and it transpired later that of these four new sites the only satisfactory one was Hawalbaugh, which became Jameson's principal headquarters in the Kumaon.

From this time onwards, Jameson's reports, generally communicated by Government to the Calcutta Agricultural and Horticultural Society, are clear evidence of the care and thought given to every aspect of tea development plans in the North-west Provinces. In his report of 1845 he stated that 287 of the plants in Koath and 180 in Ramserai were imported from China or rather raised in Calcutta, from seed sent from China. From these first plants all the others now growing in the different nurseries in Garhwal and Kumaon have originated. By this time there were then in the Kumaon one hundred and eighteen acres of nurseries situated at elevations between 3,500 and 5,200 feet and the actual production of tea in 1844 amounted to 374 lb, beside 60 lb of very coarse tea . . . 'too coarse for marketable purposes'. Eleven acres of nurseries existed in Garwhal. The most important tea event of the year was the establishment of a Government plantation at Kaolagir, two miles west of Dehra Dun.

Jameson now began to study the problem of cost and for this purpose he assumed that one acre of tea bushes would produce one maund* of made tea. He calculated in his 1845 report that the cultivation, manufac-

* One maund = 80 lb.

ture, and transport of tea from six thousand acres of planted tea land would cost Rs 1,30,000 per annum and that the sale proceeds might be Rs 4,80,000 or at least Rs 3,60,000. In view of its historic interest, this estimate is reproduced below – though it will be realized that it is in many ways deceptive. No allowance was made for the considerable superior staff that would obviously be required; depreciation and interest were ignored; and it was assumed that one coolie per four acres would be sufficient.

	Each per month	*Per month*	*Per annum*		
CULTIVATION OF TEA					
2 Overseers	Rs 100 0 0	200 0 0	2,400 0 0		
2 Assistant ditto	60 0 0	120 0 0	1,440 0 0		
8 Moonshees	10 0 0	80 0 0	960 0 0		
30 Chowdrees	8 0 0	240 0 0	2,880 0 0		
30 Assistant ditto	7 0 0	210 0 0	2,520 0 0		
1,600 Mallees	4 0 0	6,400 0 0	76,800 0 0		
				87,000	0 0
MAKING TEA					
10 Chinese tea manufacturers	33 2 0	331 4 0		3,975	0 0
PACKING TEA					
2 Chinese tea box-makers	33 2 0	66 4 0	795 0 0		
1 Chowdree carpenter	10 0 0	10 0 0	120 0 0		
1 Assistant ditto	8 0 0	8 0 0	96 0 0		
12 Carpenters	6 0 0	72 0 0	864 0 0		
8 Sawyers	4 0 0	32 0 0	384 0 0		
			Total	2,259	0 0
CARRIAGE					
Carriage of 6,000 maunds of tea to Bhamoree, at one rupee per maund			6,000 0 0		
Ditto 6,000 ditto of ditto to Ghurmuktissur Ghat, at 25 maunds, to each 4-bullock hackery, it being 8 stages at Rs 1–8 per stage = Rs 12, and of these 240 will be required, 240 × 12 =			2,880 0 0		
Hire of eleven 600-maund boats to transport the tea to Calcutta, Rs 220 each, Rs 220 × 11			2,420 0 0		
EXTRAORDINARY CONTINGENT EXPENSES					
Wood for boxes, repairs, additional coolies, &c. 600 0 0			7,200 0 0		
LAND RENT					
Land rent of 6,000 acres, at Rs 3 per annum			18,000 0 0		
				36,500	0 0
Total Expenditure				Rs 1,29,734	0 0
To value of 6,000 maunds of tea, or 2,40,000 seers at Rs 2 per seer				4,80,000	0 0
Balance, Rs				3,50,266	0 0

Or say that the tea is sold at Rs 1–8 per seer, 2,40,000 × 1–8	3,60,000	0	0
Expenditure, Rs	1,29,734	0	0
Balance, Rs	2,30,266	0	0

Jameson did not, however, consider that it would be wise to aim at an integrated unit of this size. He writes:

I do not consider that it will be necessary for the parties who manufacture Tea to keep up nurseries on their own account. On the other hand, I am confident, that natives by encouragement, and by making advances, will be induced to undertake the cultivation of the plant; a certain sum per seer for *kutcha* leaves being paid to them at the manufactory, and from the vast return they can be paid in a liberal manner. . . . Moreover, the very circumstance that the cultivation of Tea, in addition to vast pecuniary advantages, is attended with but comparatively light labour, would be another inducement to make the natives undertake the cultivation of the plant. If, therefore, this system could be generally established, a sum of upwards of 1,01,000 rupees, placed in the estimate for *mallees* and land rent, would be at the party's disposal to carry out the above measure. The advantages, too, of throwing into this poor country such a sum of money would be great for the agricultural population.

Jameson's financial estimates may have been not altogether sound, but he made excellent tea, and in his 1847 report he was able to claim that he sold tea in Almora at an average equivalent price of 7s 1d per lb. This encouraging report led the Government of India to depute Robert Fortune (who had been Botanical Collector to the Horticultural Society of London) to China to obtain the finest varieties of the tea plants for the Himalayan plantation.

His first despatches of seeds were incorrectly packed and died. Fortune then adopted a method of packing which he thus described.

My first experiment was tried in the following manner. Having procured some fine mulberry-plants from the district where the best Chinese silk is produced, I planted them in a Ward's case in the usual way, and watered them well. In two or three days when the soil was sufficiently dry, a large quantity of tea-seeds were scattered over its surface, and covered with earth about half an inch deep. The whole was now sprinkled with water, and fastened down with a few crossbars to keep the earth in its place. The case was then screwed down in the usual way, and made as tight as possible. . .

When the case reached Calcutta the mulberry-plants were found to be in good condition, and the tea-seeds had germinated during the voyage, and were now covering the surface of the soil. Dr Falconer, writing to me upon the receipt of this case, says, 'The young tea-plants were sprouting around the mulberries as thick as they could come up . . .

During this year (1849) large quantities of seeds were sown in other cases between the rows of young tea-plants. These also germinated on their way to India, and reached their destination in the Himalayas in good condition . . .

When the news of the success of these experiments reached me from India, I determined to adopt the same plan when I packed the cases which I was now taking round under my own care. Tea-seeds were therefore sown in all the cases between the rows of young plants . . .

Fourteen cases having been packed and prepared in this manner, I had still a large quantity of seeds – about a bushel – remaining on hand. These I determined to dispose of in the following manner. Two glazed cases had been prepared to take a collection of camellias from China to the Botanic Garden at Calcutta. The tea-seeds were emptied out in front of these cases and a small portion of earth thrown in amongst them. A layer of this mixture, which now consisted of about one part earth and two parts seeds, was laid in the bottom of each case, and the camellia-plants were lifted gently out of their pots and placed upon it. The spaces between the plants were then filled up to the proper height with this mixture of tea-seeds and earth, and a little soil was sprinkled upon the surface to cover the uppermost seeds. The whole was then well watered, bars were nailed across to keep the earth in its place, and the lids of the cases were fastened down in the usual manner.

The method proved satisfactory and large quantities of seed as well as more than twenty thousand seed plants were thus introduced into India from the best tea districts of China. Fortune was then asked to inspect the Himalayan plantations. At this time Fortune did not adequately appreciate Jameson's great work – indeed he seemed more anxious to blame than to praise.

The plants [said Fortune with regard to one plantation] 'generally did not appear to me to be in that fresh and vigorous condition which I had been accustomed to see in good Chinese plantations. This, in my opinion, is caused 1st, by the plantation being formed on *flat land*; 2nd, by the system of *irrigation*; 3rd by too *early plucking*; and 4th, by *hot drying winds*, which are not unfrequent in this valley from April to the beginning of June.

Fortune's view was not altogether sound and he made insufficient allowance for three years of drought. Jameson nevertheless believed in his own work and after Fortune's return from a second visit to China, Jameson persuaded the Government to send Fortune again on a tour of inspection to the Kumaon and the Garwhal. Fortune was now, in 1854, much more complimentary than on his previous visit. Of the plantation at Kaolagir in the Dehra Dun Valley he thus reported:

I have great pleasure in stating that I have never seen finer or more productive Plantations in China. The plants are in high health, large, and bushy, and are yielding annually abundant crops of leaves. Many of the bushes are five and six feet in diameter. One I measured was eight feet, another ten, and both six feet in height. Of course these are the giants of the Plantation. And it is to be noted that these plants are not 'drawn up' with few branches and leaves; but they are dense bushes in high health, and formed to give large quantities of Tea.

Regarding the Bhuttpoor plantation, he stated that 'the bushes are in excellent condition and fully justify the favourable opinion I formed of the plantation on my first visit'. In modern Anglo-parlance, he 'gave Jameson a good chit', and took the credit for the improvement very largely to himself on the strength of his alleged earlier advice.

Jameson, in the meantime, was giving careful thought to the practical problem of growing tea commercially. He had satisfied himself that as much labour as was necessary could be obtained at the rate of two annas per day, provided employment was permanent. He had also come to the conclusion that plenty of land was available; that it would yield from a hundred lb to 230 lb per acre; that it would pay the villagers better than grain cultivation; and that the aims should be to secure cultivation of tea by villages to the extent of two acres for every hundred held from the Government.

The Commissioner of the Kumaon, in accordance with the accepted principle that the Government must withdraw from tea production when it became commercially attractive, now recommended that all the government tea plantations should be sold after 1 January 1857, except that one government nursery might be maintained in each district.

Government deferred orders on this proposal, but from about 1856 private persons began to take to tea cultivation in the hills of the North-west Provinces. Grants of land were offered on liberal terms and free tea seeds and seedlings were distributed. A number of Indians began on a small scale and in 1856 three Europeans established four plantations. At about the same time, Colonel Elwall and Captain Thelwell established a rather large plantation in Dehra Dun, and in 1859–60 the Dehra Dun Company, formed with an authorized capital of £500,000, purchased this property for £50,000.

Various companies now offered to take over all the government plantations in the sub-Himalayan districts. The Government, however, accepted none of these offers for fear it would lead to a monopoly in the new industry. The plantations were in fact, sold over a period of years and to a number of different individuals, the most important such sale being that of the large plantation at Kaolagir in Dehra Dun to the Raja of Sirmoor.

By 1863 seventy-eight plantations were in existence in these areas. Eighteen of these were in the Kumaon, twenty-five in Dehra Dun, three in Garwhal, three in Simla, twenty-six in the Kangra Valley – where tea had been developed by Jameson in the early fifties – and three in Kulu. Thirty-seven of them were owned by Europeans and forty-one by Indians, including the Maharaja of Kashmir, the Raja of Mandi, and other princes. Nassau Lee, writing in 1863 thus sums up the situation:

Last year *eighty-nine* tons! of tea seed – and *two millions four hundred thousand*! seedlings, were distributed, gratis, to private planters, from the Government Factories. And yet, – though so immense the supply it fell far short of the demand. Many indents sent in could not be complied with. Owing moreover to the number of Tea Companies, and Concerns, springing up in the Hill Ranges of the North-Western Provinces and the Punjab, and the consequent demand for Managers and skilled workmen, the Government Overseers and Chinese manufacturers, tempted by the higher wages offered by private planters, are leaving the Government Plantations.

Government activity had served its declared purpose of demonstrating that tea could be a commercially profitable crop in these hills and stimulating private enterprise to undertake it.

CHITTAGONG

We have seen that experiments in the cultivation and manufacture of tea were carried out first in Assam and then in the sub-Himalayan districts. The next area of experiment was Chittagong, in what is now East Pakistan. On 12 August 1843 A. Sconce, Collector of Chittagong, who had in 1840 started the Pioneer garden as an experiment, wrote thus to one Charles Terry in Chittagong:

I doubt very much if my imperfect attempt to make Tea from leaves grown at Chittagong, be worth your notice. However, I send you some in the accompanying bottle. It is made from Assam Plants, of which nearly three years ago, I got a boat load, through the kindness of Major Jenkins. The soil on which they are planted is very sandy, and of necessity poor. Still the bushes, many of them, have shot up to a considerable height, 6, 8 and 10 feet.

By the time the bottle reaches you, I hope neither the look of Tea, nor the smell of Tea will have entirely disappeared. You will expect that a good deal has yet to be overcome in the way of flavour. The manufacture was performed over a kitchen fire in earthen dishes. By Mr Bruce's account, the pans should be iron.

I am this year gathering a considerable quantity of seed, and what I prize very much, three China Tea plants, which I got from Dr Wallich, are also giving seed.

Terry replied as follows:

I have examined the sample of Tea you sent me, the produce of Chittagong, and have much pleasure in handing you my opinion of it.

It is superior Tea in flavor, also in strength, and is of the Pekoe class. Had it been well manufactured, it would command a good price in the English market.

The manufacturing does not appear to be understood, the leaves not having been rolled.

For a long time no further advance was made, perhaps because the

climate was not ideal. Money, writing on Chittagong a few years later, states that:

the climate is better than Cachar in the one respect that there is less cold weather, but inferior in the more important fact that much less rain falls in the spring. In this latter respect it is also inferior to Assam, particularly to Northern Assam. There is one part of Chittagong, the Hill Tracts (Tea has scarcely been much tried there yet), which, in the fact of spring rains, is superior to other parts of the province as also in soil, for it is much richer there. On the whole, however, Chittagong must yield the palm to both Assam and Cachar on the score of climate, and also, I think, of soil. For though good rich tracts are occasionally met with, they are not so plentiful as in the two last-named districts. Always, however, excepting the Hill Tracts of Chittagong; there the soil is, I think, quite equal to either Assam or Cachar.

Sconce's garden came in due course into the possession of one Fuller, and, in November 1862 'Dr J. B. Barry who was greatly interested in tea, visited Chittagong, and being satisfied with what he saw and the information he received, commissioned Mr Fuller to take up twenty thousand acres of ground on his account. After this other investors came forward. Applications for allotment of waste land poured into the Collectorate and a number of gardens were opened out. J. P. Langlois, the manager of the Muddunhat Tea Company, considered, after some years of experience, that Chittagong was not a favourable district for tea cultivation and he doubted whether, with one exception, any garden in Chittagong was paying. H. Hankey, the officiating Commissioner, who reported to the Government of Bengal in 1873, brushed aside Langlois's opinion and declared that 'the prospects of Chittagong as a tea-growing district, if not brilliant, are very steady and fair', and he placed much emphasis on the satisfactory character of local labour. Some years later the editor of the *Indian Tea Gazette*, in an article reproduced in the *Tea Encyclopaedia* in 1880 also took an optimistic view:

There is perhaps no district in which tea cultivation has been more rapid in growth than Chittagong. It may almost be said, indeed, to have become now a special industry of the place, and there has been an almost entire absence of the labour difficulty. We think we shall not be far out in estimating that there are now some 2,500 acres in the Chittagong, Noakally, and Chittagong hill districts, under tea, and extensions are still taking place. There are several native proprietors, but mostly on a small scale. Chittagong tea has not hitherto realized good prices in London, or even in this market: it is reported as deficient in point and flavour. This may, however, be overcome by greater care in manufacture, as the soil and climate of the district is all that can be desired for tea.

Langlois, however, was more of a realist than either Hankey or the editor of the *Indian Tea Gazette* and Chittagong never, in fact, became an important tea district. We need not refer again to the development of

tea in Chittagong except to say that production in 1939 amounted to only just over 2,000,000 lb.

DARJEELING AND THE TERAI

The next district in which tea was planted as an experiment was Darjeeling. This district provides an even more spectacular example than Assam of the civilizing effect of British administration as well as of the economic transformation wrought by the introduction of the tea industry. In the latter half of the eighteenth century, the Gurkhas, who had completed their conquest of Nepal in 1768, were in an expansionist frame of mind which led them to make repeated inroads into the territories of the Raja of Sikkim and ultimately to annex a considerable portion of that country. By early in the nineteenth century, the Gurkha kingdom abutted on British India along a length of seven hundred miles. Constant border raids by the Gurkhas and the capture by them of four small frontier garrisons led, in November 1814, to the Nepal War. The Gurkhas were completely defeated and ceded the annexed territories to the British who restored them to the Raja of Sikkim and guaranteed his sovereignty. Certain disputes as to the frontier between Sikkim and Nepal resulted in 1828 in the despatch of Captain Lloyd to the Sikkim Hills. Lloyd, as we learn from H. B. Bayley's report quoted in the *Darjeeling Gazetteer*, was immediately impressed with the suitability of the old Gurkha garrison of Darjeeling as a sanatorium for Europeans, as well as with its strategic importance. Darjeeling itself, formerly a large village, was then completely deserted, but this appeared to be the result of the tyranny of the Raja of Sikkim, and Lloyd was confident that if the British possessed Darjeeling the Lepchas would soon flock there from the Raja's territory.

Lord William Bentinck, the Governor-General, accepted Lloyd's estimate of the possibilities and directed him to initiate the negotiations which resulted, in 1835, in the transfer of a strip of territory in the present Darjeeling district to the East India Company. The deed of grant is worth quotation.

> The Governor-General having expressed his desire for the possession of the hill of Darjeeling on account of its cool climate, for the purpose of enabling the servants of his Government, suffering from sickness, to avail themselves of its advantages, I, the Sikkimputtee Rajah, out of friendship for the said Governor-General, hereby present Darjeeling to the East India Company, that is, all the land south of the Great Runjeet river, east of the Balasur, Kahail and the Little Runjeet rivers, and west of the Rungno and Mahanuddi rivers.

In 1836 Lloyd and Dr Chapman were sent to explore the newly acquired area. It was 'a worthless uninhabitable mountain' and 'all they found was some huts recently erected by the Raja of Sikkim, in

which they spent a night shivering with cold, without food or bedding'. They nevertheless reported favourably and it was decided to adopt Darjeeling as a sanatorium. Progress was rapid and applications for land from European residents in Calcutta poured in. By 1840, according to the *Darjeeling Gazetteer*:

a road had been made from Pankhabari; there was a staging bungalow there and another at Mahaldiram; a hotel had been started at Kurseong and a second at Darjeeling; and at the latter place some 30 private houses had been erected, and nearly as many more locations had been taken up at Lebong.

In 1839 Dr Campbell of the Indian Medical Service, a remarkable man and a true pioneer, was transferred from Kathmandu to Darjeeling as Superintendent of the new territory. His first problem was to attract settlers and in this he was so successful that by 1849 ten thousand immigrants had come from Nepal, Sikkim, and Bhutan. In 1852 an inspecting officer reported in the following terms:

Whatever has been done here, has been done by Dr Campbell alone. He found Darjeeling an inaccessible tract of forest, with a very scanty population; by his exertions an excellent sanitarium has been established for troops and others; a Hill Corps has been established for the maintenance of order and improvement of communications; no less than 70 European houses have been built, with a bazar, jail, and buildings for the accommodation of the sick in the depot; a revenue of Rs 50,000 has been raised, and is collected punctually and without balance; a simple system of administration of justice has been introduced, well adapted to the character of the tribes with whom he had to deal; the system of forced labour formerly in use has been abolished, and labour with all other valuables has been left to find its own price in an open market; roads have been made; experimental cultivation of tea and coffee has been introduced, and various European fruits and grapes; and this has been effected at the same time that the various tribes of inhabitants have been conciliated, and their habits and prejudices treated with a caution and forbearance which will render further progress in the same direction an easy task. I may, in short, say of him that to him is the Government indebted for the formation of the district of Darjeeling.

Prior to this time, tea in the proper sense of the term, was not known in the Sikkim Hills, though according to Dr Hooker, the local inhabitants had been in the habit of making a kind of tea from a plant allied to hawthorn and other similar plants. In 1841, Campbell brought China tea seeds from the Kumaon and planted them in his residence at Darjeeling at a height of nearly seven thousand feet, but, said Hooker, 'the frosts and snow of that height injure it as do the hailstorms in spring'.

Others followed Campbell's example at somewhat lower elevations. In 1848 Hooker wrote regarding Lebong, a thousand feet below Darjeeling, that 'the tea plant succeeds here admirably and might be cul-

tivated at a great profit and be of advantage in furthering a trade with Tibet'.

The renewed aggressiveness of the Sikkim Government, culminating in its seizure of Campbell and Hooker led, in 1850, to the annexation by Britain of the Terai and of 'the portion of the Sikkim Hills bounded by the Ramman on the north, the Great Rangit, and the Tista on the east, and by the Nepal frontier on the west'. The area ultimately available for tea cultivation was thus extended.

In 1852 one Jackson, in a report quoted in the *Darjeeling Gazetteer* says:

I have seen several plantations in various stages of advancement, both of the Assam and China plant, and I have found the plants healthy and vigorous, showing that the soil is well adapted for the cultivation. In the garden of the Superintendent, Dr Campbell, in Darjeeling, in the more extensive plantations of Dr Withecombe, the Civil Surgeon, and Major Crommelin, of the Engineers, in a lower valley called Lebong, the same satisfactory result has been obtained: the leaves, the blossom and the seeds are full and healthy; the reddish clay of the sides of the hill at Lebong seems to suit the plant better than the black loam of Darjeeling. This has been the result at and about Darjeeling itself, at a height of seven thousand feet; but the opinion of Dr Hooker and of others competent to judge seems to be that there is too much moisture and too little sun at Darjeeling to admit of the cultivation on a large scale becoming remunerative: this objection, however, does not apply to the lower sites of Pankhabari and Kurseong, where a plantation of both tea and coffee has been established by Mr Martin, and the plants are now in a highly-thriving condition. In this tract of country, between the Morung and Darjeeling, every variety of elevation and aspect is to be found, and there seems to be little or no doubt that tea cultivation in the tract would answer.

By 1856 it was reported that:

Tea plants had been sown and raised at Takvar to the north by Captain Masson, at Kurseong by Mr Smith, at the Canning and Hopetown plantations by the companies attached to those plantations, by Mr Martin on the Kurseong flats and by Captain Samler, the Agent of the Darjeeling concern between Kurseong and Pankhabari.

The experimental stage had been passed and development was rapid. According to the *Darjeeling Gazetteer*:

In that year (1856) the Alubari tea garden was opened by the Kurseong and Darjeeling Tea Company, and another on the Lebong spur by the Darjeeling Land Mortgage Bank; in 1859 the Dhutaria garden was started by Dr Brougham; and between 1860 and 1864 four gardens, at Ging, Ambutia, Takdah and Phubsering were established by the Darjeeling Tea Company, and the gardens at Takvar and Badamtam by the Lebong Tea Company.

Other gardens which were started at this early period were those now known as the Makaibari, Pandam and Steinthal tea estates.

From this time onwards, in spite of the widespread tea crisis of the early sixties, development in the Darjeeling District was rapid, as will be seen from the following figures:

Year	*Number of gardens*	*Area under cultivation (acres)*	*Outturn of Tea (lb)*
1866	39	10,000	433,000
1870	56	11,000	1,700,000
1874	113	18,888	3,928,000

In 1874 the labour force amounted to nineteen thousand and a steady stream of immigrants from East Nepal prevented the labour question from becoming serious in the hills, though the position in the unhealthy Terai was sometimes more difficult. The industry was now well established and before long Darjeeling second flush tea became famous for its unique quality.

It was natural that the thoughts of Darjeeling planters should turn towards the possibility of tea cultivation in the foothills of the Himalayas, but in the earlier sixties the only available land under British rule was in the Terai sub-division – an unhealthy area to the west of the River Tista, traversed by many rivers which rise in the hills of the district and situated at an average height above sea level of about three hundred feet. Experimental plantations were started in the Terai about 1860, and in 1862 the first garden in that area was established at Champta by James White. In the next few years a number of other gardens were opened.

CACHAR

The district of Cachar now demands attention – and it is interesting to note that attempts were made to grow coffee in that district before tea was considered as a possibility. In an article in the *Journal of the Agricultural and Horticultural Society of India* for 1857, Lieutenant R. Stewart thus reported:

> An attempt was made to cultivate coffee in Cachar some twelve years ago, and failed simply from want of funds on the part of the speculators. The plant, which is indigenous to the soil, grew luxuriantly, and was just commencing to make small returns, when the house in connection with the concern at Calcutta failed, and jungle was allowed to choke the promising plantation. The coffee was of an excellent quality, and many of the trees, in spite of the neglect in which they have been left, continue bearing to this day. I am convinced that properly conducted coffee cultivation in Cachar would rival that of tea, in point both of excellence and profit.

Tea had apparently long been growing in the dense forests covering the low ranges of hills or *teelas*.* The tea tree was indeed well known as a timber used mainly for doorposts, in view of its durability, but it does not seem to have come to European notice until the early fifties. In May 1855 F. Skipwith, a judge at Sylhet, sent to the Agricultural and Horticultural Society specimens of the tea plant gathered in the Cachar District, and although experts in Calcutta were somewhat non-committal, they admitted that 'to all appearance they are identical with the tea plant of Assam'. The next batch of specimens were definitely recognized as belonging to the Assam variety of the tea plant and the Superintendent of Cachar, Captain Verner, called attention to the excellent access afforded by the River Burah, and therefore trusted that large plantations would soon be established. A few weeks later in August 1855 Verner submitted specimens of manufactured Cachar tea of which he wrote as follows:

> The leaves of which the tea is composed, were gathered in the jungles from the indigenous plant of this province. This tea has not been manufactured by a regular tea manufacturer, but by a person who has been in the habit of seeing tea made in Assam; some allowance must therefore be made for his want of skill. My object in submitting the sample is, that those interested in tea, might be able to ascertain, from its flavor and color, what Cachar tea, when properly manufactured, might turn out.
>
> I am not of opinion that the Cachar and Assam plant are of the same variety. The Cachar leaves, when dried, are much lighter colored than the Assam, they are also I believe thinner. Tea made of Cachar tea differs also in flavor and color from that made of Assam tea. The Assam, that I have seen, is strong, black, dark colored tea, the Cachar is brighter in color, and when milk is poured on, then the difference is great, the one looking dark and muddy, the other more bright and clear. The tea leaves taken out of the teapot and compared, show that they are different. The Assam leaves being dark brown, and the Cachar more of a green brown. There is a slight peculiarity of flavor in the Cachar tea, which may be, owing to the manufacture, to there having only been a very small quantity made, also to the leaves having been gathered in the jungles, and to the plant not having been cultivated. I would esteem it a great favor if the opinion of any competent person or persons could be obtained as to what the tea might turn out when cultivated and properly manufactured.

Encouraging reports were received on these samples and on 23 October 1955 Verner wrote as follows: 'Three parties have commenced work, and six other European speculators have applied for tea lands, which promises well, considering that it is only some three or four months since it was ascertained that the indigenous plant was growing in the jungles of my district.'

* *Teela*=hillock.

In Cachar, as in Assam, there has been some controversy as to who first discovered indigenous tea. The foregoing account is based mainly on articles in the *Journals of the Agricultural and Horticultural Society of Calcutta*, written a few years later. Shri D. Datta, Vice-Principal of the Gauhati College, gives a somewhat different account on the basis of local records.

In Cachar indigenous tea was discovered first in 1855. But speculations regarding the possibility of tea cultivation in this district began soon after its annexation to the British territory in 1832. In February 1834, Captain Fisher, the Superintendent to whose charge the administration of the district was placed after annexation, received a letter from Mr Gordon, Secretary Tea Culture Committee. Mr Gordon requested Fisher to contact people coming from the province of Yunun of China, learn from them the conditions as regards soil, rainfall, climate etc. required for the cultivation of tea, and then to report if Cachar fulfilled such conditions. Fisher could contact very few people coming from Yunun, as because of the disturbed condition of the NE Frontier peoples, movement in that region was very limited. Anyway, from the information gathered he submitted a report in which he dealt with every point as regards soil, climate, rainfall etc. and concluded with his opinion that Cachar would be suitable for the plantation of tea. It is interesting to note that when Fisher was studying the possibility of tea plantation in Cachar he did not know that abundant tea plants were growing wild in the jungles of the district.

The discovery of tea plants in Cachar in 1855 was not the result of any conscious effort on the part of any person. About this discovery R. Stewart, the then Superintendent wrote in his letter dated 10 July 1855: 'When in Moffasil last February the first specimens I saw of the Cachar plant were brought to me by an individual who had been employed in a tea plantation in Assam, and who recognized the plant, and as an inducement to others to bring to my notice any discoveries they may make, I beg to suggest that he be given a present of thirty or forty rupees or any sum which may be considered sufficient.'

It is at least clear that tea was growing in a number of places in Cachar and that by 1855 this fact had been realized. Applications were then invited for grants of land for the cultivation of tea. There were many applications, all except one – which was apparently not followed up – from Europeans and by 1856 a number of pioneers were at work.

According to the report of the Deputy Commissioner of Cachar in 1873 'the first gardens were Bursangon and Gungurpar; they were opened in 1856 and worked with local labour and labour from Sylhet'. Up to 1858 all work was done with local labour, but about that time, or soon afterwards, many of the local labourers seem to have acquired lands and ceased to work on tea gardens. Labour thus had to be imported. In spite of the terrible mortality in the early years of importation, foreign labour seems to have settled down better in Cachar than else-

where. The Commissioners, who were appointed in 1868 to inquire into the state of tea cultivation in Assam, Cachar, and Sylhet, considered that in the matter of the contentment of labour, Cachar was much ahead of Assam, while J. W. Edgar, officiating Under-Secretary to the Government of Bengal, reported in 1873 that the majority of the imported labourers meant to settle in the district.

Labour soon became more expensive, but nevertheless tea cultivation was extended rapidly. According to D. Datta, the local authorities were apprehensive of unwise speculation in this field, and the Superintendent of Cachar warned one applicant that 'in order to bring a thousand acres of land under tea cultivation it would entail an outlay of at least one lac* of rupees at the rate of rupees one hundred per acre'. Interesting evidence on the economics of the Cachar tea gardens in 1868 was given to the Commissioners by J. Smeal, part proprietor of several tea gardens in Cachar. He thus explained the position:

> Nearly the whole of the land suitable for tea in Cachar has been taken up, although much the larger proportion of this has not yet been brought under cultivation. From actual experience I can state that the outlay of bringing a garden from its commencement up to the end of the fourth year may, with careful management, be taken at Rupees 400 an acre. One of my gardens has cost this sum up to the end of the fourth year. From this the proceeds of tea made in third and fourth years must be deducted. This may be estimated at Rupees 100 an acre, leaving a net expenditure of Rupees 300. Now that seed is so much cheaper I believe a garden might be brought up to the end of the fourth year for even a less sum. The garden to which I particularly allude has cost Rupees 80,000 for two hundred acres up to the end of the fourth year. The working expenses in its fifth year amount to Rupees 1,300 a month, or Rupees 6–8 an acre per month. This covers all the expenses on the garden, but does not include freight or other expenses after the tea has left the gardens. I do not believe that a garden can be worked well at a more economical rate. A garden in full yield should give not less than five maunds† an acre. Many gardens in Cachar yield this on the area in full bearing. This takes place in the sixth year with ordinary cultivation. In the garden to which I allude bullocks are largely employed for ploughing between the bushes. This answers well, does not injure the plants, and causes a considerable saving. Besides the bullocks there are nearly two hundred laborers; but of these a large proportion are women and children. Only about thirty are employed to hoe, and that in places where stones or roots of trees prevent the use of the plough. I do not think the expenditure per acre, including manufacture and all expenses on the garden, should exceed Rupees 120, even when the plants are in full yield. Our tea is plucked on a different system from what is usual, a fresh picking being made regularly every seven or eight days. Our teas have fetched a very high price, averaging last year, in London, Rupees 125 a maund. Rupees 60 per maund is a common average price in London for

* One Lakh = 100,000.

† Maund = approx. 82 lb.

Cachar tea. Taking the cost per acre at Rupees 120, and allowing a small yield of only three maunds at this rate, there remains a balance of Rupees 60 an acre. From Cachar to Calcutta the expenses of freight, &c, may be taken at Rs 5 a chest, and from there to London Rupees 10 to 12, including brokerage, &c. &c. For three chests or maunds the expense would be, say, Rupees 48, and deducting this from Rupees 60, there would remain only Rs 12 profit.

W. Nicol, manager of Arcuttipore Estate, Cachar, testified as follows with regard to labour:

When I first came into Cachar, the highest rate of payment for local labor was Rupees 4 a month; it is now 4 annas a day, and for a special labor, as of Ghuramees, more. The first cause of the rise was the competition among gardens, owing to the insufficiency of imported labor; second the knowledge of the price paid for imported labor; third the general rise in value of agricultural produce which has made the laborer independent of the planter, and the laziness of the natives. Without advances local labor cannot be obtained. I myself have never found difficulty in getting my advances worked off, as I am close to the Court.

After the crisis of the sixties, tea in Cachar progressed steadily and in 1872 as many as eighty gardens were under cultivation. Tea grants then occupied ninety thousand acres, twenty-three thousand acres of which were actually planted with tea and the yield in 1872 was reported by the Deputy Commissioner to be 4,883,183 lb of which black tea accounted for 4,614,059 lb and green tea 153,124 lb. J. W. Edgar's conclusions made in 1873 were that 'on the whole tea is in a better position and that its prospects are more hopeful in Cachar than in any of the other districts'.

SYLHET

Early in 1856, S. A. Glover, the officiating Collector of Sylhet, reported in the following terms that tea had been discovered in that district in December 1855.

Ever since the discovery of tea in Cachar, it had been surmised by those best qualified to form an opinion, that the plant would be found in this district, and 'prospectors' had for some time been employed by the Magistrate, Mr Larkins, in searching the neighbourhood of the hilly part of the eastern side of the district. In December last, the first discovery was made, and ever since then, reports of fresh successes have come in daily.

It is said that the discovery was made by one Mohammed Waris, who received a reward of Rs 50 from the collector.

Although the first discoveries were made in areas contiguous to the early tea areas of Cachar, the collector confidently predicted that tea would be found on most of the *teelas* of the district. He pointed out that some difficulties arose from the fact that people did not know what to look for. They were 'astonished to think that the tea plant is not just a

shrub but a tall stately tree growing to thirty, forty or fifty feet in height and in some instances too large in circumference to be clasped by one arm'.

Almost immediately after the discovery of tea in Sylhet, a tea garden was established at Malnicherra.* Others soon followed, but development was impeded by the fact that much of the land at Sylhet had been permanently settled by the Government. The settlement holders would doubtless in many cases have been willing to lease their land for tea cultivation, but the prospective planter wanted, not a lease, but the fee simple of his garden land. H. C. Sullivan, the collector at Sylhet, seems to take the planters to task for this preference in his report of 13 January 1873.

> In a permanently settled district like Sylhet it is hardly to be expected that waste lands, or what are generally called waste lands, can be found to any great extent. Such lands can only be procured through the *zemindars* who hold these estates, or from Government in the case of *khas mehals.*† But I feel sure that if tea-planters would only open gardens as investments of private capital for their own profit, and not with an eye to future speculation in the shape of a company, and if they would only give up their cherished fiction of estates in fee-simple and deal directly with the *zemindars*, or take a Government estate under the present liberal settlement rules, they would not fail to reap a substantial profit on their investments. The result of it is, that when a planter opens a garden, the first thing he looks forward to is the possibility of getting up a company at some future time, and then selling his garden for a handsome profit. These companies are generally started in England, where of course nothing will go down that is not a fee-simple. Whatever the faults of the indigo system were in Bengal, the planters in their generation tried to secure lands from *zemindars* as much as possible. An indigo factory with its own *putni* or *zemindari*‡ or *izardari* lands was always a profitable investment. In those days there was not so much talk about fee-simple.

There were, however, certain areas in Sylhet not covered by the permanent settlement. It was to such areas that the planter directed his attention, and the figures a few years later show that two-thirds of the tea lands in Sylhet were held on leases from Government under the old Assam rules; only between fifteen and twenty per cent were held on leases from *zemindars*.

It was perhaps for this reason that the gardens were mainly established on *teelas*, of which Sullivan writes that 'they are steep and sandy and by no means well adapted for the cultivation of tea. The heavy rains

* Ukers refers to Malnicherra as the first Sylhet tea garden, but the report of the then Deputy Commissioner states that Telaghur was the first.

† Lands in the possession of the Government.

‡ Lands held on payment of revenue to the Government.

wash away the soil from the roots of the plants, and in many cases the plants themselves are washed away'. It was all very well for Sullivan to quote an experienced planter to the effect that the flat lands in Sylhet were very suitable for tea – these were in the main, the very lands covered by the permanent settlement, and so not readily available to the planter.

A number of new gardens were opened about 1860 and labour shortage was soon encountered. Sidney Turnbull, Manager of the Sylhet Company, giving evidence to the Commissioners in 1868 stated as follows:

When tea gardens commenced to be opened out on a large scale, the first requirement was large acreage; that is to say, jungle was cleared, and land brought under cultivation without any regard to the available supply of local labor, which not only was insufficient to meet the increased demand, but also rose in price to meet the deficiency. Coolies were imported at great expense and risk. A large proportion of the earlier batches of coolies were up-country men, who, if they survived, lost their health and strength on the gardens, and were of little use as laborers. Their inefficiency increased the cost of working the garden. Many of the earlier managers were either incompetent or negligent. Quantity was looked to rather than quality. A large proportion of much coarser tea than is now manufactured was sent into the market.

R.C.Bell, in his evidence to the Commissioners of 1868, gave an interesting analysis of the Sylhet labour position.

At certain times of the year local labor is available; but it is rather expensive, and not to be depended on, as the men will only come to work in the garden when they have no cultivation going on. Rs 8 a month is now asked for it. I do not know what the former rate was here.

I have found the coolies sent up from Calcutta by contractors very bad. Out of a hundred men not more than thirty or forty were healthy, useful men. I believe that they were originally bad, and not that they became ill on the voyage up. No sufficient care was ever taken in the selection. There used to be reckless expenditure without any check, in the part of all concerned. I never knew the legislative interference of Government operate to increase the cost of importation of labor. The real cause of the increase was the keen competition for labor which there was two years ago, when people went mad in tea speculations. The speculators looked to selling the gardens, and not to working them. Gardens were purchased without any enquiry, and without being seen, but merely on a report from some friend of the owner.

In spite of these difficulties, well-run concerns were able to make profits. Thus R.C.Bell estimated the inclusive cost of running a garden at Rs 150 an acre and, assuming an outturn of two and a half maunds per acre, reckoned on a profit of Rs 50 per acre. Sidney Turnbull estimated production costs, including packing, at 8 annas per lb and

seemed to expect a price of about 12 annas a lb. Tea in Sylhet at the beginning of the sixties appeared to be a good investment.

The profits realized were at any rate sufficient to induce a recovery after the crisis of the middle sixties and in 1873, 3,240 acres of land were actually under tea in Sylhet while a further 12,000 acres had been taken up for planting. The yield had reached 324,186 lb and it was evident that expansion from that time onwards would be rapid.

CHOTA NAGPUR

In 1860 a tea estate was established at Ramghar in the Hazaribagh District, and two other estates were soon opened there. By 1872, 626 acres of tea were under cultivation in the district, but the Deputy Commissioner reported that the soil and climate were not suited for tea cultivation, since Ramghar had only 'in one favourable year just paid the usual expenditure of the year'. Moreover, the managers of the three gardens reported that the average yield of tea was 50 lb, 62 lb and 80 lb per acre respectively. We can without difficulty accept the view of the Deputy Commissioner as being correct.

In the Lohardaggah District of Chota Nagpur, there were at this time two tea gardens which together had 244 acres of tea and gave average yields per acre of 91·5 and 111 lb respectively. One of the managers reported that the climate had not been found suitable to the growing of the tea plant, and the Deputy Commissioner rightly referred to the fierce, hot winds and long droughts as most destructive.

CHAPTER SEVEN

TEA MANIA AND COLLAPSE

Up to about 1861 the Indian tea industry had been developed on sound and steady lines by men who were as much interested in its long-term prosperity as in immediate results. The Assam Company had for some years been in a prosperous condition, the Jorehaut Company had paid dividends right from its inception and a number of private owners had also made good profits. These successes attracted people who knew nothing of the early struggles of the pioneers or of the hazards of tea-growing, and, unfortunately, official reports encouraged them in an unrealistic outlook. J. W. Edgar, who studied the whole subject some years later, tells us that in 1862–3, 'officials as well as planters seem to have indulged in visions of fabulous prosperity'. The Land Revenue Administration reports from Assam and Cachar for that year were both written in an exalted tone that contrasts curiously with the usual sobriety of official reports.

The actual successes and the official reports engendered the most extravagant beliefs in tea as a money-spinner and a new, speculative element appeared. A madness comparable in intensity with that of the South Sea Bubble seized men's minds, and normally level-headed financiers and speculators began to scramble wildly for tea shares and tea lands. Edward Money, writing in 1870 with personal knowledge of the facts, graphically describes this rush to get rich:

> First, we had the wild rush, the mad fever, when every man thought that to own a few Tea bushes was to realise wealth. In those days existing plantations were bought at eight and ten times their value; nominal areas of five hundred acres were paid for which, on subsequent measurement, proved to be under one hundred; new gardens were commenced on impossible sites and by men as managers who not only did not know a Tea plant from a cabbage, but who were equally ignorant of the commonest rules of agriculture. Boards highly paid, with secretaries still more liberally remunerated, were formed both in Calcutta and London to carry on the enterprise; and, in short, money was

lavished in every conceivable way, while mismanagement ran rampant in each department.

It seems to have been thought that any fool could run a tea garden. People who had failed in everything else were recruited as managers. 'Tea planters in those days', says Money, 'were a strange medley of retired or cashiered Army and Navy officers, medical men, engineers, veterinary surgeons, steamer captains, chemists, shopkeepers of all kinds, stable-keepers, used up policemen, clerks and goodness knows who besides'.

Tea companies, with or without tea lands, sprang up overnight; shares rose to fantastic heights; lands were cleared without any consideration of their suitability or the availability of labour; and highly placed civil servants threw up their posts to become planters. Some idea of the violence of the mania can be gathered from the fact that in 1862–3 in the single district of Cachar applications for tea lands covered 558,078 acres. Another indication is provided by the phenomenal demand for tea seed. The Jorehaut Tea Company, for example, which before and after the mania normally sold from 170 to 180 maunds of seed for a few hundreds of pounds each year, in 1863 sold 830 maunds for £8,486.

Gardens were put out as a speculation and with no intention of keeping them. Edgar, whose notes are a mine of information on the whole subject, makes the following pungent comments:

> When I first went to Cachar at the end of that year, (1863) there used to be a saying in the mouths of planters that it was very doubtful whether it would ever pay to make tea, but that there was no doubt that it paid to make gardens. Another saying to the same effect was that gardens were made to sell, not to pay. Scarcely any one interested looked forward to obtaining his return from the produce of his tea cultivation; every one looked forward to becoming suddenly and immensely rich by getting a piece of land, planting it out with tea, and then selling it for a vastly greater sum than he had expended on it. At first the officials connected with tea did not see the danger of this state of things, for they exaggerated enormously the future profits of tea, and in the early days of the tea mania, though the price paid for gardens was frequently many times their possible value, still a real tea garden was got for the money. So we find the Superintendent of Cachar, in his report for 1862–3, complacently relating that some gardens had been sold at an advance of 700 or 800 per cent on the gross expenditure of the owners and cultivators, while the Commissioner of Assam talks of people who certainly could not have been more than five years in tea 'gaining their well-merited reward in ample fortunes'.

It is not surprising that in this atmosphere fraudulent transactions were common. J. W. Jamieson, agent of the Northern Assam Tea Company, gave evidence on this point to the Commissioners appointed

in 1867 to inquire into the state and prospects of tea cultivation in Assam, Sylhet, and Cachar.

I believe that many of the gardens which changed hands in the height of the tea speculation were manufactured for sale, and not *bona fide* gardens for cultivation. I know of one instance in which an estate in Nowgong was sold in two divisions, – one division for £80,000. This purported to be a garden of a thousand acres under cultivation of two year old plants. At the time the sale was effected in London, there were only small patches of cultivation in existence. A telegram was sent out to have the requisite acreage cleared and planted by a certain date. The Company carried on for two seasons under the Board of Directors, of which one of the vendors was Chairman. After that the estate was wound up in Chancery.

W. Roberts of the Jorehaut Company in his evidence confirmed this general statement, while Money reports that a small garden of thirty to forty acres was often sold to a company as one hundred and fifty or two hundred acres.

It was done over and over again. The price paid, moreover, was quite out of proportion to even the supposed area. Two or three lakhs (£20,000 or £30,000) have often been paid for such gardens, when not more than two years old, and forty per cent of the existing area, vacancies. The original cultivators 'retired' and the Company carried on. 'With such drags upon them,' asks Money, 'could success be even hoped for?.'

In spite of the many bogus gardens, the production of tea in India had begun to increase rapidly, as shown by the following figures*

Year	*Output of tea* (lb)
1853	366,700
1859	1,205,689
1865	2,758,153
1866–7	6,387,988

The considerable increase in 1866 might by itself have depressed prices and caused financial embarrassment, but before then the speculative bubble had burst with dramatic suddenness. In 1865 many proprietors discovered how foolishly they had bought and were dismayed by the realization that they could never hope to make a profit. Panic spread swiftly and there was a wild rush to sell. 'Many companies,' says a contemporary observer, 'and not a few individuals, unable to carry on, had to wind up and sell their estates for whatever they would fetch. Gardens that had cost lakhs were sold for as many hundreds, and the very word "Tea" stank in the nostrils of the commercial public'.

* There is a considerable margin of error in all these early figures.

Many concerns collapsed completely and the depression was, of course, intensified by the ignorance of the general body of proprietors of tea shares, who, according to Edgar, 'showed as much folly in their hurry to get out of tea as they had a few years before in their eagerness to undertake the speculation'.

The crash came as dramatically in Sylhet as in Assam and C.B. Jennings, described by the Collector of Sylhet as a planter of some experience, wrote thus regarding it:

> Gardens have been sold at very high prices; indeed I do not know of a single instance in which a garden has been purchased from the original owner, except at a sum far above its value, as has been since proved. This has decidedly affected the depreciation of tea property to a great extent. The money crisis of 1866, and particularly the failure of the Agra Bank, also had a very prejudicial influence. The high price paid for rice, and the fact that planters were compelled to supply it to their coolies at one Rupee a maund, led to great losses. The influence of the protector on the coolies' mind has, I think, had a bad effect on the tea interest. Before the protectorate, coolies looked up to their managers, which they ceased to a very great extent to do when a special protector was appointed. The unhealthy condition of the coolies that were sent from Calcutta led to great sickness and mortality, and the loss in this way fell very heavily on tea planters.

Apart from the ill-considered speculation which was primarily responsible for the crisis, five secondary causes operated. They may be briefly enumerated as, firstly, the lack of restraint on the part of Government in granting land; secondly, the shortage of labour and the expansion of the industry regardless of this factor; thirdly, the lack of experience regarding both cultivation and manufacture; fourthly, the insistence of many proprietors on quantity at the expense of quality; and, lastly, the food shortage and the burden on proprietors of supplying rice and other foodstuffs at concession rates far below actual costs. The last two factors sound strangely modern. All of them are sufficiently important to justify analysis and fortunately plenty of contemporary evidence is available. Our study will be based on three main documents; the first is the Report of the Commissioners appointed in 1867 by the Government of Bengal to inquire into the state and prospects of the tea industry in Assam, Cachar, and Sylhet. The second document is an invaluable report presented by the Government of Bengal to the Government of India in 1873 – and in particular, the notes within that document by J.W. Edgar and Campbell, Assistant Commissioner of Burbettah. Our third source is a prize essay, written in 1870 by a planter Edward Money, who had for eleven years been a keen observer of all these events. In the interests of fidelity to these sources, we shall in our analysis have recourse to extensive quotation.

When the new Waste Land Rules were first introduced into Assam in 1854, and into Cachar and Sylhet in 1856, a good deal of care was taken in dealing with applications for grants. Soon, however, the Government began to take an unduly optimistic view of the prospects of the tea industry and became therefore extremely anxious not to put obstacles in the way of its development. When, therefore, the long rent-free term attracted persons interested in speculation in land rather than in developing tea gardens, the Government made no attempt to apply the brake, or to consider the economics of the expansion of the industry. Referring to the fact that applications for 558,078 acres of waste land in Cachar were submitted in 1862–3, J. W. Edgar thus comments:

It seems now almost incredible that it should not have been apparent to every one at the time that this amount of land could not be required for the purpose of *bona fide* tea planting, and that the demand must be the outcome of a dangerous spirit of speculation. According to the clearance conditions of the rules, the applicants for these lands would have been bound to bring into cultivation nearly 140,000 acres in ten years. To do this they would have required about 140,000 laborers, while it was well known that the total population of the district at that date scarcely exceeded that number. Again, it would have required a capital of from £5,000,000 to £7,000,000 to have brought the required acreage under cultivation, even if labour had been procurable at the rates then current; and the most sanguine believer in the profits to be made from tea planting could scarcely have expected that even the smaller sum was likely to be at the command of the applicants. It ought to have been evident that the latter, attracted by the long rent-free term, and seeing the eagerness of the general public to obtain land for tea purposes, had applied for the greater part of the lands, in the hope of being able to sell it before the end of the first five years, when it would become liable to resumption under the clearance conditions; and the Government, in spite of any temporary odium it might have incurred thereby, should have refused to sanction all such grants.

Matters were made worse by the lack of any adequate arrangements for surveying and demarcating the grants. Here again we cannot do better than quote from Edgar's note:

The evils of this reckless speculation in waste lands were greatly aggravated by the inadequacy of the provisions for demarcation and survey made in the Assam rules. It is probable that there is scarcely anywhere in the world more difficult ground to demarcate and survey than the forest jungles of Assam and Cachar. The mere work of cutting lines through the jungle preparatory to survey is far more costly and troublesome than the actual survey of any cultivated tract could be; and the jungle grows so rapidly that these lines disappear in a few months, leaving no trace of the boundaries, unless most substantial and durable marks have been put up. Yet the sole provision made by the Assam rules for this important object was, that a sum of money sufficient to provide a proper survey of the boundaries by a compass *ameen*

should be deposited. The result was that in many, possibly in most cases, the compass *ameen** sent in a fancy sketch of an almost imaginary tract of land, which was generally found, when the professional survey went over the ground some years later, to bear very slight resemblance to the real grant. Sometimes the grant had no real existence whatever; sometimes it was far away, in wilds inhabited by wild tribes, who owe merely a nominal allegiance to Government, and who would probably have taken the head of the grantee if he had attempted to take possession. Thus grants in the very heart of the Lushai country have been sold by the original applicants at the rate of 10 shillings per acre to tea companies formed in London. I need scarcely say that the purchaser never took possession of them.

The facts here related fully justified Edgar's comment that the reckless speculation and insane attempts to extend cultivation, which led to the crisis, were greatly encouraged by the Government's policy, or lack of policy, in dealing with waste lands. Some years after the crisis, planters complained of obstacles and delays over obtaining grants of land, but in reality the Government of Bengal had learned wisdom from its grievous errors in the sixties.

The next factor in the crisis was the grave shortage of labour and the increase in its cost. The Assam Company, and the early proprietors in Assam, Cachar, and Sylhet made do with local labour, though they seldom found it satisfactory and made many of the complaints which Bruce had voiced in the experimental days. As new gardens were opened out the position began to become more difficult and from about 1856 the shortage became obvious. In 1868 the Commissioners thus stated the position:

> Of the many difficulties in the way of the remunerative cultivation of Tea in Assam, Cachar and Sylhet, the scant supply and high price of local labor are among the most formidable. The older plantations were formed with local labor at a comparatively small cost. The large returns from capital invested in Tea property attracted a large amount of speculation. Many gardens were simultaneously opened out, and the supply of labor proved to be quite inadequate to meet the increased demand. The difficulty was aggravated by the peculiar circumstances of the country and of the people. The soil is of exuberant fertility, the population sparse, (especially in some of the Assam Districts,) and the land revenue extremely light. Rice, the common crop, is grown with little trouble and at small risk; and while its cultivation yields at present market prices a large return, it requires no corresponding expenditure of capital. The wants of the people are few, and easily supplied. The climate is enervating. The people are naturally indolent, and largely addicted to the use of opium. They will work only under the pressure of urgent necessity – a pressure which, for the causes given above, is seldom brought to bear on them. Lastly, (and this point is deserving of the most serious consideration,) there is no laboring class distinct from the cultivators of the soil, and dependent for existence on the wages of labor.

* Ameen = surveyor.

A few years later, Captain Phillips, the Assistant Commissioner of North Lakhimpur, further developed this theme:

The indigenous coolies are almost invariably residents of the immediate neighbourhood of the gardens. It is a very rare thing indeed for an Assamese living at a distance to leave his home for the mere inducement of getting work in a tea garden. Their taking such work at all is generally attributable to temporary necessity, as for instance inability to pay their revenue, wanting to get married and not having the necessary means, being in debt to a *Kyah* and wanting if possible to escape payment of his exorbitant interest, or, as more commonly happens, pawning their freedom, being in want of a yoke of bullocks for cultivating purposes, &c., &c. In cases such as these they go to the tea-planter as their last resource, execute an agreement of service, receive an advance of twenty or thirty rupees, and in five cases out of ten never make their appearance at the garden again until they are compelled to do so as the result of an action against them for breach of contract.

Planters naturally stigmatized the local inhabitants as lazy since they would not work on tea gardens. What is more surprising is that they had the support of some district officials in suggesting that the land revenue should be raised so that economic pressure would force cultivators to work on tea gardens. Needless to say this suggestion was not accepted.

The situation was little better in Cachar and Sylhet, and, except for Darjeeling, where labour soon came spontaneously from Nepal and neighbouring countries, it was clearly necessary to import labour from other parts of India. This subject will be studied in a later chapter. Here we need only note that attempts at recruiting labour from Bihar and Chota Nagpur had been made ever since 1841, that in 1859 a Planters Association was formed for this purpose, and that the 'coolie-catcher' had already earned a bad reputation.

Importation of labour, however, had great drawbacks. It was expensive; the very high mortality amongst the labour made it at least partly infructuous; and in its early phases, it involved suffering and even cruelties, which must have been abhorrent to many of the planters. Moreover, it was never adequate in scale and still left labour in hopelessly short supply for the vast expansion of the industry undertaken in the early sixties.

Unfortunately, the mad race to expand led planters to clear land which they could not possibly maintain with their existing labour forces. The Commissioners in 1868 thus reported:

Again, the rage for extending the area of cultivation operated most prejudicially. Mr Roberts, the Managing Director of the Jorehaut Company, has stated that he is convinced that larger returns of leaf are to be had with a given supply of labor by reducing the acreage under cultivation, and increasing the proportion of labor on the land retained, than by spreading the

same labour over a larger area. Other gentlemen have expressed the same views. Mr Roberts considers that, to secure thorough cultivation, a garden ought to have two persons employed for every acre under Tea (taking men, women, and children together). In his estimate of the labor required, he goes somewhat beyond the majority of other planters; but there can be no doubt that the proportion of labor to area originally, and even now prevailing, is below the requirements of thorough cultivation. Insufficient cultivation of the land, and neglect to fill up vacancies as they occurred, may be, in a great measure, if not entirely, attributed to undue extension of area of cultivation in the first instance.

The occurrence of vacancies, in some instances, reduces the nominal area, as compared with that of land actually occupied by plant, by from one-third to one-half; at the same time the cost of cultivation is not reduced, as the land must be kept clean, and the cost of plucking leaf is increased from the larger surface over which the same quantity is scattered. The outlay for every acre of actual plant eventually obtained in the garden is of course proportionally great. Mr Haworth, at page 22 of his pamphlet, goes so far as to say that an acre of so-called five-year-old plants will probably not have more than one-fourth to one-fifth of the whole actually of that age, the rest being of all ages down to seedlings. This is where vacancies are filled up; sometimes they are not filled up.

As we have seen earlier, the Waste Land Rules also operated in the same direction, as they compelled planters to plant specified areas whether they had the labour to do so or not. Cupidity and compulsion thus combined to lead tea garden proprietors to expand further than the supply of labour would permit – and the results were in many cases disastrous. Thus, N. J. Peal, manager of a garden in the Lakhimpur District, states:

We have 100 acres under tea cultivation; 30 acres of 5-year-old plants, and the remaining 70 of 4-year-old plants. Owing to scarcity of labor, we have been able to keep clear only the land covered by the older plants, and 20 acres of the new. The outturn of 1866 (the first year of bearing) was 76 maunds; of 1867, 108 maunds of tea. If we had had sufficient labor, we should have made 200 maunds.

Moreover, the great expansion of tea cultivation had created a seller's market for labour and wages accordingly went up rapidly. Several witnesses before the Commissioners alleged that the Public Works Department entered the labour market in competition with planters, and by offering higher rates brought the general level of wages up – but this was denied by one reliable witness. There is, however, no doubt that the cost of labour, both local and imported, rose considerably during the years of expansion. Thus the Commissioners state that:

Even if local labor were now largely available, the high price which it commands would materially affect the profits of Tea cultivation. Wages have

doubled in some of the districts since plantations were first opened out. The rise in wages may be traced primarily to the competition which followed on the simultaneous formation of so many new gardens, and the forced extension of old gardens during the years when speculation was rife, and was but the natural result of the working of the laws of supply and demand. The settlement of large numbers of imported laborers on plantations in the neighbourhood brought within the cultivator's reach a larger and more remunerative market for his produce, and encouraged him to raise larger crops of rice. Even where the garden stores supply rice at equally cheap rates, Bengali coolies prefer to market for themselves, and to buy rice in the husk in the neighbouring villages. It cannot be doubted that the cultivators in districts where Tea gardens are large and numerous are, as a rule, in far better circumstances than they were before European enterprise had brought so much money into the country. The Government demand was not raised in proportion to the rise in the value of agricultural produce. The cultivator, as his circumstances improved, became more independent. The rate of wages having once risen could not be reduced, even with a reduced demand for local labor; at any rate, not as long as the agricultural population (apart from which, as we have before stated, there are no laboring classes) were beyond the reach of want.

In view of modern developments, it is interesting to note that a third element in the crisis was the high cost of providing foodstuffs for labour at concession rates far below actual costs. The importation of labour for tea gardens seriously upset the balance of supply and demand of cereals in Assam. J. W. Edgar wrote with his customary acumen on this subject:

Perhaps even as early as 1862, the number of imported laborers far exceeded the supply of food available for them, and I attribute much of the sickness and mortality of those years to want of food sufficient in quantity and variety to enable the cooly to resist the effects of the climate. Long before I took up the subject, farsighted planters like the Messrs Davidson had foreseen that an increase in the production of food in the tea districts was necessary to the safety of any system of imported labour, and Mr James Davidson had taken up land with a view to getting it settled and cultivated with the ordinary food-crops. When, however, the speculative fever set in, this great object was lost sight of, and people thought they could import food as well as labour – or rather that the supply of food would follow the demand created by the importation of labour. Unfortunately they had left out of their calculation the slowness with which things adjust themselves in India, the deficiency of means of communication, and the imperfect machinery of distribution in sparsely inhabited jungles like those of Assam and Cachar, and years elapsed before the food-supply became really sufficient. In fact, I doubt very much whether it is really sufficient even now in parts of Assam, and I am convinced that any great and sudden increase of imported laborers would cause a fresh disturbance, that there would be another scarcity and a repetition of the suffering and mortality of past years.

Prices of foodstuffs naturally rose and the Commission in 1868 thus summarized the position:

In consequence of the very high price of provisions in 1865 and 1866, and especially in the latter year arising from the famine in Bengal, owners of gardens lost very large sums of money in supplying rice to their coolies at a fixed price. The earlier contracts provided for its supply at one Rupee per maund. Those entered into within the last eighteen months have been generally at a higher rate, where any is specified, or at current market rates. The loss in providing rice at one Rupee a maund, when for many months it actually cost five Rupees, six Rupees, and even ten Rupees a maund, was very great. But even had no contract existed, much of this unlooked for expense must have still fallen on the gardens, for the coolies were quite unable to keep themselves in food at such famine prices, and must have starved without very liberal assistance.

Modern experience will fully confirm contemporary views as to the crushing burden of supplying foodstuffs at concession rates in a rising commodity market.

A fourth factor in the crisis was the inexperience and inevitable ignorance of most of those who took charge of tea gardens while the mania was at its height. It is true that methods of tea manufacture as judged by modern standards, were still primitive – rolling was done by hand, ideas about fermenting were vague, and firing was in general still done over charcoal fires. Nevertheless, as appears from the illuminating reports of Mr William Roberts, founder of the Jorehaut Tea Company, a fair body of knowledge had been acquired on the well-established gardens. The new men, however, neither knew how to grow tea nor how to manufacture it. The position was stated succinctly by the Commissioners of 1867:

The sudden expansion of Tea cultivation necessarily threw the management of numerous gardens into the hands of inexperienced persons, many of whom were young men fresh from England, who had no knowledge whatever of the business in which they were engaged, of the habits and languages of the people who were under their control, or of the difficulties to be met and overcome. Under these circumstances, it was impossible that mistakes should not occur. Everything had to be learnt, and, as there were few or no competent teachers, each man gained his experience for himself at the expense of repeated failures.

It is interesting to study contemporary opinion on this subject and for this purpose we may quote a letter extracted by Dr Mann from *The Englishman's Overland Mail 1860*:

How many plantations exist in Assam, Cachar, Chittagong, Hazareebagh, Oude, Darjeeling, Kumaon, the Punjab, or the Neilgherries, (we think we have enumerated all the places where Tea has been or is likely to be grown,) where a large and useless expenditure has not been incurred, in the first

instance, through ignorance. At all callings, at all trades, a knowledge of the work is naturally considered a *sine qua non* to success—not so with Tea. The boy fresh from school, who knew naught of agriculture, less, if possible, of horticulture, was pitchforked into a Manager's berth, and told to plant Tea. It may be, it probably was, that his colloquial knowledge did not exceed his mother's tongue; *n'importe,* a certain area must be put under Tea without delay, there was no one available more qualified than the said lad, and go he must and did. So did the money also, as the proprietor or shareholders discovered later to their cost; but with a persistency, which speaks volumes for the firmness of Anglo-Indians, the same course, the same error was repeated again and again, nay, is being enacted in this very year of grace in more than one place which we could mention. There were excuses, (the word is not apt, a man need give no excuse to others if he wishes to impoverish himself,) well, reasons, if you will, at first for this suicidal conduct. Like all new branches of commerce, when once its practicability is ascertained, Tea-planting in India was to enrich its promoters to a fabulous extent. Those who made plantations first would reap the richest harvests; the cultivation was novel, no one knew anything about it, so it mattered little who was chosen for a Manager! People have sobered down since then; expectations are probably to-day as much below the true mark as they were formerly above it; but the idea that any one can plant Tea is just as prevalent as it was some ten years ago, and for aught we know will remain so to the end of the chapter.

A fifth contributory cause of the troubles was the natural tendency of tea proprietors in London to insist, in a time of boom, on increasing production at the expense of quality. The Commissioners of 1868 thus commented on this tendency:

> But besides want of experience, there was another cause mentioned by several of the gentlemen whom we examined, which, we believe, has had a most serious effect on the manufacture of Tea. This was the pressure put upon Garden Managers by the Agents and Managers of Companies to make up quantity without reference to quality. Much Tea which was worth little or nothing went into the market to make it appear that the produce per acre was high, and the garden flourishing.

The result was that tea prices fell in response to the decline in quality. W. Roberts in his evidence to the Commissioners stated 'it is a fact that very badly manufactured tea has been sent into the Calcutta market. The teas of 1866 were particularly bad. I think the quality of Indian teas was generally so bad that the market was materially affected thereby.' In the case of his own company, Roberts said they had the same managers and assistants as previously and he attributed the change to some peculiarity of the season. In general, however, the deterioration was not confined to one year and there can be little doubt that it was related to poor cultivation and manufacture, and to the insistence on quantity at the expense of quality.

Apart from these main elements in the crisis, there were the usual

complaints about the unsatisfactory attitude of the Government and the local authorities. Even in 1873 there were apparently too many forms to fill up and one manager, in a memorandum to the Government of Bengal, stated that 'the time has now come when Government ought not to be continually worrying the tea planters with new orders, returns, etc'. The same writer had a lot to say about the incompetence of the local police to preserve law and order and went on to complain about the want of interest shown by the Commissioner in tea matters and about the general bias of the official against the planter. These criticisms are, of course, perennial and are closely linked to the more serious complaint that, then as now, the Government was too ready to intervene between the employer and the labourer.

A well-balanced summary of the causes of the crash was given by Lionel Ingels to the Commissioners in 1868.

> Before the land sale rules were introduced there was a general unwillingness to enter into Tea cultivation for want of title to the lands. At that time nearly the whole of the cultivation was in the hands of the Assam Company and a few private planters; but although the public held back, the mania for Tea was gradually spreading, and on the introduction of the fee-simple rules, there was a general rush for land. Gardens, which in some instances were by no means what the vendors had described them, were bought up at excessive prices, and without any enquiry. Managers and assistants who had no experience or knowledge of tea matters were sent out to take charge; expenditure on the gardens was lavish; the tea turned out was in some instances badly manufactured, and the quantity of bad tea, saleable only at very low rates that would not cover the cost of manufacture, thrown on the market brought discredit on Assam Tea in general, though certain gardens have throughout maintained the character of their teas; the interest on the capital could not be paid up; confidence was shaken, and funds consequently could not be raised. At the time the cost of local labor increased, and an enormous expenditure had to be incurred on account of importation of labor. The estimates of expenditure put forward by promoters of Companies were framed without any reference to the rise in the cost of labour, which necessarily followed the sudden increase of tea cultivation.
>
> The parties who promoted Companies were in many instances owners who sold their own gardens to the Companies at unreasonable rates. It has happened that gardens have been formed by speculators merely with a view to getting up a Company to purchase them from themselves afterwards. Among other causes of depreciation of tea property, is the export duty levied by Government on Tea. In the present stage of tea manufacture, before the article is fully established in the market at its proper price, it is too early to begin taxing it with export duty. The provisions of Act XIII of 1859 are not sufficient for the protection of the planter against breach of contract by local laborers, and advances to a large extent are thereby lost. The planter requires that the order for specific performance should be actually enforced; the remedy in the Civil Court is not worth anything, as directly the contractor

suspects that he will be proceeded against, he makes away with his property, so that a decree cannot be enforced.

The causes of inferiority of manufacture were partly inexperience of the managers, partly hasty manufacture to bring the produce as speedily as possible into the market, and partly the pressure put upon the managers from England to send quantity, which caused quality to be neglected. The extent to which Government took up the local labor was a most serious cause of loss. Planters are unable to give the same prices for labour that the Government can pay, and they are heavily burthened by the enormous amount of money sunk in importing coolies. Had the Government imported labor for its own requirements, the local labor would have been available to the planter. In my own case I could have got a considerable supply of local labor if it had not been drawn away by the higher rates paid by the Government. Looking at this as a new country which requires to be opened out, I think the Government ought to have imported labor for public purposes, and left the local labor free for the development of the resources of the country.

This contemporary analysis is so complete that nothing can usefully be added to it.

CHAPTER EIGHT

AFTER THE CRISIS

Those tea companies which had been prudently established and well run, soon recovered from the crisis. In 1872 Campbell, Assistant Commissioner at Burpettah, reported a steady revival of confidence in tea planting in the past three years. He said:

A more favourable turn of affairs took place in 1869. It could not but attract attention that nearly all old gardens, notwithstanding the severe test which they had undergone during the preceding three years, were still not only in existence, but were by careful management yielding a profit to their owners. Dividends, although small, were again heard of. The quality of manufactured tea, which in the years of reckless speculation had fallen off, had greatly improved, and the prices obtained both in the Calcutta market* and at home were fully remunerative.

Edgar, writing at the same time more generally of the tea districts of Assam and Bengal took an optimistic view of the industry.

There cannot be the slightest doubt that the industry is in an infinitely better and safer position now than it was ten years ago. The existing gardens are, as a general rule, well filled with plant, highly cultivated, and carefully managed. The amount of tea produced per acre, although falling far short of the sanguine expectations of the first days of tea planting, is satisfactory in all the more important districts, while the prices obtained this season show that the average quality must be very good.

The crisis had demonstrated the need for first-class management and the companies which survived began to tighten up supervision of their estates and to look more carefully for shortcomings. Typical of the new approach were the thorough and searching inspections of the Jorehaut Company's gardens by William Roberts and, fortunately, extensive extracts of his reports were published in the company's official history. They show a remarkable attention to detail and little seems to

* The first public auctions of tea in Calcutta were held in 1861.

have escaped Roberts's quick eye. The first inspection report dated 1867 is worth lengthy quotation as an illustration of the new approach:

The area of land formerly under cultivation was 471 acres, as particularized in the statement annexed to the Director's last report; but sixty-one acres of 1865 cultivation relapsed into jungle more than two years ago, in consequence, it is stated, of the number of labourers being insufficient to keep the whole of the plantation in proper order. The soil on this portion is remarkably good, but there are vacancies amongst the plants to the extent of eighty-five per cent. The cost and labour required to bring the land into proper cultivation, and to fill up the vacancies, would be almost equivalent to the cost of forming a new plantation, and as this would be impossible with the present limited number of labourers, there was no option but to allow the land to remain in its present state. Two patches, measuring about five acres where the plants are more numerous, have been cleared out and brought again under cultivation, and the plants on the remaining portion will be used for filling up vacancies in the old plantation. On about thirty-five acres of the old cultivation, there are alternate rows of Assam and China plants, the former evidently having been planted intermediately subsequently to the latter, with the object of ultimately eradicating the China variety; this intention, however, was not carried out, and in many places the Assam variety has been greatly injured by close contact with the China, the stems presenting a bare lanky appearance and the branches covered with moss and lichen; it was accordingly determined to cut down the Assam plants to within six inches of the ground leaving the China to remain for another year, when, should the Assam kind throw out vigorous shoots, the China plants may then be eradicated; in some places, where the Assam plants are in better condition the China kind is to be removed at once; this latter plan was carried out on a small portion of this cultivation last year, and has proved very successful; the Assam plants are now looking very healthy and strong.

The condition of the cultivation over the whole plantation is very good; by continually working the land the coarse jungle-grasses have now disappeared, and in the cold season small flowering weeds make their appearance, similar to those at Darjeeling at the same time of the year; this has considerably lessened the labour of keeping the lands clean during the rainy season, so much so, that after a good deep hoeing in the winter, one light hoeing in the middle of the rains is found sufficient for all purposes. . . .

The following statement exhibits the quantity of tea produced from the several sections or divisions of the plantation during the past season of 1867, viz:–

12½	acres	Assam and hybrid plants					at 896 lb	per	acre	=	11,200 lb
30¼	,,	,,	,,	,,	,,		,, 586	,,	,,	=	17,726 lb
8¾	,,	,,	,,	,,	,,		,, 536	,,	,,	=	4,690 lb
38	,,	,,	,,	,,	,,		,, 480	,,	,,	=	18,240 lb
47	,,	,,	,,	,,	,,		,, 440	,,	,,	=	64,680 lb
16¾	,,	Assam and hybrid and China plants					,, 366	,,	,,	=	6,130 lb
20½	,,	Assam and China plants					,, 330	,,	,,	=	6,682 lb
72½	,,	principally China					,, 320	,,	,,	=	23,200 lb

60 acres	hybrid and China plants	at 126 „ „ „ =	7,560 lb
4 „	fractional parts	(figures not available)	
410 „	total at 390½ lb per acre		160,108 lb

The above return shows in a clear manner the value or productiveness of each portion of the plantation. The distances between the plants vary from 6 ft × 6 ft to 6 ft × 4 ft and 6 ft × 3 ft. Of the total quantity of tea manufactured, about 7½%, or 12,000 lb, were of a coarse and inferior description; although the green leaf was gathered last season much earlier than usual. In order to reduce the proportion of coarse tea and to improve the quality of the whole crop, it has been decided to pluck the leaves during the current season before they have become fully developed, and consequently it is probable that the crop will not be as large as the previous one. It is estimated accordingly that the yield will amount to 1,850 maunds, or 148,000 lb of really fine tea. . . .

The payment of wages to the labourers for Sundays, on which days they are allowed leave of absence under the *Cooley Act*, will absorb a large sum of money. It is evident, however, that the health of the coolies has been improved by this indulgence, and that it has made them more contented and happy. The rate of mortality has also been considerably reduced; and in this way a satisfactory equivalent is apparently realized in return for the outlay of money. The numbers of Bengalee coolies at present on the muster-roll are 317 men, 164 women, 106 children; total 587.

It is interesting to read Edgar's opinion on the position and prospects of the various districts in 1873. To that keen observer, the prospects of tea seemed more hopeful in Cachar than in any of the other districts – in spite of the fact that seventy per cent of the tea there was of the China variety and that the soil was poor. Edgar's main ground for his belief was that the planters of Cachar 'seemed to have made more progress than those of any other district substituting scientific methods in cultivation and manufacture for the crude experiments which caused much loss in earlier times'. He also appears to have considered that the climate of Cachar was more suitable to tea than that of the Assam Valley or the Terai; and he pointed out that a large permanent resident labour force was being formed; and that food production was growing rapidly.

In Darjeeling, the use of machinery had proceeded further and more successfully than elsewhere, but, on the other hand, Edgar considered that a 'dangerous tendency towards speculative extensions of cultivation' was likely to do much mischief.

As regards the Assam Valley, Darrang 'seems in some respects to take the lead amongst tea districts. Its tea would seem to be of the finest quality consistent with a large outturn'. On the other hand, Darrang seemed unsuited to the importation of labourers amongst whom the mortality had been appallingly high – as high as forty-two per cent in one year.

In Lakhimpur, most of the planters completely failed to give the information called for by Edgar, and this necessarily vitiated his report. He considered, however, that although there were certain enlightened and able planters in the district, it was in most respects the most backward of the great tea districts. 'It is probably', says Edgar, 'the only district in which much interference between planters and their labourers is excusable.'

Sibsagar, Edgar believed, had an immense advantage over Cachar and Darjeeling in the superiority of its plants, chiefly hybrid, but it was inferior to Darrang in climate and soil and the district was short of food.

The Report of the Commissioner of Assam, included in the 1873 Papers, contains a mass of interesting material. Manures, either natural or artificial, were little used and there was much controversy about their desirability. Experiments were, however, being conducted and W. J. Lance, the Officiating Deputy Commissioner of Kamroop, writes interestingly on this subject:

> Some of the planters have tried manure under circumstances which seemed indicated to them on the supposition that rain and the moisture in the ground were the means by which the fertilizing properties of the manure were conveyed to the plants; but the theory is a most questionable one, if not actually decisively proved to be erroneous, as experiments would seem to show that the earth almost immediately absorbs the principal ingredients required for the nutrition of plants, from the water holding the manure in solution, and then of itself supplies directly the necessary constituents for the growth of the plant. Certain (but of course not all) cases, therefore, where manure has been thought to fail simply from excess of rain, &c., may have been fairly attributable to fault in the manure. As manure beyond that obtained from the decayed weeds hoed from the ground, and which are always lying ready to hand, is not generally to be got near the garden, and the cost and difficulties of transport are to be taken into consideration, ammoniacal manures, such as have already been alluded to, can hardly be used except by gardens within a moderate distance of the Brahmapootra; and even then the ammonia being one of the main constituents, they are liable to serious deterioration on the road in such a climate as this. What is wanted is an appropriate manure, easily got and of inexpensive character. This has not yet been obtained, but once found the produce of the tea plant will be increased probably by twenty per cent.
>
> Thyme contains a large proportion of nitrogen, and therefore such manures as are rich in that substance would be indicated at the same time; and if the analysis for certain tea soils in China is to be taken as an criterion, silex is found to be a general constituent of the best tea lands to an extent of nearly eighty per cent., a point to be borne in mind when treating the land with manure.

It is clear from the district reports that hybrid was gradually replac-

ing the China plant but that little was being done to improve the plant. Lance comments interestingly on this subject.

Actual improvement in the plant itself must be a work of time, and is likely only to be undertaken in gardens where commercial profits are not the only end sought to be attained. In such cases some selected acres might perhaps be taken up, the plants experimented on, and the seed of such plants used to produce improved varieties of plant. At present it is not universally settled what the actual properties are which are required in a tea-plant. Then, again, matters are unfortunately influenced by the arbitrary decision of home brokers, &c., who deal with tea from a merely commercial point of view, and decide on the goodness or otherwise of tea with reference to the particular use that can be made of it, for the necessities of the market as it at present exists, making no account of the inherent goodness of any particular sort of plant as such plant. They principally desire the strength of the Assam tea to give body to the weaker description of China produce, as far as I have ever had means to judge. They offer no particular inducement for any actual higher culture of the plant itself, such as has produced the present high-flavoured English fruits from the original wild and inferior stocks. As an instance of the result of this conventionality in the brokers' decisions on teas, it may be pointed out that one objection of rolling tea by machinery is that it expresses much of the tea sap, which in turn discolors the Pekoe tips; and as the light grey tinge given by the buds is then wanting, the tea is set down as of inferior value, though not a bud less is found in the article.

Assam tea, I believe, to labor under this disadvantage, that it is not brought sufficiently forward on the strength of its own qualities to compete for fuller favour with China teas, and that therefore the planters have no sufficiently decided standard of the qualities to be sought for and admitted to be desirable according to the taste of those who drink it.

Machinery for rolling was still used only by a few pioneers. Here again Lance writes interestingly.

Only one garden in this district has used machinery, and with but moderate success; for whilst it undoubtedly saves manual labor to a great extent, the result as regards the tea so dealt with is found to be unsatisfactory. It is imperfectly rolled, much broken, and deprived of a considerable quantity of its sap; whilst the latter, discoloring the Pekoe tips, deprives it in the estimation of the broker of a great deal of its commercial value, though actually the quality of the tea is in no way prejudiced. It is not likely that machinery will ever supersede the hand in the sifting, or even rolling, of tea. It would be extremely difficult, for instance, to separate the Pekoe bud from the leaf when required; and the delicate manipulation attainable in the rolling process by the human hand, which adapts itself to the varying circumstances of the bundle of leaves submitted to it in ever-changing form, could hardly be adequately supplemented by any machine, which from its very nature must act in a regular series of appointed motions. Again, machinery when worked by steam is comparatively expensive, and such must be confined to gardens of considerable size and yielding good returns. Many gardens, however,

possess motive power of other descriptions which might be economically made use of if thoroughly efficient machines were to be had.

Even one of the pioneers in the use of machinery, Severin of Gronland in Mangaldai, preferred hand-rolling when sufficient labour was available, though he regarded his fanning and sorting machine, which he had used for about three years, as very valuable. In Jorehaut, on the other hand, the Assistant Commissioner reported that 'almost every large garden now has a leaf-rolling machine worked by steam'.

Then as now, planters urged that the Government should cease 'worrying the tea planter with new orders, returns, &c.', and some of them complained of the alleged bias always shown by the official against the planter. Thus, F. Stevenson, who seems to have had a hearty dislike for all government officials from the Commissioner downwards, states that:

> I have always noticed that the tea planter is looked upon by the official as quite below him, and when he has a chance, will snub him in the most open manner. Again, the tea planter looks upon the official with the contempt he generally deserves (of course there are exceptions to every rule); but I think Government is to blame by the example it has shown.

Stevenson was obviously a querulous individual but there is other evidence of frequent antagonism between officials and planters. No doubt officials frequently adopted the superior attitude, which in later years led the writer's Service to be dubbed 'the heaven born' – and no doubt, too, the planter regarded himself as king in his own plantation and resented interference, however justifiable it might be. These, however, were but teething troubles which did not interfere with the rapid growth of the industry.

By 1873 about seventy-five thousand acres were under tea cultivation in Assam and Bengal, and the total yield amounted to about 15,000,000 lb. The average yield of mature tea was calculated at 237 lb per acre. In the Kangra Valley, Dehra Dun, and Kumaon, production amounted to 429,000 lb, 412,000 lb, and 286,000 lb respectively. In Chota Nagpur at this time, 870 acres of land were under tea cultivation, but as had been previously anticipated, yields were very poor.

THE DOOARS

In Assam and Bengal the industry had clearly recovered from the crisis and was in a healthy state and it was natural that its success there should stimulate development elsewhere.

In 1865 a strip of land known as the Dooars, situated at the foot of the Himalayas, and to the east of the River Tista, was annexed from Bhutan. The name *dooar* means door or pass and there were eighteen of such passes. The Eastern Dooars, to the east of the River Sankos, were

included in Assam and we are not concerned with them here. The Western Dooars between the Rivers Sankos and Tista were included in the Jalpaiguri District of Bengal. It is necessary to remember that the name Eastern Dooars is no longer used in the old sense and that the Western Dooars are merely called the Dooars. This sometimes gives rise to historical confusion, since planters are apt to refer to the eastern portion of Jalpaiguri incorrectly as the Eastern Dooars, when it is really the eastern portion of the Western Dooars.

The Dooars must have been unattractive to all except the boldest pioneers. The district is traversed from north to south by innumerable rivers and streams which in the rainy season become raging torrents and perpetually change their courses. In the middle of the last century it was covered with almost impenetrable jungle containing much valuable but unexploited timber, giving shelter to all manner of wild beasts and inhabited only by primitive tribes such as Garos, Mechis, Totos, many of whom lived in trees or crude huts and lived by hunting and fishing. As a modern India planter puts it: 'This was a land only for the saints or the satans.'

The British in India at that time were not unduly worried about either saints or satans. Although the Dooars was a most unhealthy district, in which malaria and blackwater fever were rife, climatically it had much to recommend it as a tea-growing area and according to the *District Gazetteer* in 1874 Dr Brougham, who had started Dhutaria garden in Darjeeling fifteen years earlier, opened a garden at Gazeldubi, employing as his manager, one Richard Houghton, who is described in the *Gazetteer* as the pioneer of tea in the Jalpaiguri District.

Almost immediately afterwards, gardens were established at Fulbari and Bagrakot, and by 1876 thirteen gardens had been started, though the China type of bush was planted and it was not until sometime later that the greater merits of an Assam-China hybrid or Assam and Manipur indigenous varieties were realized.

In the first few years, Nepali labour was employed, but the supply was soon found to be insufficient and recourse was had to recruitment on the free system from Chota Nagpur and the Santhal Parganas.

In 1879 the first Indian-managed tea company in Bengal was formed by a few enterprising Bengali lawyers and clerks. The company was known as the Jalpaiguri Tea Company, and its one garden was Mugalkata. It seems right to record the names of these Indian pioneers, and according to B .C. Ghose, a very prominent director of an Indian tea company, its first directors were Joy Chandra Sanyal, Gopal Chan dra Ghose, Mahim Chandra Ghose, Jadav Chandra Chakraborty, and Harish Chandra Adhikary.

The company soon ran into difficulties and it is said that in order to keep the estate going some of the directors pawned their wives'

ornaments. It is interesting to note that according to Ghose, the first Superintendent of this company, Lukas, was paid the princely salary of Rs 150 per annum, while the first manager was in the grade Rs 50 to Rs 75.

Two other Indian companies – the North Bengal Tea Company and the Gurjungjhora Tea Company – were started within the next three years, and a number of British companies also began operations at this time.

Land was offered by the Government for tea cultivation on favourable terms and the growth of the industry in the eighties was so rapid, that the acreage under tea in 1892 was over six times that in 1881. Duncan Brothers were very prominent in these developments and such details as are available shew the diverse origins of some of their gardens. Ellenbarrie and Monabarrie, for example, were opened out by a Darjeeling planter, a Calcutta bank manager, and a former assistant of Duncans, who had returned to Calcutta as manager of the Land Mortgage Bank. Next in the field was James Johnston, manager of Moondakotee garden in Darjeeling who obtained four grants in the Dooars. 'At that time,' says the historian of the Duncan Group, 'the whole of the district was covered with dense forest, the timber was magnificent and the soil splendid.' But there were no roads, and Johnston handed over part of the Jiti grant to Duncans who undertook to build a road to the garden. The new garden was named Hope after the daughter of Duncans' senior Calcutta partner and the manager of Ellenbarrie was transferred to it. The story of his transfer is amusing.

> When the change was first mooted to Mr Fischer he was not at all anxious to leave Ellenbarrie. It happened, however, that on one of the weekly leave days, when his coolies were all away at the bazaar to lay in their supplies for the week, a spark from a jungle fire came blowing across and set the Ellenbarrie bungalow alight. Had the coolies been there, they could no doubt have beaten out the fire with branches; but there was no one available and Mr Fischer had to look on while his bungalow was being burnt down. The incident rather upset him, and he was then willing to make the proposed change.

Johnston went into partnership with Duncan in respect of his other grants. According to the work just quoted –

> His views on economy were of the strictest, and his manager had an allowance of only Rs 200 monthly. The manager fell ill, and had to be removed to the Darjeeling hospital. He was suffering from pernicious anaemia, from which he did not recover. There was only one thing to do in the circumstances, and that was for Mr Fischer to take charge, in addition to his own work on Hope. This proposal was made to Mr Johnston, who agreed with it, the suggestion that Mr Fischer's remuneration should be at the rate of only Rs 100 monthly falling in with his ideas of economy. But when Mr Fischer was instructed to go on extending as rapidly as possible Mr Johnston got

alarmed, and in 1884 he offered to sell out. The offer which he then made was refused by Glasgow, but he repeated it in the following year, naming cost price plus ten per cent. He was then asked to put down the actual figures showing his expenditure, which turned out to be about Rs 30,000. This offer was at once accepted. A little later in the same year he offered 1,200 acres which he held adjoining the estate. The price was Rs 6,000, to which the Calcutta office agreed and the bargain was closed. This property was then started under the name of Upper Jiti Tea Estate. Later on, however, it was amalgamated with Hope, and the total area held by that company was accordingly raised to something like 4,400 acres.

Somewhat earlier than this Duncans had acquired the agency of the Amo Tea Company,* of which the following amusing story is told.

The manager at that time had a curious disinclination to reply to letters, even when these covered his monthly remittance. This went on for so long that one day Mr Aitchison, the senior proprietor, sent his Jemadar with instructions and full power to take charge of the garden, if necessary. This was somewhat of a blow to the manager, who, in point of fact, had not been idling, but had laid out about 150 acres which were then in good condition. He was left in charge, of course, but a few years later, when a change became necessary, the proprietors arranged with Mr Peter Rothenbusch, who was at that time a manager in the service of the Land Mortgage Bank, to take over the management and a quarter-share of the garden free of any payment for the latter.

By 1890 Duncan Brothers had in its agency twelve gardens, with a planted area of 5,795 acres, but progress was still more rapid in the next decade and at the end of the century the number of estates in the agency had risen to twenty-five, covering 18,690 acres of tea.

This development was confined to the area between the Tista and the Daina, and on this point C. J. O'Donnell, ICS, wrote the following comment quoted in the *District Gazetteer*.

This important industry has increased so much of recent years as to change almost completely the physical characteristics of the submontane country over a great area thirty miles long extending from the debouchment of the Tista from the Darjeeling hills to a similar point on the Daina river on the frontier of Bhutan. The greater part of the primeval forest has disappeared and mile after mile has been replaced by great expanses of tea-gardens. East of the Daina a similar tract stretches for about the same distance as far as the Rajabhatkhoa forest reserve due north of Alipur. It is remarkable for its waterless character which prevents its occupation for tea or any other form of cultivation. A few springs are, however, found in limestone formations which occasionally crop out on its northern boundary. They are, however, almost immediately absorbed by the surrounding porous soil, and do not again appear on the surface for seven to eleven miles south of their sources.

Some gardens established in the area east of the Daina had been a

* This is in Sylhet and is only relevant here as shewing the Company's enterprising outlook.

failure because of the lack of water, but water was brought down from the Bhutan Hills in pipes and the area soon began to be developed as an important tea district, and since agreements with the Government of Bhutan granting water rights to tea companies are still renewed from time to time, it can be presumed that they date back to the early days. In spite of the low water table, it was also found possible to sink wells satisfactorily. The industry thus spread throughout the Dooars and at the end of the century seventy-six thousand acres were under tea and outturn had reached nearly 32,000,000 lb.

It is interesting to notice the continued Indian activity in the development of tea in the Dooars at this period. By 1900 eight Indian tea companies held grants totalling more than fifteen thousand acres. It has been suggested that British companies were given the best land and Indians left to take inferior land, but there is no evidence to justify this statement and the subsequent history of some of the Indian companies concerned does not support it.

CHAPTER NINE

STEADY GROWTH IN THE NORTH: 1875–99

In retrospect, the last three decades of the nineteenth century have the appearance of a period of almost continuous expansion, during which Indian tea gradually ousted China from the United Kingdom tea market. The men of the time, however, must have been far more conscious of alternating prosperity and depression, and of profits which on the average fell far below the expectations of the first generation of tea planters. Some of the factors which accounted for the fluctuating fortunes of the industry operate equally powerfully today. Then, as now, good prices in one year frequently led to coarse plucking in the following year, with a consequent fall in prices which then provided the discipline necessary to ensure a return to better standards. These alternations are worth studying in some detail.

In 1875 exports had reached a figure of over 24,000,000 lb or nearly double the volume in 1869. No inroad had yet been made on the sale of China tea to the United Kingdom, and the British import of almost all the Indian crop represented a straight addition to tea consumption in Britain. There were signs that new markets for Indian tea were opening up, but the trade with Australia was not progressing as well as had been hoped, since merchants in that country still found it cheaper and more convenient to buy China tea. A powerful stimulus to the development was provided by the fact that tea 'was a favourite medium of remittances to England'. In 1876 the official view was that 'the industry was now in a good and safe position and there are signs that the labour question has become more easy of solution'.

Unfortunately the importance of quality was often overlooked. According to the *Statement Exhibiting the Moral and Material Progress and Condition of India* for 1875–6*:

> The increase in quantity was obtained by a sacrifice of quality; the mechanical appliances and the available amount of labour were not sufficient

* A statement prepared yearly by the Government of India for presentation to Parliament.

properly to work up the leaf and the strain upon the plant caused by continuous overplucking is believed to have produced a temporary deterioration in the character of the leaf.

In the following year favourable mention was made of attempts to improve quality in Darjeeling, but in 1877, the *Statement Exhibiting the Moral and Material Progress and Condition of India* reported that quality had again been sacrificed to quantity. Exports rose to thirty-three million lb, and the coarse tea with which the London markets were flooded, together with the coincidence of a large China crop, resulted in low prices.

In 1878 planters genuinely set themselves to produce better tea and the yield in Assam was brought down to 260 lb per acre as against 286 the previous year. Calcutta prices rose to 13½ annas a lb and results were good.

There was, however, still too much tea on the market, and the official report for 1878–9 provides a gloomy Assam picture. 'Cultivation continued to extend and new lands were still being taken up,' we are told, 'but at the same time there was a sensible check in both cases, and the tea industry was not progressing in the province with the great strides which it had made in previous years. Many gardens were worked at a loss owing to the over production of previous years that necessitated selling at such low prices as left no margin for profit.' The report goes on to refer to the continuance of the high cost of management and of imported labour and states that 'no improvement was considered to be likely save from some unforeseen restriction on the China trade or from the opening of new markets; and it was feared many of the less stable gardens would have to close'. The authors of the statement expressed belief in the ultimate soundness of the industry, but nevertheless felt that there were some evil days in prospect.

The extent of tea cultivation at this stage, that is in 1880, is shown in the following table:

	No. of gardens	Acreage under tea (acres)	Yield (lb)	Average yield per acre of mature tea (lb)
ASSAM	1,058	153,657	34,013,583	283
BENGAL	274	38,805	6,572,481	239
NWP[1]		4,110	838,742	292
PUNJAB[1]		7,466	927,827	177
BRITISH BURMA[2]		179	16,120	105
MADRAS[2]		4,275	649,460	
TOTAL		208,492	43,018,213	

[1] Figures incomplete.

[2] Not covered by the present chapter, but included for the sake of completeness.

Too much precision must not be attached to these figures. Many gardens failed to submit returns and rough estimates had to be made, and when, a few years later, the Indian Tea Association began to maintain its own statistics, the official figures were almost invariably found to be too high. The broad facts are, however, clear. Production in Assam had reached about 34,000,000 lb; the tea acreage in Darjeeling was increasing rapidly; and in the Dooars 'tea cultivation was still in its infancy but was rapidly developing'. Tea of excellent quality was being produced in the Chittagong hill tracts and a little tea was also grown in Dacca, Lohardugga, and Hazaribagh. The Punjab and the North-west Frontier Provinces each produced nearly a million lb of tea annually. Machinery was gradually being introduced in the factories, and in the *Statement of Moral and Material Progress* for 1880–1 it was reported that tea-drying machinery effected a considerable improvement on the results obtained by the old process of drying over charcoal fires. Elsewhere in the report it was stated that mechanical means of sieving and sorting the leaves were used with success.

The gloomy official prognostications of 1879 were not fulfilled. Cultivation did not diminish as had been feared and by 1881 deficiencies in the China trade induced a rise in tea prices and the general opinion then was that 'the tea market had recovered from the depression of the last two years'. The newly formed Indian Tea Association, in a report two years later, stated that whereas in 1880 dividends were the exception, in 1881 they were the rule. This was somewhat of an exaggeration, for of forty-one Assam companies for which accounts are available, twenty four made profits in 1881, fourteen suffered losses and three broke even. The average net profit in what was regarded as a fairly encouraging year was only two per cent. Darjeeling teas were now reported to stand high in the home market as a result of 'the great care bestowed in plucking and manufacture in order to enable them to compete with the China products'.

The position of tea in the North-west Provinces at this time was rather less satisfactory. The long communications lead to the ports made it impossible for that region to compete with Assam and it therefore developed Central Asia as its main market. The abolition by Russia of the duty on transit of tea between Samarkand and Bokhara, and the simultaneous abolition by India of the import duty on China tea passing through Bombay to Central Asia, undermined the position of the planters in the North-west Provinces, who, according to official reports, soon found themselves in the hands of a ring of dealers. It may be noted that at this time, except in the Kangra Valley, tea-planting throughout India was almost entirely in the hands of Europeans.

In 1882 Indian tea production rose to about 60,000,000 lb as against

48,000,000 lb in 1881.* Prices and profits fell and of forty-one companies for which accounts are available, the average net profit for the year was as low as one and a half per cent, while seventeen showed losses. Cachar tea prices fell by from 2d to 4d a lb and according to the Deputy Commissioner of that district, some judges considered 1882 one of the most disastrous years ever known. The Deputy Commissioner observed that:

> The fall was greatest upon good and medium sorts, while the lower qualities were better maintained . . . For fine and finest teas, prices have ruled exceedingly high owing to their scarcity because most of the gardens, encouraged by the full values obtained in the former year, confined their attention mainly to the production of good medium teas which were thus in excess of the requirements of the trade.

Costs of production in Cachar were apparently as high as 1s per lb and Draconian measures of economy now had to be taken. 'Indeed the cry now is more for economy in manufacture than excellence in quality'.

The following table showing exports and average values from 1873–4 to 1882–3 is of interest.

Year	Exports from India (lb)	Value of Exports from India (£)	Average value per lb s d
1873–4	19,324,235	1,742,926	1 9·00
1874–5	21,137,087	1,937,429	1 10·00
1875–6	24,361,599	2,166,417	1 9·34
1876–7	27,384,124	2,607,425	1 10·52
1877–8	33,459,075	3,044,571	1 9·84
1878–9	34,432,573	3,138,423	1 9·87
1879–80	38,173,521	3,051,020	1 7·18
1880–1	46,413,510	3,054,240	1 3·79
1881–2	48,691,725	3,609,136	1 5·77
1882–3	57,766,225	3,699,496	1 3·36

The position regarding exports to Australia and the USA seemed hopeful in 1882, for Australia imported 2,750,000 lb and the USA 700,000 lb. This, however, was a very temporary improvement and by 1883 the exports to those two countries together had fallen to 800,000 lb. The author of the *Moral and Material Progress Statement* reported somewhat obscurely in that year that 'the trade with Australia, which promised well, had collapsed temporarily, chiefly owing to the reckless way in which it was pushed'.

The years 1883 and 1884 were characterized by low prices and many losses, but the acreage under tea continued to expand, and steps had to

* Both figures are probably too high.

be taken to increase the supply of tea seed. It was no longer considered sound to plant China tea and a number of gardens were planted with the view to producing indigenous seed.

In 1884 according to the Indian Tea Association Report, the average Calcutta price was 8 annas 9 pies per lb on which basis a reasonable profit was only possible where garden production costs were less than 6 annas per lb. Few gardens could keep costs as low as this, and much attention therefore began to be given to the possibility of reducing expenditure on labour 'by a more economic use of the labour available and by getting better work from the coolies, so that fewer hands will be required'. The abolition of the payment of bonuses to coolies who accepted fresh engagements was also considered, but presented difficulties with which modern planters will be familiar.

In some districts, the tendency to pluck coarse leaf appeared again, though the Superintendent of the Assam Company denied that the serious drop in prices was to any great extent due to fall in quality. In a review of the trade in 1884 a firm of London brokers nevertheless expressed themselves forcibly on this subject.

> The trade generally are commenting freely and with regret at the gradual but marked deterioration year by year in the quality of Indian Teas, and it is commonly asserted that Indians from 1/- downwards cannot now compare as they did in value with Chinas of the same price. This assertion we consider to be only too true, and a most unpleasant fact for the contemplation of those interested, and we believe it points to the fact that we have not yet witnessed the lowest prices in such descriptions of teas.

The chairman of the Indian Tea Association was not altogether prepared to accept this judgement, but his general remarks on the subject of quality and price in his speech at the annual meeting in 1885, and his reference to what in modern times is described as the 'closing of the concertina' of prices, are worth reproduction.

> The assertion here made, that Indian Teas show a marked deterioration in quality, is not generally supported by the opinions of those here who are in the best position to judge, and I do not find any such sweeping condemnation expressed by any other London firms. I think it will be admitted that, as a rule, the care and attention given to manufacture has not diminished and the appliances for the work have improved. It is true that some individual marks have from time to time shown a falling off in quality, and it is thought that in some cases teas have been injured by the use of drying machines, either from defects in the machines themselves or from ignorance or carelessness in the working of them. The defects observable in the produce of gardens which have made no alteration in their system of manufacture, except in the introduction of drying machines, would certainly point to the latter as the cause of the falling off in quality, but experiments which can easily be carried out should show conclusively whether this supposition is correct or not. These

dryers all require more or less care and special knowledge in working, and I trust it may prove that any injury shown to have been caused by them has arisen from ignorance as to the proper way of using them, and not from defects in the machines. It would cause serious inconvenience to many gardens on which the supply of timber is limited if they had to revert to the use of charcoal for drying purposes. One noticeable feature in connexion with the prices of Indian Teas is the small difference which now exists in the relative values of the higher and lower grades. We find good Pekoes now selling at very little over the prices obtained for Souchongs. This would indicate that the trade at Home are not prepared to pay up for fine teas, and as planters are obliged to study the requirements of the market, the result must be, unless a change takes place, that coarse plucking will be resorted to, and the crop will show a larger proportion of the lower grades. This result would be a matter of great regret to all who are anxious to see fully maintained the superiority which Indian Teas have attained. If buyers want fine quality, however, they must pay for it, and I trust when the great depression in trade generally which at present prevails has passed away, that we shall again obtain for our Pekoes and other fine teas the relatively higher prices which they have heretofore realized.

The fears of overproduction expressed by leading producers in 1884 were not realized in the following year. In spite of the fact that Ceylon was now beginning to send tea to London, stocks of tea in London at the end of 1885 were lower than in the previous year. Prices rose, and the rupee companies included in Messrs Barry & Company's Report of 1885 paid an average dividend of a little over five per cent. The usual result followed. In 1886 coarse plucking was reported by the Deputy Commissioners of Sylhet and Cachar; yield in North India rose to 79,000,000 lb as against nearly 69,000,000 lb in 1885 and prices fell. One observer took the view, however, that the cheap prices had increased consumption in the United Kingdom so that no old stocks would remain to compete with the 1887 stocks. He admitted, however, that in the process the industry had lost 2d a lb all round.

Indian tea was now beginning to replace China tea in Britain and the *Moral and Material Progress Statement* for 1886–7 states that China tea 'is not so carefully cultivated or picked . . . is not so skilfully rolled or dried, and is not so well packed as Indian tea'. If this statement can be believed, a great change had taken place since the broker's report for 1884 to which reference has been made. It was also pointed out in the official report that China tea suffered an export duty of thirty five per cent from which Indian tea was free. In 1888, imports of Indian tea into Britain for the first time exceeded those of China tea – a position which was never thereafter lost. The figures of consumption in the United Kingdom for the period from 1886 to 1889 are of great interest.*

* There are arithmetical mistakes in this table, but it is accurately reproduced from the Indian Tea Association Report for the year ending 28 February 1900.

Year	UK imports of Indian tea (lb)	UK imports of China tea etc. (lb)	UK imports of Ceylon tea (lb)	Total (lb)
1866	4,584,000	97,681,000		102,265,000
1867	6,360,000	104,628,000		110,988,000
1868	7,746,000	99,339,000		106,815,000
1869	10,716,000	101,080,000		111,796,000
1870	13,500,000	104,051,000		117,551,000
1871	13,956,000	109,445,000		123,401,000
1872	16,656,000	111,005,000		127,661,000
1873	20,216,000	111,665,000		131,881,000
1874	18,528,000	118,751,000		137,279,000
1875	23,220,000	122,107,000		145,327,000
1876	25,740,000	123,364,000		149,104,000
1877	27,852,000	132,263,000		151,115,000
1878	36,744,000	120,252,000		157,396,000
1879	34,092,000	126,340,000		160,432,000
1880	43,836,000	114,485,000		158,321,000
1881	48,336,000	111,715,000		160,051,000
1882	50,496,000	114,462,000		164,958,000
1883	58,000,000	111,780,000	1,000,000	170,780,000
1884	62,217,000	110,843,000	2,000,000	175,060,000
1885	65,678,000	113,514,000	3,217,000	182,409,000
1886	68,420,000	104,226,000	6,245,000	178,891,000
1887	83,112,000	90,508,000	9,941,000	183,561,000
1888	86,210,000	80,653,000	18,553,000	185,416,000
1889	96,000,000	61,100,000	28,500,000	194,008,492

One feature of the early eighties was the gradual reduction in production costs. A Cachar planter, quoted in the Annual Report on Tea Culture in Assam for 1887, thus analyses the position:

> Tea can be turned out now for less than what was possible a few years ago. The use of machinery of an improved character is now largely extended with the invariable result that everything is done cheaper, while freight and cost of transport is much less. Then, coolies are growing . . . more skilled in their work . . . while all extensions are put out with the best class of plant available upon good soil.

The process of cost reduction seemed, however, to have achieved its full effect by 1885, for the following figures taken from the table of Messrs Barry & Company do not show any steady downward trend in costs from 1886 onwards.

District		Cost per lb including sale charges
		Annas
ASSAM	1885	8 7·15
	1886	8 1·34
	1887	7 11·25
	1888	7 9·00
	1889	7 10·68
	1890	7 6·24
	1891	7 4·81
	1892	8 9·36
	1893	8 2·28
	1894	9 0·86
	1895	8 5·20
CACHAR and SYLHET	1885	7 7·98
	1886	6 10·21
	1887	6 7·29
	1888	7 7·81
	1889	7 0·91
	1890	6 7·52
	1891	5 9·73
	1892	6 5·68
	1893	5 11·90
	1894	6 9·40
	1895	6 8·54
DARJEELING	1889	8 4·83
	1890	8 3·87
	1891	7 8·61
	1892	8 4·98
	1893	7 5·05
	1894	8 5·57
	1895	7 11·19
DOOARS	1889	6 2·69
	1890	6 7·99
	1891	5 7·99
	1892	6 3·00
	1893	6 2·34
	1894	6 2·66
	1895	5 8·27

		Annas
TOTAL	1885	8 0·45
	1886	7 2·25
	1887	7 6·25
	1888	7 6·72
	1889	7 6·30
	1890	7 3·06
	1891	6 7·05
	1892	7 6·50
	1893	7 0·61
	1894	7 6·05
	1895	7 0·42

The years 1887 and 1888 witnessed little change in the general tea position, except for an increase of production in North India to more than 96,000,000 lb.

The Annual Report on Tea Culture in Assam for 1888 brings out the interesting fact that the Marwaris* had now entered the tea business, not indeed as producers but as purchasers of tea from small village growers for sale to local tribal people.

In 1889 the Indian production figures topped the hundred million pound mark, the biggest increase being in Sylhet where the *bhil*† lands were proving very productive, though quality there was often sacrified to quantity. In Lakhimpur on the other hand, the increase in yield was less than might otherwise have been the case as the planters there manufactured finer tea than usual.

Indian tea was now fetching better prices than China tea in the United Kingdom, and the sales to Australia and the United States of America were over 3,000,000 lb annually. According to the official reports yields had risen to an average of 414 lb per acre in the Assam Valley, and 362 in the Surma Valley. The corresponding Indian Tea Association figures, always more conservative and probably more reliable than those given in the Annual Report on Tea Culture, were 382 and 343 respectively.

The last decade of the century thus opened with reasonable prospects. In 1891 the total production of tea in North India, according to the figures of the Indian Tea Association, reached over 119,000,000 lb made up as follows:

	(million lb)
Assam Valley	49½
Cachar and Sylhet	37
Darjeeling and the Dooars	22½
Chittagong and Chota Nagpur	1½
Dehra Dun, the Kumaon, and Kangra	4½
Private and native gardens	4

* Marwaris – an enterprising business community from Western India.
† i.e. Marshy areas or swamps.

South India at this time was producing about 4,000,000 lb, making a total for India of about 123,000,000 lb. Exports were steadily rising. United Kingdom imports of tea amounted to 111,000,000 lb, while 9,000,000 lb were exported from India to Australia, Canada, the United States of America, Persia, and other countries. Canada had, indeed, now become a larger importer of Indian tea than the United States of America. A little Indian tea was exported to the Straits Settlements, but the trade there was not coming up to producers' initial expectations. The dividends of Barry's listed Indian Companies averaged over four per cent.

In 1892 adverse climatic conditions resulted in reduced exports, but the consequent improvement in prices more than compensated for the diminution in volume and the dividends of Barry's listed Indian Companies averaged six and a half per cent. The Deputy Commissioner in Cachar thus comments: 'This rise in prices was due to the fact that it was early realized at home that both Assam and Cachar would give a short crop and that Ceylon suddenly ceased to increase its outturn of tea in leaps and bounds – and to the fall in the price of the rupee.' The Deputy Commissioner's statement regarding Ceylon was incorrect, for imports from Ceylon into the United Kingdom rose continuously throughout this period, and had reached 63,000,000 lb by 1892. The Deputy Commissioner was, however, right in referring to the shortfall of production in Assam and Cachar.

After an average year in 1893, Indian tea did well in 1894. Average prices rose from 8 annas to 10 annas per lb for Assam Valley teas, and from 6 annas 5 pies to 8 annas 8 pies, for Surma Valley teas. Dividends were higher than at any time since before the slump of the sixties. In the two following years prices fell to what was then regarded as normal, but the seasons were good and the profits satisfactory. Exports to North America had now reached nine and a half million pounds, and it is interesting to note that the re-export trade from the United Kingdom was growing rapidly. The Indian Tea Association at this time was much alive to the need for capturing foreign markets, and in his speech at the annual meeting in 1897 the chairman referred to the need to produce tea suited to the Russian taste and so capture that market from China. He also dealt with the disadvantage suffered by Indian tea producers as a result of an over-valued rupee and went on to urge the need for a propaganda campaign to oust Japan and China tea from the United States of America and Canada. Above all, he emphasized the need to cheapen costs without sacrificing quality.

Although markets were expanding, prices continued to fall from 1894 to the end of the century, and the situation was only saved by the success of the planters in North-east India in drastically reducing production costs. In spite of this reduction, in 1897 and 1898 the average

dividends of Barry's listed Indian Companies fell respectively to 1·99 per cent, and 2·84 per cent.

Referring to the downward trend in prices, the chairman of the Indian Tea Association, at the annual meeting in 1900 pointed out that the bulk of the new tea coming into bearing was common in quality. There was a limit to the market for common teas and prices had already gone so low as to leave very little margin for profits. He rightly concluded that the most urgent task for the industry was to expand the out-markets and he considered it unsatisfactory that out of a crop of something over 174,000,000 lb only about 30,000,000 lb should find its way to markets outside the United Kingdom.

The industry did better in 1899, but nevertheless the economic position was not bright at the beginning of the new century. Production and acreage, district by district, in 1900 were as follows:

North India	*Acres*	*Production* (lb)
Brahmaputra Valley	204,985	75,287,500
Cachar and Sylhet	132,342	65,831,144
Bengal	134,572	46,533,255
North-western Provinces	8,055	2,297,429
Punjab	9,745	2,135,130
South India		
Madras	6,107	852,032
Travancore and Cochin	25,202	4,253,164
Burma	1,479	271,010
Total	522,487	197,460,664

CHAPTER TEN

PROBLEMS IN NORTH INDIA : 1875–99

A study of the reports of the Indian Tea Association since its foundation in 1881, suggests that the major problems of the industry have not fundamentally changed in character since the early days. Then as in recent years labour, communications, the need to expand markets, the packing of tea, and law and order, occupied much of the attention of the Indian Tea Association. Some of these subjects will require separate treatment, but brief reference must be made to them in this chapter.

LABOUR

It is not surprising that labour matters should have occupied the most important place in the Association's reports. We have already seen that, at a very early stage in the growth of the industry, acute shortage of labour was experienced and planters had to undertake the expensive task of importing labour from other parts of India. These operations gave rise to two different sets of problems – on the one hand, it was necessary to protect the illiterate immigrant coolie from exploitation, and on the other hand the employer had to be protected against the disappearance of labour which he had imported at great expense. There was, however, endless scope for argument as to where the true balance lay, and it is not surprising that the correspondence between the Association and Government about recruitment and similar matters was voluminous and that some of the relevant legislation came in for much criticism.

An interesting light on the careful attention which this whole subject received from the best of the local British officials in Assam is thrown by a letter written on the 23 March 1883 to the Indian Tea Association, by the personal assistant to the Chief Commissioner of Assam.

> With regard to the first point, Mr Elliott regrets to find that a misunderstanding exists, or did exist in many quarters, as to the intention with which the new rules have been framed. It has been thought that they were prompted

by a desire to harass tea planters by excessive inspection, or to encourage vexatious complaints on the part of labourers, or to expose weak points in the working of the tea industry, or to satisfy an abstract craving for statistics which might be useful to the general administration but do not directly bear on the working of the Emigration Act. Nothing could be further than this from the intention of the Local Government. On the contrary, Mr Elliott has always held, and has openly expressed his view that the condition of the emigrant labourer is generally prosperous, and is steadily improving; that the more that is known concerning it, the more popular will emigration to Assam become, and the more surely will the opposition to the system and to the Emigration Act subside, and that where additional information is called for it is mainly needed in order to clear up points which were vague and obscure before, but the throwing of further light on which would place the tea industry in a more satisfactory position.

A salient illustration of this will be found in adverting to the objections taken to the enquiry into what is called *tikka wage*. It is known to your Committee that in the old form of Inspection Report the question occurred – 'What are the actual monthly earnings of labourers, compared with the rate of wages entered in their contracts?' The answer to this was extracted from the *Haziri book*, and almost invariably showed earnings less than the contract amount; the wages of men being generally returned at about Rs 4–0, 4–4, or 4–8; of women at about Rs 3–8 or 3–12. This on the face of it was unsatisfactory, not only as shewing that labourers did not receive their contract wage of Rs 5 for men and Rs 4 for women, but also as giving point to the question, 'in what respect are coolies bettered by emigration if they can only earn in Assam a rate of wage not higher than they can earn in their native country'. It was, however, known to all who are acquainted with the industry that these figures do not represent the real earnings of the coolies. They are the sums gained by performing a moderate, and in some cases light, daily task. But over and above this daily task extra work is liberally paid for and on some kinds of work such as hoeing and pruning, many do more than the task: while on one kind of work, plucking, almost everyone does more and often much more than the task. These extra earnings are known as *tikka wage* or *tikka pice*, and on most gardens are entered in a separate book, and not brought to account in the return given to the inspecting officer. This practice is unfavourable to the tea industry, and tends to create an unjust impression that the labourers are paid too little. It was in order to remove that impression, and to further the best interests of the planters, that the Chief Commissioner directed that the *tikka wage* should be shown in the *Haziri book* and included in the figures given in the Inspection Report.

The subject of the recruitment and the conditions of labour will be dealt with in detail in a later section of this book.

TRANSPORT AND COMMUNICATIONS

The second principal worry of planters at this period was transport and communications. Complaints about the Assam roads figured regularly in the Indian Tea Association annual meetings and were very bitter in

1881 when the Government were urged to import labour for the maintenance of the roads. In the following year, the Assam Public Works Department was accused of offering high rates of wages to induce labourers to leave tea gardens for work on the roads in the province. A few years later, the complaint shifted to the Dooars, but at the same time it was alleged that the roads from both Jalpaiguri and Siliguri to the districts were worse than ever before, and that a cart might well take three weeks to cover a distance of thirty miles from the garden and back again. Ferries were also a source of difficulty. In 1888 it was reported that at one time no fewer than a hundred carts were kept waiting at the ferryover the Chel below Dam Dim. Tea there had to wait five days for a passage.

Some improvement in Assam Valley roads was effected by appointing planters as honorary contractors. In Cachar also, when, in the late eighties, the industry began to demand better communications, a similar remedy was suggested.

In 1895 planters were still justly complaining that little was being done to improve Dooars roads, even though considerable sums were raised from the tea industry for this purpose. The complaints were not without their effect, and a good deal of useful road construction was done in the last years of the century. By that time railways and steamer services had improved the situation in many of the tea districts and much of the attention of the Association thenceforth was to be given to demanding improved rail facilities and reduced freight rates. These developments, which profoundly affected the whole economy of the tea industry in North-east India, will require a chapter to themselves.*

Ocean freight rates, too, were a frequent source of discussion and as early as 1887 the Indian Tea Association complained of the excessive differentials between the rates for choice and rough cargo. They saw no reason why the rate for tea from Calcutta to London should be fifty shillings per ton, when cereals were shipped at from twenty-five to thirty shillings per ton. A somewhat acrimonious correspondence between the Indian Tea Association and the Steamship Lines Conference led to an abortive attempt to form a 'Planters Line', which would carry tea at rates lower than those fixed by the Steamship Lines Conference. A reduction to forty-five shillings per ton was secured from that Conference in 1892 and in 1895 a new arrangement was made with the Conference Lines by which the rate for tea was fixed at ten shillings above the rate for rough cargo.

THE SEARCH FOR NEW MARKETS

Even at this early stage the fear that production would outstrip demand was prominent in the minds of the leaders of the industry. They

* *Vide* Chapter 42.

fully realized the importance of systematic attempts to develop a world demand for tea and, not unnaturally, they first turned their attention to the countries bordering on India. The possibilities of this development were first pointed out, not by a business man, but by Sir Ashley Eden,* who wrote a pamphlet in 1880 or 1881, suggesting that Assam planters should attempt to make something like the brick tea which the Bhutias were accustomed to get from China. In 1885 A. Simson of Schoene, Kilburn & Company, put the same suggestion to the Indian Tea Association and the Government of India was asked by that body to make diplomatic approaches to China with a view to securing the admission to Tibet of Indian traders. It was pointed out by the Association that Tibetans evidently had no prejudice against Indian tea since 'the Minister at Tashilunpo, who is a connoisseur in tea, drinks Indian tea whenever he can get it'. Various officials took an interest in the project and the correspondence includes an interesting account by H. Z. Darrah, officiating Director of Agriculture in Assam, on the methods employed by the Bhutias at Dewangari for brewing tea, which deserves quotation since the details of it are not generally familiar to western readers.

> Two pots, one of brass and filled with water, the other, an earthen one and empty, were put over a fire, a piece was broken off a brick of tea and crumpled up in the hand to separate the adhering leaves and twigs. The handful so obtained was put into the dry earthen pot and stirred up for a few seconds till hot. Then about a couple of glasses full of potash water (made by straining water through ashes) was poured on the dry tea, and when the heat had almost evaporated the moisture, another spoonful of water (now hot) was added from the brass pot. The tea meanwhile was kept stirred to prevent its burning, and when nearly dry, a second, and then after an interval, a third spoonful of water was added. When this, too, was almost dry, all the water from the brass pot was poured in, and a teaspoonful of salt having been put in, the mixture was boiled.
>
> Thereafter *ghee*† and salt were added and the whole mixture was churned vigorously.

The subject of the search for markets and propaganda to popularize tea will be discussed in a later chapter.

THE PACKING OF TEA

A fourth cause of anxiety related to the packing of tea. Tea boxes were in general constructed on the gardens, either from planks sawn up on the spot, or from timber imported by contractors. Many varieties of timber were used, and as the supply situation became more difficult the tendency to employ inferior and unseasoned wood grew. In 1883 complaints in the press of the damage done to tea through the use of

* Lieutenant Governor of Bengal.
† Clarified butter.

unsuitable woods for tea boxes, led the Government of India to inquire into the situation. The Forest Department reported that there would be very few varieties of wood in Assam which, if properly seasoned, would injuriously affect tea packed in them, and the department considered that unseasoned wood was more likely to be the cause of the trouble. They also expressed the view that it would be cheaper for planters to grow suitable timber on their own gardens than to buy it from the Forest Department.

The matter was further examined by George Watt, who at that time was an officer on special duty in the Revenue and Agriculture Department of the Government of India. He took a view at variance with that expressed in the Press and entered into an interesting controversy with P. Playfair of Barry & Company about it. Playfair maintained that unseasoned wood of certain kinds corroded the lead linings of the boxes, producing both in the wood and in the lead a pronounced and disagreeable smell which was communicated to the tea. Watt, however, had conducted a series of experiments which led him to disagree with Playfair. He said:

> I had pieces of lead placed between slabs of wood, green and seasoned, from each tree experimented with. After damping these I left them in a confined atmosphere, with the view of producing the effects of the hold of the ship. In many cases the wood became completely rotten, especially in the case of green woods. In others, a fungoid growth united the lead so firmly to the wood that the slabs could with difficulty be torn apart. In no instance did I discover a single wood that corroded the lead.

Watt therefore came to the conclusion that the trouble did not arise from the wood, but that the tea itself, either because of imperfect drying or from the humidity of the atmosphere before it was packed, corroded the lead linings and produced the 'cheesiness' in the tea to which the complaints related. Kelway Bamber, who became chemist to the Indian Tea Association a few years later, came to the conclusion that both Watt and Playfair were partially right. He writes:

> There is no doubt, however, that both the tea and the wood might cause the 'cheesiness', as they both are liable to undergo a kind of fermentation, resulting in the formation of certain volatile and non-volatile organic acids, similar, if not identical, and having corrosive action on lead. The remedy however, I think, rests partly with the planter, and partly with the supplier of boxes or box wood; not so much in the rejection of certain kinds of wood for box making, though some woods may be more liable to acetification than others, but in only employing perfectly-seasoned wood for the purpose. The proper seasoning of wood, or the removal or destruction of all easily fermentable matter, would not take long in a climate like Assam, where if cut into planks and properly exposed to the atmosphere, the wood would be subjected to heavy rain and hot sun alternately, for several months of the

year, and then to a prolonged period of dry, warm weather. Under these circumstances the acid products of any fermentation would be washed out, and the wood rendered harmless.

After the Watt-Playfair controversy, more care was taken to use seasoned wood and to avoid wood likely to taint tea, but in 1893 the London Wholesale Tea Dealers Association again thought it necessary to complain to the Indian Tea Association of 'cheesiness' due to the use of green wood in the tea boxes. A more common complaint at this stage was of the weakness of the boxes and of consequent leakage. This was particularly the case with packages of dust and in 1894 a large firm of buyers of Indian tea went so far as to suggest that dust and small broken teas should be packed in patent metal boxes. A little later, however, they withdrew this recommendation as they found that metal cases were not acceptable in England. They now recommended the use of canvas wrappers. In 1895 the Inland Steamer Companies complained of the inferior quality of wood used for tea boxes, and the London Wholesale Tea Dealers Association repeated its former complaints. At the same time, Stenning, Inskipp & Company, a prominent London firm of tea brokers, returned to the suggestion that metal chests should be used and recommended that, whether of wood or metal, half chests only should be used for dust.

In 1896 complaints of bad packing were so numerous and serious that a special sub-committee, representing producers, buyers, brokers, and steamer agents was appointed by the Indian Tea Association to consider the whole matter. This sub-committee, while acknowledging that in the absence of adequate European supervision tea did not receive fair and proper handling at the jetties, also referred to 'the extremely bad packing of chests from many well known gardens, not only with regard to the quality of the wood employed for the boxes, but also with reference to the slackness of the contents'. The committee expressed themselves forcibly and finished up with some practical recommendations. Nevertheless, little immediate improvement resulted and early in 1898 a large importing firm in Melbourne reported that 'a shipment is seldom landed here either from Calcutta or Colombo, unless there is very strong evidence of the need for a reform in the directions indicated'. From this time onwards, improvement was noticeable, though the position did not become satisfactory until plywood came into use in the twentieth century.

LAW AND ORDER

The fifth important cause of serious anxiety in this period arose from threats to law and order. Planters today are apt to talk of the deterioration in law and order since the transfer of power and to long for the security of the days of British rule. It is doubtful if their grandfathers

would have agreed with them, for as one reads the annual reports of the Indian Tea Association and the chairmen's speeches at the annual meetings in the late eighties and in the nineties of the last century, one is conscious of a sense of nervousness and insecurity running right through them. In 1885 strong representations were made by firms interested in tea gardens on the Cachar frontier with regard to the contemplated withdrawal of police guards from the outposts during the rains. In 1888 in criticizing the proposals to remove the regiment from the tea districts to Shillong, planters spoke feelingly of 'the European and native lives that have been taken by the savage tribes on our frontier at Alexanderpore, Catlecherra, Jalnacherra, and Balladhun', and declared that they preferred preventing their throats from being cut to revenge afterwards. It is clear from the language used that there was considerable apprehension and a genuine conviction that the strengthening of the forces of law and order was essential. In 1892 it was stated that 'the late massacre of the natives by the Lushai hill tribes had startled the community' and it was considered providential that in spite of the failure of the authorities to provide protection, European planters were not attacked wholesale at this time. In the same year, a meeting of planters at Cachar passed the following resolution:

> That the Civil Administration of the district is so faulty that *dacoities* are prevalent and property unsafe even on the public roads in open day-light, the police being apparently more employed in the impressment of labour than their legitimate business, and the officer in charge too listless or indolent to trouble himself to make any personal enquiries when robberies are reported to him.

At the next annual meeting of the Indian Tea Association, it was reported that serious *dacoities* had occurred and that 'the position of our planters and our labour force in Cachar is a very serious one . . . the people are being alarmed and loud and deep are the growls at the incompetence of the police and the apathy of the Government'.

The situation grew worse and the chairman of the Indian Tea Association spoke of the constant *dacoities* and general lawlessness throughout Cachar. At this time the Manipuris seem to have been the principal cause of anxiety and the European and the Anglo-Indian Defence Council tabled a list of Manipuri outrages, including the Boruncherra outrage, in which, on the 4 April 1892 not less than thirty-eight labourers were murdered and six women carried away captive. The Inspector-General of Police, though naturally rebutting the planters' criticism of police inactivity, admitted the seriousness of the situation and proposed drastic measures, including the location of punitive police forces in certain Manipuri villages at the cost of the inhabitants. The authorities at the same time rebuked the planters for

sending large sums of money without an armed escort. In response to the request of certain managers for armed police guards, the Chief Commissioner remarked in August 1893 as follows:

A native *zemindar* in Sylhet would probably consider a couple of strong men armed with stout *lathis* quite sufficient to resist effectively and put to flight any such bands of Manipuris as are shown to have been concerned in the Cachar highway robbery case. But if managers of gardens prefer to have an armed police guard, they have been told that they can have it at a trifling cost, and the Chief Commissioner does not think it unreasonable to require that the guard in such cases should be paid for.

In the following year the Cadastral Survey is said to have caused unrest amongst the inhabitants of Cachar, but overt criminal acts were comparatively few. In the Annual Report of the Indian Tea Association of 1895–6 it was observed that there had been no reports of outrages in Cachar or Sylhet and that the measures taken by the Chief Commissioner for the suppression of crime had borne fruit. The disappearance of this topic from subsequent annual reports suggests that the *Pax Britannica* was at last becoming established in the tea districts.

OTHER PROBLEMS

The attention of the Committee of the Indian Tea Association was also considerably occupied in the last years of the nineteenth century by the need for scientific research, and by the problems connected with weighment of tea in the bonded warehouses of London. These two topics, however, are so technical that they can best be treated in separate chapters of this book.

Four other matters of a comparatively simple nature can suitably be discussed in the present chapter. The first of these was insurance against damage by hail. The subject was apparently first raised by J. A. Westwood Oliver, a Fellow of the Royal Meteorological Society of London, who wrote to the Bengal Chamber of Commerce on 7 December 1886 stating that hailstorms were very destructive to opium and tea and that he was considering the possibility of affording to those crops the protection of insurance. The initial reaction of the industry was that the difficulty of estimating the damage done by hail would be very great, if not insurmountable, but subsequent inquiries as to how hail insurance worked with various crops in England, France and Germany, led to concrete proposals from the County Hail Storms Insurance Company. The subject disappeared at this stage from the annual reports and was not further noticed until 1903, when an arrangement was made to include this risk for an additional half per cent on the current rates of Marine Insurance. The damage was to be inspected by two planters and the liability of the insurer was limited to one maund of made tea per

acre. Even today there is much division of opinion as to the wisdom or otherwise of insurance against hail.

Planters in the nineteenth century were as much worried as their successors today about the slanderous statements frequently made regarding the industry. The chairman of the Indian Tea Association in his speech at the 1899 meeting, said:

> The native press is constantly producing articles containing the grossest libels on tea planters, and we stand by without defending them, saying that further publicity would be detrimental to the planters' cause. I venture to think that the planters are right, and the omission to defend these attacks encourages the libellers with the result that the public in England, through the medium of some Parliamentary busybody, will become imbued with the idea that the tea planter of India is equal of the old slave driver of Virginia. It is for us, I think, then, not only to place ourselves in opposition to these attacks, but to boldly claim for planters on every opportunity we can that they are indeed benefactors of the country and the people.

A particularly provocative attack on the tea industry was made in an article headed 'Legislative Abetment of Slavery', published in the *Madras Mail* of the 11 September 1890. It contained such fantastic statements as that, according to the Civil Surgeon of Dibrugarh, the low birthrate 'is largely due to abortion, which is resorted to because the women must work and cannot also look after a child'. H. J. Lawrie wrote an extremely able and cogent reply which was published in the *Madras Mail* on 9 December 1890, in which he challenged the writer of the article to visit Assam, to stay with him, and to check the facts for himself. The challenge was not taken up, but one paragraph from Lawrie's article deserves quotation.

> The Civil Surgeon of Dibrugarh says, according to the article, that it is largely due to abortion, which is resorted to because the women must work and cannot also look after a child. I do not know whether the Civil Surgeon of Dibrugarh ever made such a statement, and, if he did, I am surprised he was not called on to give his proof for such. He could never have inspected a garden, or, if he did, must have performed his inspection in a very cursory manner. He could never have examined the books, or even the coolies themselves. My knowledge of tea gardens in Assam is large, extending over a period of fourteen years, and I can safely say there is no garden where a woman is not given one month's leave before, and one month after, her confinement. For this period she draws half-pay. This is the minimum amount of leave; on many gardens she is allowed to remain on leave as long as she is not strong enough to work. Mind you, sir, I am ready to prove all this to the writer, if he will only come up here and make the investigation, which his very serious charges warrant.

The quotation is of interest, firstly because it shows that the industry was far ahead of public opinion or of the practice in other industries of maternity benefits, and secondly, because it reveals the kind of process

by which the tea industry at this period was grossly maligned by persons who had no first-hand knowledge of it. As a general rule the leaders of the tea industry have, rightly, refused to be drawn into press controversy on these matters but the planters as a whole have always resented this silence.

A matter which bothered the planters even more than slanderous statements was the decision of the Government of India to tax commission on profits. It appeared that until 1887 commissions on profits of tea gardens declared in England and not remitted to India were untaxed in India. Mr H. E. S. Hannay was the first victim of the decision that such income was income 'accruing and arising in India' and therefore liable to tax. The Association's legal advisers relied on the parallel of the indigo industry and argued that the manager's commission was income derived from agriculture and therefore exempt from tax. Representation was made to the Government of India which not unnaturally hardened its heart and held that the commissions were definitely liable to Indian income tax. Planters were still hoping to contest this decision in 1894 and drew temporary hope from an opinion given by Stokoe, but in that year the chairman of the Assam Branch reluctantly agreed that the contemplated test case should be abandoned. It is difficult to feel very sympathetic when one remembers the negligible incidence of income tax at that time.

One last matter calling for mention in this chapter is the unfortunate effect on the tea industry of the measures taken by the Government in the early nineties to raise the value of the rupee from 1s 2d to 1s 4d. The change meant that in rupees per lb of tea sold in London the industry received about twelve and a half per cent less than before the revaluation – and it was in rupees that the costs of production had to be met. Feeling on that subject was bitter and is perhaps best made clear by a somewhat lengthy quotation from the chairman's speech at the annual meeting in 1898.

> India has within the last decade become self-supporting in every sense of the term, and although importers may suffer, that is no reason why the country should be handicapped in competition with China and Japan by what is nothing less than a heavy export duty on her produce . . . The progress of the tea industry in India has been unparalleled in the commercial history of the country. Our industry first began to be of importance some thirty-five years ago. In 1863 a crop of about three million pounds was produced, and the expansion was steadily, if slowly, progressive, until 1883, when the crop amounted to fifty-nine millions. Since then, however, our tea having obtained a recognised footing in the home market, the advance has been by 'leaps and bounds', and our crop last year amounted to 151 million pounds. During this period we have practically ousted our great rival, China, from the home markets, and we have every hope of following up this success in the

other markets of the world. At the present moment it is estimated that our great industry represents an invested capital of over £20,000,000 with an area under tea of about five hundred thousand acres. This industry has not been built up without the sacrifice of many valuable lives, and the graves of its pioneers show what the reclaiming and opening up of the large waste lands in the Valleys of the Brahmapootra and Surma, and other districts has cost us. What was not so very many years ago wild unprofitable jungle is now a source of revenue to the Government and provides support for over one million Natives of India, and as most of these come from congested districts, the progress of our industry has been of great benefit to the country generally. I know, Gentlemen, that we are at one in our desire for the continued prosperity of the tea industry, and I think you will bear me out in saying that we shall consider any action of Government which may lead to a continuance of the present artificial value of the rupee as an indirect attack upon our interests. Did our industry belong to another nation there would be no question of being handicapped by the threatened tax on our revenue; no, in all probability our efforts would be encouraged by *Bounties*, as in the case of sugar. We do not, however, ask for assistance of this nature from Government, but simply to be allowed to compete in the markets of the world on our own merits and with a free and untrammelled Exchange.

It is not necessary for us to pronounce on the conflicting views in this controversy. We have only been concerned in this chapter to show the kind of problems with which the industry was beset and to make clear the diligence of the Indian Tea Association in dealing with them. Thanks to that diligence, the position of tea in North-east India at the end of the century was fundamentally sound, although the immediate economic situation was somewhat depressing.

CHAPTER ELEVEN

DEVELOPMENTS IN NORTH INDIA: 1900–14

We have seen that on the whole the last few years of the nineteenth century were an anxious and not very profitable time for the Indian tea industry. The strenuous efforts which had been made to reduce costs had been largely nullified by Ceylon's success in capturing the out-markets.

The reports of the Indian Tea Association at this time contain four sets of figures showing tea company results – one set forth in the *Home & Colonial Mail* dealing with sterling companies; a second statement from the same source concerned with rupee companies; a statement of Barry & Company, on the results of rupee companies; and a fourth statement prepared by George Seton, a well-known dealer in tea shares, regarding forty-five sterling companies. Taken together, these statements give a good indication of the ups and downs of the industry.

In 1901 a warehouse dispute in London dislocated the normal processes of sales. Fortunately, in that year planters had in general practised fine plucking; the crop was small and prices were a little better than in the previous year. The year might in fact be described from the tea producers' point of view as poor, but not disastrous, and in 1901 the dividends of the sterling companies on the *Home & Colonial Mail* list averaged three per cent. In 1902 the position was a little better. Out of ninety-eight possible dividends preference or ordinary, only thirty-four were passed and the average dividend paid was four per cent.

Nevertheless in 1902 Norman McLeod found it necessary to speak strongly on the question of coarse plucking.

> An idea is current among some that they have lost money during the past season owing to their adherence to fine plucking, which idea, if allowed to take root, and bear fruit in the shape of an excessive quantity of coarse tea, will only lead to the direst results. It may be that during the past season, owing to the short crop, the manufacture of coarse teas has in some instances

paid, but we have only to go back to the year 1900 to find that an over-supply of common teas does not pay, and it would be well that those who have gained a temporary advantage, owing entirely to the short crop of 1901, should consider the position most carefully, and not by unconsidered action take away from the good which has been done.

In 1903 production increased considerably and costs came down. Fortunately, prices rose in spite of the increase in production and profits were reasonable. Seton's table shows a dividend average of 4¼ per cent and Barry's list gives much the same result.

In 1904 J. Thomas, in their annual review for 1902–4, took an optimistic view of the situation, provided that companies did not again resort to coarse plucking.

> Everything points to the industry as a whole being once more on a sound paying basis, and this must continue, provided coarser plucking is not resorted to. With common tea at its present price, the temptation will be great, but it must be shunned. The present system of plucking with no large areas coming into cultivation, and a general expansion in consumption, have brought supply and demand to a sound ratio, and it is to this alone that we owe the satisfactory position of the trade today. If we continue on these lines, the situation must still further improve; but depart from it, flood the market with an over-supply of tea, the bulk of it common, and we shall be back again in the gloomy times of three or four years ago.

In 1904 the condition of the industry was much the same as in 1903 and according to the *Home & Colonial Mail* statement, dividends averaged 4½ per cent. Nevertheless, twenty-five out of ninety-eight dividends in that list were passed. Critics who talk loosely of the high dividends supposed to have been earned by the tea industry throughout its history would do well to study the lists published by Seton, Barry, or the *Home & Colonial Mail*. They would discover that out of ninety-eight companies listed by the *Home & Colonial Mail* in 1901, 1902, 1903, 1904, 1905, and 1906 respectively, dividends were passed in 45, 34, 26, 25, 19 and 12 cases.

The industry enjoyed relatively good years in 1905 and 1906 and the average dividends for those years in the *Home & Colonial Mail* lists were 5¼ per cent and 7 per cent respectively.

In the year 1907 the tea industry was reasonably prosperous. Only eleven of the ninety-eight dividends listed by the *Home & Colonial Mail* were passed and the average dividend was 8 per cent. Barry's lists point to the same conclusion. World consumption was growing fast and the increase of crop in this year did not prevent prices from rising. It should be noted here that from the beginning of the century the South Indian crop had become significant and in 1908 it reached seventeen million lb. The serious entry of South India into production was henceforth to be an important factor and it will be discussed in a later chapter. In 1908

only nine of the *Home & Colonial Mail* listed dividends were passed and the average dividend was 7½ per cent. Barry's listed rupee companies paid, on an average, dividends of 6½ per cent. Tea seemed an attractive proposition at this time and the acreage planted continued to increase rapidly.

Fortunately for the Indian tea industry the British public had already been weaned away from China tea. In 1900–1 out of a total import of tea into the United Kingdom amounting to 308,000,000 lb, only thirty million came from China. By 1909 total imports were 343,000,000 lb, of which China accounted only for eighteen million. In 1920, China tea accounted for only 3·67 per cent of all tea imports and by 1930 the percentage had fallen to 1·61 per cent and since that time China tea has never recovered the ground lost. At the end of the Second World War the percentage of China imports was negligible, and although it increased from 1955 onwards, the figure was only 2·2 per cent at the end of our period.

The next year, 1909, was also encouraging and at the annual meeting in 1910 the chairman of the Indian Tea Association, Calcutta, was able to speak in a cheerful vein:

> It must be a gratifying experience to investors to find that after the trying experiences through which the industry passed about 10 years ago, their confidence in tea has not been misplaced. Though the past season opened on a relatively low level and though the crop at one time promised to be a short one, phenomenal growing weather in the latter part of the season has enabled a record crop to be made in most districts. Drought in South Sylhet and Mosquito Blight in the Terai have unfavourably affected yield in portions of these districts. In spite of an increase of fully 10 million lb in the Indian production and as much more in Ceylon, prices have advanced and give promise of steadiness. The expansion of markets which has led to this increased crop being absorbed without sacrifice in price will be differently explained; for opinion as to causes is always varied. I am, however, of those who believe that it is in part due to the operations of the advertising campaign which has been for the past few years carried on by growers through the agency of the Tea Cess fund.*

Only five of the dividends on the *Home & Colonial Mail* list were passed and the average dividend reached 9½ per cent. Barry's list shows an average of 11 per cent for Indian companies, while the dividends of the Dooars companies in that list averaged 17 per cent.

The improvement continued in 1910 and at the 1911 annual meeting of the Indian Tea Association, J. N. Stuart was able to say that 'we stand in the fortunate position of a ship, which after a long period of stormy days, is resting at anchor in a sheltered harbour' – though he was wise enough to qualify his optimism with the remark that 'it will not be long

* A market expansion organization which will be discussed in a later chapter.

before we shall again have to meet difficulties'. Production in 1910 reached a record level of 262,000,000 lb and acreage was still rising fast. Only two of the *Home & Colonial Mail* listed dividends were passed, and the average dividend was 9½ per cent. Barry's list of rupee companies showed average dividends for the year of nearly 13 per cent.

In 1911 in spite of further increases in acreage and yield, prices were good. Only two of the *Home & Colonial Mail* dividends were passed and the average reached 7½ per cent, while Barry's list showed much the same result as in the previous year.

In 1912 the acreage under tea rose by 17,000 acres and production was 27,000,000 lb higher than in the previous year. The world was able to absorb this increased weight of tea, and according to Barry's table, prices were the best known since 1895. Barry's listed dividends averaged 16·6 per cent, while the *Home & Colonial Mail*'s list average was 11½ per cent, with only two companies passing dividends.

In 1913, prices rose still further and results were much the same as in 1912. In 1914 the war introduced new complications and it seems desirable, therefore, to record at this stage the position which the industry had achieved during the first decade or so of the twentieth century.

The average production per acre in India had risen from 378 lb in 1900 to 506 lb in 1913; and India's exports of tea had grown to 292 million lb. Figures of production for the different districts are as follows:

Area	*Acreage under tea in 1913*	*Production* (lb)
Assam	367,500	199,722,000
Bengal	156,000	
Bihar and Orissa	2,200	80,421,000
Northern India (United Provinces and the Punjab)	17,300	4,709,000
South India	63,700	22,245,000
All India (excluding Burma)	606,700	307,097,000

MISCELLANEOUS PROBLEMS

The period covered by these statistics was clearly one of continued expansion and moderate, though fluctuating, prosperity in the tea industry of India. Many problems nevertheless had to be faced in the process of achieving this development, and as the dimensions of the industry in South India were still relatively small, the story of how the industry's problems were tackled is largely contained in the annual reports of the Indian Tea Association. Some of the major topics concerned – as for example labour, tea propaganda, scientific research, transport and communications – will be dealt with in later sections of

this book and in this chapter we shall only be concerned in a general way with the miscellaneous problems of the tea industry in North-east India between 1900 and 1914.

Of the five principal causes of anxiety to which we have referred in the last chapter, that relating to law and order seems to have considerably abated in the twentieth century. The other worries relating to labour, the packing of tea, warehousing, and market expansion continued and brief general reference must be made to the first two of these topics.

LABOUR

During the first few years of the century, much of the attention of the Indian Tea Association was directed to what might be regarded as the teething troubles of Act VI of 1901, and once again the old suspicions and even antagonisms between a section of the planters and the Government appeared. The trouble was partly the result of the new system of inspection, but was exacerbated by the inability of the Chief Commissioner, Henry Cotton, to recognize the financial difficulties of the industry and by his statement in Council that the wages actually earned in the tea districts were too low as compared with the general level of agricultural wages in Assam. This statement seems to have had very little foundation. The Chief Commissioner was a man of unlimited sympathy with the poor and the oppressed, but he did not understand business and he did not possess the gift of managing individualistic European planters, many of whom knew that they did in fact give labour a square deal. The Association resented Cotton's allegations and pointed out that in most of the cases concerned, wages were low merely because labour worked so few days in the week. In the case of one of the gardens to which Cotton had referred, the Assam Branch of the Indian Tea Association was able to show that labour worked on an average only seventeen days a month though they were also paid for four Sundays and on an average for two days sick leave a month. In the Assam Branch Indian Tea Association annual meeting in 1901 the chairman expressed the general feeling as follows:

> His Honour the Chief Commissioner in his speech in Council appeared rather to ridicule the crisis we are now passing through, saying it could not be compared with that of the sixties. He remarks that 'the industry recovered from that blow, and it will recover from over-production also, as other industries have done, which have been stricken by the same cause, the crisis from over-production will pass away as new markets are opened out, and the supply learns to adapt itself to the demand'. I would ask, and what are fifty per cent of the Tea Gardens to do in the meantime while the 'supply learns to adapt itself to the demand'. It is very easy for Mr Cotton to say all industries have their ups and downs, but we know that the present condition of tea has

no precedent. The *Globe* informs us that the share capital of forty-five of the principal companies having a face value of nine millions sterling on 1 January 1901, had on 1 June 1901 an aggregate market value of only Rs 71,75,000.

Subsequent events to some extent justified the Chief Commissioner's view of the economic prospects of the industry, but his attitude did not make for the smooth working of the new Act. In the following year, the new Chief Commissioner, Fuller, was more conciliatory and understanding and attached importance to encouraging the immigration of labour into Assam. The Indian Tea Association Committee for their part recognized that it would 'hardly be reasonable to expect Government again to acquiesce in free recruiting with the history of this system before them', and at the annual meeting in 1905 the chairman tentatively suggested the appointment of an independent recruiting Association working through garden *sardars* for part of the year, and through *arkattis* during the remainder of the year. This proposal was, however, kept in abeyance, since in the following year a Government Commission was appointed to inquire generally into the working of the relevant labour legislation. We shall revert to this topic in a separate chapter.

THE PACKING OF TEA

As in the previous period, tea chests gave rise to a number of problems at this time. In 1906 as in several previous years, there were complaints of the heavy weight of dust and small leaf teas packed into chests. At a conference of representatives of London tea buyers, it was stated in relation to Indian tea that:

> The solid weight of small Tea frequently put into a package at present is more than most ordinary chests, however good, can be expected to stand, and experience has shewn that it is almost invariably packages of such excessive contents that are landed broken and deficient. The alteration, if made, will conform to the practice in connection with Ceylon Teas, with which cases of ullage and breakage are rare.

The Calcutta Tea Traders Association took the matter up and at their suggestion the Indian Tea Association, Calcutta, recommended 'that the quantity of fannings or small leaf Tea of any description packed in a chest should be limited to one hundred pounds, and that nothing lighter than 4 oz lead should be used for lining the chest containing such Teas'.

Apart from the density of packing, the quality of the chests used was often unsatisfactory. In February 1907 the Vice-Chairman of the Calcutta Port Commissioners thus commented:

> On a round of inspection this morning I noticed several lots of tea being shipped, and in the case of two lots the chests were in such a shattered con-

dition (not from rough handling but from the boxes being made of bad wood badly put together), that coopers were standing by the shipping trays tinkering up the chests before they were hoisted on board of different vessels. The trade and shipping cannot expect such chests to be discharged in London in a good condition, one or two will certainly fall to pieces, and then we shall hear of shortage.

Some improvement was brought about, but in 1910 there were complaints that chests were riddled with wood-boring beetles, and the Australian Government reminded tea importers that they were liable to heavy penalties if such beetles were found in chests imported by them. The subject was not mentioned in later reports and presumably the defect was remedied.

The marking of tea chests also received consideration by the Association. In 1912 it was suggested by the Indian Tea Cess Committee that since tea chests, after sale, were extensively used for other purposes, they provided a practical and inexpensive way of drawing attention to Indian tea. The Indian Tea Association therefore recommended that the words 'pure Indian tea' should be stamped on all chests exported from India. This was done, but in the following year the Association were informed 'that the term "Indian" as applied to tea in the United States is capable of misconstruction and suggested to some people a semi-medicinal preparation such as herb tea'. It was agreed to substitute the word 'India' for 'Indian'. Markings also gave rise to misunderstandings in another direction. Some gardens made a practice of stencilling net weights on their chests. These often differed from the weights inscribed by the customs authorities in the United Kingdom and confusion resulted. The Indian Tea Association thought it might be better to stencil no weights at all in the gardens. The Calcutta Tea Traders Association, however, pointed out that gross weight must be marked on chests sold on the Calcutta market. It was therefore agreed to stencil no weight on chests for London and to put gross weight on chests for the Calcutta market.

IMPORT DUTIES

In this period a number of new problems emerged, one of which concerned the duties levied on the import of tea into various countries. The duty on entry into the United Kingdom had been raised by 2d a lb in 1900 and in 1902 it was suggested in the English Press that tea and various other commodities should be taxed more heavily in view of the cost of the South African War. Strong representations against the duty were made by the Indian Tea Association, but the Treasury did not accept the arguments used, and minuted as follows:

> The extra tax has in no way diminished the consumption of Tea, or its importation from India and Ceylon. Every evidence of ability to bear its burden of taxation that a customable article can give, is given by tea now. Tea

never was cheaper or more plentiful in the London market, notwithstanding the tax.

The trouble which the Indian and Cingalese tea trade is in does not arise in any degree from high taxation, but from over production, and careless cultivation, preparing and packing.

The Local Governments must interfere to check the suicidal policy of planters, by establishing a control over the area of cultivation and the character of the ground devoted to cultivation, and an inspection over the tea before it is packed and exported. This will necessarily increase the cost of production; and of course it is desired to obtain a set off in a reduction of taxation, which would be tantamount to a grant from the Exchequer.

It is a mistake to suppose that tea is more highly taxed than coffee and cocoa, if allowance be made for the far larger number of cups that can be produced from a lb of tea at 6d than from a lb of coffee or cocoa at 2d. When tea was reduced from 6d to 4d a lb in 1890, coffee and cocoa remained unchanged at 2d, therefore when tea was restored to 6d in 1900, there was no reason for increasing the duty on the two other articles.

The Indian Tea Association sent a well-reasoned reply in which they pointed out that, from the Treasury's own showing, the price of tea had not risen as a result of the duty and the burden of it must therefore clearly fall upon the producer. The Chancellor of the Exchequer did not adopt the view of the Treasury officials, but merely stated that though he sympathized with the tea industry, he could not afford to give up the revenue involved just then. He had, indeed, stated in his Budget Speech in 1901 that:

> Tea is already taxed up to seventy-five per cent of its value. Tea is now a produce mainly of India and Ceylon, a crop in which our own fellow subjects at home and abroad are deeply interested and the trade of which is at present, largely owing to overproduction, not by any means in a satisfactory condition. I do not think we ought to increase the duty on tea.

The Chancellor stood by this view in 1902, and the duty was not enhanced. In January 1903 the producers of tea in India and Ceylon, and the buyers and brokers concerned in London, made a further representation to the Chancellor urging the reduction of the duty now that the war was at an end. They contended that at least half of the additional duty had been borne by the producers and they called attention to the unhappy condition of the tea industry; this they illustrated by the fact that the market value of the shares of forty-five representative Indian companies was only £6,600,000 against a nominal value of £9,500,000. They also pointed out that in 1902 the value of Indian and Ceylon tea imported into England was only £7,300,000 against which a duty of £6,000,000 or over eighty per cent, was paid. No industry, they declared, except the trades engaged in the supply of alcoholic liquor and tobacco had so heavy a tax laid on it.

In spite of this cogent representation, and against the advice of the Viceroy, Lord Curzon, in 1903 the duty was raised to 8d a lb. The Calcutta Committee of the Indian Tea Association in co-operation with the United Planters Association of Southern India, then suggested that a preference should be given to British-grown produce, but the London Committee thought it useless to propose this until after the next General Election. In 1905 the duty was reduced again to 6d, but the Anti Tea Tax League which had been formed in January 1905 began to demand further reductions and hoped to secure the support of the Liberal Party, most of whose members were pledged to support 'a free breakfast table'. The Conservatives were known to be anxious to abolish all customs barriers within the Empire and it was thought that Labour men must necessarily refuse to support 'a penn'orth of tax on a penn'orth of tea'. The campaign was partially successful, and in 1906 the duty was reduced by one penny. The Anti Tea Tax League organized extensive propaganda and in the annual meeting of the Indian Tea Association in 1909 the chairman criticized the organizers of the campaign for portraying the industry in their posters as 'a young man of athletic build and somewhat villainous countenance, in fancy riding kit, with a large whip'. After a good deal of enthusiasm had been displayed in this matter, it seems suddenly to have petered out. After 1909 the subject was not again mentioned, either in the annual meetings or in the reports and the duty in fact stayed at 5d.

At the beginning of this period, Ceylon also levied an import duty of 4 annas a lb on Indian tea, while a five per cent duty was levied in India on the import of Ceylon tea. In 1901 the Indian Tea Association suggested the abolition of both these duties and argued that the Ceylon duty effectively prevented the use of Indian tea in Colombo for blending purposes. They pointed out that this was of particular importance in connexion with the sale of tea to Russia. 'There is no direct steamer service between Calcutta and Russian ports. Transhipment at Colombo, or elsewhere, is consequently unavoidable. But the charges at Colombo are so heavy, because of the duty, that it is less expensive to tranship at Singapore notwithstanding the great distance.' They also urged that if Ceylon refused to exempt Indian teas from the duty, the Indian duty on Ceylon tea should be increased to a prohibitive level. The Ceylon Government did not accept the Indian producers' argument, since Ceylon planters and merchants both considered it undesirable that teas should be blended in Colombo and preferred to export pure Ceylon tea.

In 1904 the Indian Tea Association again raised the question, using the argument that abolition would help Colombo to become a blending centre. In opposing this suggestion, the Ceylon Planters Association pointed out that they had for some years taxed themselves much more heavily than India to finance tea propaganda. The matter was raised in the House of Commons in March 1906, but Ceylon planting opinion was

again strong and the Ceylon Government finally turned the proposal down on the following grounds:

(a) That the allegation that local opinion has changed with regard to the proposal that Indian teas should be imported into Ceylon free of duty for blending purposes is not accurate. The mercantile community generally would probably be a gainer by the change, but their gain would be made largely at the expense of the local producer of tea. The former, therefore, have no very strong objection to offer to the innovation, while the latter are violently opposed to it.

(b) That the change is one which would be highly disadvantageous to the best interests of the Colony. Ceylon tea has won a high reputation through its excellence, but also by reason of the energy and enterprise of the planting community which have combined to make its qualities widely known. Already some tea of Indian origin is exported in circumstances which unquestionably lead purchasers to suppose that it is the produce of Ceylon, and the adoption of the proposal to remove the export duty would lead to this taking place on a far more extended scale. Such sales, moreover, can only be made in direct competition with Ceylon teas, and it is therefore thought inadvisable to take action which is calculated directly to stimulate that competition.

(c) The removal of the import duty on Indian teas for blending purposes would render it difficult to withhold a similar concession in favour of China teas imported via Hongkong. It is true that Hongkong does not produce tea, but it is one of the most important distributing centres of tea produced in China, is a free port, and is, moreover, a British Colony which might well claim a share in any privilege granted by Ceylon to British India.

After this correspondence, the Indian Tea Association dropped the matter and it finds no further mention in the annual reports.

Two other import duties engaged the attention of the Indian Tea Association at this time. In 1901 an Australian Tariff Bill proposed to levy a duty of 2d per lb in addition to the *ad valorem* duty of twenty per cent on all teas imported into Australia. It was pointed out that this would mean a differentiation of duty in favour of China tea. A pound of British-grown tea worth 8d would pay 3½d while a pound of China tea worth 4½d would pay only 2¾d. The Australian Government accepted this protest and provided for a flat rate of duty.

The other case with which the Association had to deal related to the import duty in Russia. It is not of sufficient importance to warrant narration here, but details of it will be found in the Indian Tea Association's Report to Calcutta for 1903–4.

WORLD SUPPLY AND DEMAND

Another problem which faced the Association at this time, was the adjustment of the supply of tea to world demand. Consumption in many parts of the world was increasing, but not fast enough to keep pace

with the increase of tea production in India and Ceylon. Early in 1901 a Joint Committee of the Indian Tea Association, London, and the Ceylon Association, London, put forward a scheme the essence of which was the reduction of output on a sliding scale, according to which common-tea producers would be restricted more severely than fine-tea growers. In view of the importance of this principle in subsequent years, it is worth while reproducing the Joint Committee's proposals verbatim.

To meet the views referred to, and those of many growers, the Committee have added to the proposal to restrict the plucking area, the alternatives of finer plucking; the manufacture of green teas; and the appropriation of tea for the exploitation of the native markets in India and Burmah; together with a sliding scale whereby estates producing finer qualities of tea are subject to a less restriction of output as compared with those producing common teas.

The following sliding scale to be adopted by estates whose 1900 crop, sold up to 31 January 1901, has averaged as under:

7d per lb gross, and under, to reduce output by 10 per cent.
Over 7d to 9d per lb gross, inclusive, to reduce output by 7½ per cent.
Over 9d to 11d per lb gross, inclusive, to reduce output by 5 per cent.
Over 11d per lb exempt. Reduction optional.

For proprietors who have sold their tea in Ceylon or India the following shall be considered the equivalents of the prices in the sliding scale above stated:

London		*Ceylon*		*India*
7d	=	38 cents	or	6 annas
9d	=	50 „	or	8 „
11d	=	63 „	or	10 „

As the basis of the scheme is to restrict quantity, companies or others owning several estates may effect the reduction of output on any one or more of their properties, and the percentage of reduction may be based on the average price of tea from the several estates or divisions, the exclusion of those over 11d per lb being optional.

Any Green Teas made to be considered as part of the reduction.

Proprietors of estates coming under the ten per cent scale may, if they prefer it, contribute 2½ per cent in tea for the exploitation of the native markets in India and Burmah, a scheme for which is under consideration. Information will be issued later on as to the disposal of the tea thus set aside.

The matter of extensions having been prominently brought forward at the meeting, the Committee wish it to be understood that under existing circumstances large extensions are impossible in Ceylon, and consider that capital cannot now be found for further extensions in India, but they most strongly urge that no further tea clearings be planted out either in India or Ceylon other than those for which completed financial arrangements have been made and which cannot now be stopped.

Signatories to the undertaking will be informed at the earliest possible date whether the minimum quantity has been signed for, and if their obligations are, therefore, binding.

A sufficient percentage of Indian producers accepted the scheme to make it workable but, unfortunately, Ceylon, which has frequently taken an independent line in these matters, did not give adequate support and the scheme had to be abandoned.

REGULATION OF SALES

Even though production could not be controlled, it was obviously desirable to regulate offerings of tea on the London market in such a way as to produce an even flow of tea. This necessity was brought into prominence by the abstention of the buyers early in November 1902 and a system of weekly regulation of offerings was then introduced. Partial regulation was introduced in Calcutta also, but it was dropped in 1903 in view of the complications of the out-markets. In 1904 the matter was reopened and the Indian Tea Association, Calcutta, secured the signature of all leading producers to the following undertaking:

> We, the undersigned, being of opinion that the quantities of tea to be sold on the Calcutta market during season 1904 should be systematically regulated, hereby agree and resolve –
> (1) To use our best endeavours in order to ensure that no Garden crops, either in whole or in part, for season 1904, shall be sold forward or privately in Calcutta except for *bona fide* exports to countries other than the United Kingdom.
> (2) To regulate the sales of all black teas of public companies or private estates controlled by us, or in which we are interested as principals or agents, in such proportions as may be decided upon by a Committee of producers, to be appointed by the signatories hereto, (at weekly meetings) over the whole period from 1 May to 15 March following.
> (3) To make such recommendations to public companies and proprietors with whom we are connected as will be calculated to ensure that no coarser plucking shall obtain during season 1904 than obtained during season 1903.

In 1905 regulation of sales continued in London, but was not found necessary in Calcutta, although it was accepted in principle and a special committee was appointed to organize it if necessary. In the same year, the London importers resolved that 'no garden crops, in whole or in part, for season 1905 shall be sold forward either in London or Calcutta for export to the United Kingdom, and that no parcels or invoices be sold privately in Calcutta or London, except for *bona fide* export to other countries than the United Kingdom'.

Calcutta supported the resolution, but opposition from one of the leading firms of London importers caused the proposal to be dropped.

TEA WASTE

Certain problems in connexion with the sale of tea waste arose at this

time in a rather indirect way. The tea industry had to be constantly on guard against fraud and theft. The annual reports of the Association in 1901 and 1902 describe an ingenious form of fraud practised by the boatmen in the Cachar and Sylhet rivers.

The fraud, it was alleged, was practised by the boatmen in conjunction with local traders with the object of securing large quantities of tea. One of the plans adopted was for the boatmen to empty the tea boxes into gunny bags, and to send off the latter in another boat. The boat containing the boxes was then scuttled, and an affidavit to the effect that the tea had been washed away by the stream was sworn. In June the Committee were approached on the subject by the Calcutta Marine Insurance Agents' Association.

Steps were taken to exercise greater care in the selection of contractors for the conveyance of tea boxes to the steamer stations, and it was also realized that this particular crime was facilitated by the local sale of tea refuse, ostensibly for the manufacture of caffeine. The police pointed out that purchasers of refuse tea were in the habit of obtaining notes from the sellers to the effect that the purchasers were *bona fide*, and these notes enabled them to explain the possession of damaged tea which might have been illicitly acquired.

It was soon realized that closer control of the sale of sweepings and refuse was necessary on much wider grounds than those arising from the fraudulent sinking of boats. In the Annual Report for 1904 the committee stated that:

Native dealers had been buying sweepings and refuse at the factories, giving higher rates than those offered by firms known to purchase for chemical purposes only. It was a fair conclusion that tea so purchased was re-sold for human consumption. In that case the object the Committee had in view in taking up the matter was defeated. For as has so often been reiterated, they desired to confine the sale of refuse to the agents of caffeine manufacturers in order to promote the consumption in India of sound teas. In the circumstances it was obvious that the only way to prevent the waste being disposed of locally was to raise the rates paid by the caffeine manufacturers. And as the state of the market in the caffeine manufacturing centres seemed to permit of this, the Committee took action accordingly. They are glad to be able to report that, as a result, the price for sweepings and refuse delivered in Calcutta has been increased from Rs 4–8 to Rs 5–8 per maund.

In 1908, the desirability of action to prevent the sale of tea waste and factory sweepings for human consumption again came into prominence, and it was stated at a meeting of the Dooars Planters Association that there was a large demand in the district for sweepings at Rs 7–8 per maund. It was believed that retail sales for human consumption were the object of the purchases. The Indian Tea Association Committee again recommended members only to sell sweepings to recognized

agents of caffeine manufacturers. The same problem has cropped up repeatedly since that time, and the Indian Tea Association has consistently set its face resolutely against any relaxation of this rule.

Apart from the negative action of refusing to sell tea waste except to reliable concerns, in 1904, the Indian Tea Association (London) also considered the possibility of laying down standards of tea for import into the United Kingdom. At the same time, the Calcutta committee considered a proposal of the Calcutta Tea Traders Association to institute a standard for India with the object of preventing the consumption or importation of low-grade teas. The committee reluctantly came to the conclusion that to fix a standard for tea produced and consumed in India would be impracticable and that the quantity of tea imported into India was not great enough to justify the establishment of the machinery of inspection which would be necessary.

Many other matters, including octroi dues, postal delays, drunkenness on tea gardens, alternative crops, and statistics received the Association's attention and, indeed, there is a remarkable similarity between many of the subjects regularly mentioned in the annual reports of the Association, then and now.

Nevertheless, the few years immediately preceding the First World War were singularly free from dramatic happenings in the Indian tea industry, and the reports of the Indian Tea Association from 1906 to 1913 make dull reading compared with those of earlier years.

REPRESENTATION IN THE LEGISLATURES

Many of the subjects with which the Association was concerned had to be discussed with Government and its officers. It was, therefore, clear that the industry would benefit by representation in the Imperial and Provincial Councils. In the Provincial Council of Eastern Bengal and Assam, the tea industry had, to begin with, joint representation with the jute industry. Representations were made by the Indian Tea Association in 1906 urging that the tea industry should have separate representation. They were unsuccessful at the time, but the Association returned to the subject when the Morley-Minto Reforms, involving expansion of the Council, were under consideration. They called attention to the position of Ceylon 'where the planting community have always had a share of representation proportionate to the interests which they represented in the Colony' and they claimed two members in the Provincial Legislature, as well as in the Provincial Advisory Council. They also claimed a representative in the Imperial Council. In 1909 the claim was recognized as regards the Provincial Council and the tea industry was accorded two representatives on the Legislative Council in East Bengal and Assam. They were to be elected on a somewhat complicated system under

which the Assam Valley Unit, the Surma Valley and Chittagong Unit each had four votes, while the Jalpaiguri District Unit had two votes. This was considered unsatisfactory by Dooars planters, who demanded a separate seat, but while they were still pressing their claims, the partition of Bengal* was annulled. The industry was then granted one representative in the new Bengal Legislative Council and three in the Assam Legislative Council. Of these three, one was to be elected by the Assam Branch of the Indian Tea Association, one by the Surma Valley Branch of the Indian Tea Association and the third by those two branch associations alternately. The exertions of the industry to secure satisfactory representation were abundantly justified by the valuable work henceforth done by its representatives.

It will be clear from this brief summary of some of the Association's chief activities before the First World War that it had developed an elaborate and efficient organization. A decade of prosperity had not induced complacency, and the tea industry in North India was well equipped to stand the shock of war.

* In 1905 Bengal had been partitioned, East Bengal being joined with Assam in a new province and West Bengal with Bihar. In 1911 the old Bengal was restored.

CHAPTER TWELVE

TEA IN THE SOUTH: 1862–1914*

THE GROWTH OF THE INDUSTRY

There are two important respects in which the circumstances of the tea industry in South India differ from those in the North. In the first place, whereas in North India the great bulk of tea is grown in the plains, in South India the industry is entirely located in the hills. Secondly, in Assam and Bengal, tea was from the beginning almost the only plantation crop, but in South India in the early days it was very much of a subsidiary crop, which counted for little as compared with coffee, and in some of the most important areas it only began to be cultivated when the coffee industry declined.

Tea is grown today in South India in several main areas separated from each other by considerable distances. First in order of priority of planting we have the Nilgiris – described by the Royal Commission on Labour as the plateau at the junction of the Eastern and Western Ghats, at an average height of about six thousand feet. Here tea is the main plantation crop, with coffee a long way second, and rubber on a still smaller scale. Then follow three regions of great beauty in the State of Kerala – the Kanan Devan hills (almost a James Finlay preserve), Central and South Travancore. The plantations lie between the altitudes of two thousand and eight thousand feet and tea is grown almost exclusively. Next comes the Wynaad, a tableland three thousand feet above sea level, partly in the Nilgiri District and partly in Malabar, and here, too, tea predominates. Next in order of time comes the Anaimalai Hills, which constitute a forest-clad plateau in the South Coimbatore District. Some coffee and cardamoms are grown there, but tea is by a long way the main crop. In the Nelliampathies coffee was originally the principal crop, while in the Shevaroys, Coorg and Mysore coffee still predominates.

* In this chapter the writer is heavily indebted to Mr J. L. H. Williams of Brooke Bond & Company, who was for many years a leading planter in South India.

THE NILGIRIS

The first phase of the development of the tea industry in South India was confined to the Nilgiris. Information regarding the early days of tea in those mountains is very meagre, but it appears that in 1832 a Dr Christie of the Madras establishment experimented with growing tea and gave some tea plants to various people in the Nilgiris. In 1834 the tea committee distributed China seed to various districts in South India, including Coorg, Mysore, and the Agricultural Horticultural Society in Madras, but it was only in the Nilgiris that any effective use was made of it. Planting tea with China seed on a small commercial scale appears to have begun in the early fifties, though coffee and cinchona occupied most of the attention of planters and tea was very much a side-line. In 1865 tea in South India was mentioned for the first time in the *Statement on the Moral and Material Progress of India* and it was recorded that 'in the Madras plantations there are now about 13,500 plants, some of which have flowered and a supply of fresh, good seed will soon be available for the public at a fair price'. The report went on to state that many plants had been distributed gratuitously to the inhabitants of the Nilgiris and others had been sold to the planters at three half pence each.

At this time there was a camp in the Nilgiris for Chinese prisoners of war, and there is an improbable local legend that the prisoners instructed planters in the manufacture of tea. For the next authentic information regarding the industry in the Nilgiris, we have to turn to the *Moral and Material Progress Statement* for the year 1876–7. In that year there were 3,142 acres under tea in the Nilgiris, of which 1,514 acres were mature, and the yield was 235,769 lb. From this stage onwards growth was steady, and the acreage under tea in the Nilgiris rose to 4,448 acres in 1881, 5,343 acres in 1889 and 6,799 acres in 1895. As early as 1877 it was reported that a little tea was grown on some coffee estates in Coorg, but the amount was negligible.

TRAVANCORE

The next phase in the development of South India tea was the result of the decline of the coffee industry. Coffee leaf disease appeared in Ceylon in 1869 and in South India a year or so later. The effects were so disastrous that before long planters began to look for alternative crops.

In Central Travancore, the first coffee plantations had been established in 1862 by J. D. Munro on Hope Estate, and his example was soon followed by Stevenson, Baker, and Richardson. The difficulties faced by these pioneers were great indeed, and Richardson, in a graphic description quoted in the *Travancore State Manual*, tells us on the journey by pony from Kottayam to Peermade that 'there were only six places on this long and weary trek where a planter could obtain fire to light his cheroot'.

Nevertheless, the cultivation of coffee in this district spread rapidly, until in the late sixties, borers, and in the seventies, leaf disease, played havoc with the crops and planters began to consider alternatives. Tea naturally came to their minds. In 1864 tea had been planted as an experimental measure in the government gardens in Peermade. It had flourished, but – perhaps, according to the *Travancore State Manual* because of the lack of experienced manipulators for curing the leaf – Government had not seen any hope of an ultimate profit and had abandoned the experiment. In 1895 a visit by Richardson to the Nilgiris led him to advocate the planting of tea. J.M. Parker of Penshurst followed this advice and opened up twenty-five acres with China tea seed brought from Catesfield in the Nilgiris, and at about the same time Maltby at the Mount and Richardson at the Ghauts each put down a couple of maunds of Catesfield tea seed. Somewhat later, Parker and Acworth introduced tea seed from North India.

These early attempts seem to have been successful. Other planters soon took to tea and by 1906 in the districts round Peermade there were eight thousand acres of tea and only five hundred acres of coffee.

In the meantime there had been considerable development in the Kanan Devan Hills in North Travancore.* Wellesley erected a temporary fort in these hills during the war with Tippu Sultan, but as far as is known, no other European visited the locality until Ward and Connor carried out a survey in 1840. A boundary dispute in this area arose between the Madras Government and the Travancore State authority and in 1877, John Daniel Munro, who had been Superintendent and Magistrate of the Cardamom Hills Division in Travancore, just south of the Kanan Devan Hills, represented Travancore on the Commission appointed to settle the question. Munro evidently saw the possibility of what was officially described as 'practically unexplored regions covered by thick fever-haunted forests, the abode of elephants . . . having no means of communication', and in 1879 obtained a concession from the Pooniate Raja of 227 square miles in the Kanan Devan Hills for Rs 5,000, together with a promise to pay an annual sum of Rs 3,000. The Travancore Government disputed the right of the Raja to make this grant, but ultimately had to recognize its validity.

Associated with Munro were Henry Gribble Turner, ICS, Postmaster-General and his half-brother A. W. Turner, who were joint concessionaires with Munro. They formed the North Travancore Land Planting and Agricultural Society with a capital of Rs 5 *lakhs*, most of which was subscribed by Madras civil servants, and almost immediately A.W. Turner came to the area to clear land at Devikulam for a cinchona

* In this section the writer is indebted to Messrs James Finlay & Company and to the general manager of the Kanan Devan Hills Produce Company for much help.

plantation. Soon after this a plantation at Munnar was opened out with cinchona and coffee, and with the help of a Chinese, John Ajoo, Turner also planted thirteen acres of tea at Munaar. Donovan, Dickinson, Baron von Rosenberg, and others soon followed suit – no doubt stimulated by the cinchona boom of the eighties – and before the end of the decade there were twelve resident European planters in the Kanan Devan Hills. Unfortunately the cinchona boom soon came to an end and a general depression ensued. A number of the pioneers had to give up and those who struggled on fared badly.

In 1893 Sir John Muir, Bart. of James Finlay & Company, visited the High Range and the Finlay Group bought out the concessionaires for the North and South Sylhet Tea Companies. A little later the Consolidated Tea and Lands Company was formed to take over those two companies. In 1897 the Kanan Devan Hills Produce Company purchased the estates from the Consolidated Company and also acquired a number of other estates which had been established in the High Range. The new owners rapidly opened up land in all directions, planting almost exclusively tea. By 1896, six thousand acres in the Kanan Devan Hills were under plantation crops, of which tea, cinchona, and coffee occupied 3,135, 1,391, and 1,357 acres respectively. Of the tea acreage, 2,820 acres were less than two years old and 2,500 belonged to the Finlay Group.

Tea cultivation continued to develop rapidly in all three main divisions of Travancore and by 31 December 1904, there were sixty-six tea plantations, covering an area of 24,711 acres. The breakdown by districts and classes was as follows:

	Mature	*Immature*	*Total*
Kanan Devan Hills	12,223	243	12,466
Central Travancore	7,823	592	8,415
South Travancore	3,805	25	3,830

THE WYNAAD

We must now turn to developments in the Wynaad. It is not easy to piece together the scattered items of information about the growth of plantations in that district, but it is clear that the coffee industry there has a history going back to 1844. According to the issue of *Planting Opinion* of 4 July 1896, in 1844 one G. J. Glasson opened up a coffee estate at Vayitri, while in the following year, Colonel Ouchterlony secured a long lease of Ouchterlony Valley for his brother James. Three coffee plantations were opened up in that year.

> It was with great difficulty the above-named gardens were opened out; the dense forest swarmed with elephants and other wild beasts, and often smugglers (*Moplahs*) going through with smuggled sandalwood from the Mysore

Province on their way to Ernaad Taluq, Malabar. There was great scarcity of labour and coolies had to be imported with much trouble and expense from Ernaad Taluq, from Coimbatore, and Salem District, and from Mysore Province.

The assistants lived on the estates in what can only be described as shacks, while the manager lived in slightly less discomfort in a traveller's bungalow six miles away from the first estate.

It was with difficulty that provisions were to be got in the early days of the Ouchterlony Valley, bread, meat, sugar, etc., from Ootacamund. Coarse rice was brought up to the estate store on pack bullocks by Brinjarrees from Sultan's Battery, and at times horse gram (*cultee*) was brought. This was the coarse food that the superintendents and their men had to subsist on and be contented . . . They looked very sickly suffering from malarious fever and enlargement of spleen. The superintendent could get no medical aid in those early days. Whenever intermittent fever came on, the medicine they were taught to take was Tartar emetic, and during high fever and headache a couple of horse leeches were applied to the temples until they drew blood and gave relief.

One or two more estates were soon opened and from the fifties onwards development was steady. In 1865 coffee covered 14,613 acres in the Wynaad. In the seventies the dread coffee leaf disease made its appearance, and a little later competition from Brazil depressed world markets. It is not easy to obtain an accurate picture of the coffee industry over the next two decades. Some contemporary or near contemporary accounts might give the impression that the industry was almost wiped out, but, in fact, coffee production in the Madras Presidency showed no signs of decrease at this time. The position must have varied from area to area. A writer in *Planting Opinion* on 21 November 1896 describes 'the complete desolation which now reigns in the North Wynaad, except for a few patches of coffee under shade'. In the following issue, however, he writes much more cheerfully of the South-east Wynaad and remarks particularly with regard to the Nellakote (now Nellakotta, near Gudulur) area that it is now in a satisfactory condition. Coffee flourishes well, he comments, if it is well shaded.

Be this as it may, planters in the Wynaad began to turn to tea as an alternative, or supplementary, crop and in 1896 one hundred acres were planted up with tea.

Unfortunately, at the turn of the century, many of them sold their coffee estates and took to gold mining. When the gold venture ended in disaster, they planted tea and to this day there are estates in which horizontal shafts are found amongst the tea.

THE ANAIMALAIS

Another important area in which tea began to be planted at about the time was that known as the Anaimalais. In 1863 certain areas in those

hills were thrown open to purchase, and the first application was that of R. J. Lowry of the Carnatic Coffee Company. Others soon followed, but a number of purchasers found it impossible to make a profit from coffee cultivation and relinquished their land. Most of the Anaimalais was then classified as reserve forest, but in 1896 the Government agreed to make a considerable area available on thirty years leases for the cultivation of tea, coffee, cinchona and other crops, the Forest Department still retaining the right to resume these lands. Applicants were numerous and included 'Carver' Marsh whose impressive statue at the top of the Anaimalai Ghat Road looking down the Parambikolam valley across the entire district symbolizes the commanding position he came to occupy in the district. The difficulties experienced by 'Carver' Marsh when he opened up the Paralai estate in 1897 are graphically described by C. R. T. Congreve, in his excellent book on the Anaimalais. Labour, he tells us, was non-existent, 'and the few jungle men found in the Anaimalai Forest had never been used to doing any work'. The only form of transport consisted of coolies whose loads were limited to about 50 lb and as there were no bazaars or shops estate labourers had to bring their own food with them. 'The usual practice was for them to come up carrying six or seven days food. While it lasted they worked and then returned to their villages for three or four days.' Marsh, Congreve, and a government surveyor named Loam, lived in conditions of great discomfort.

> The monsoon proved to be a very continuous and heavy one, and the discomforts endured by all of us living in temporary houses with mud floors and thatched roofs, were very considerable. Every room leaked; there were no doors and windows, the wet and mist soaked into everything in the building, and the only possible way of maintaining any sort of dryness was to keep a large fire burning on the floor in the middle of the room. This was done continually, and frequently the smoke was so heavy that the only place to sit was on the floor, and even then one's eyes were full of it. . . . Throughout the first year, the servant difficulty was very great. No ordinary low country servant was willing to put up with the great hardships and difficulties entailed by residence in the Anamallais, and it was quite a common happening on a Monday morning to wake up and find our whole staff had bolted at daybreak with the shandy coolies, and that we were left to fend for ourselves until such time as it was possible to obtain other servants. On these occasions Loam proved a tower of strength. A born cook, he practically always did the whole of his own cooking on a series of kerosene oil tins built into the stone work in the form of ovens along the inside edge of his verandah, where he used to sit in a chair attending to the cooking of the day. He was always willing to come to our rescue, and used to feed us until such time as a new lot of servants could be induced to face the devils and dangers of the terrible Anamallai forests.

Marsh and his colleagues were not deterred by these difficulties, and others soon followed their example.

The planters who opened up this district envisaged the cultivation of coffee rather than tea. According to Congreve, many planters considered that 'the soil was too light and the droughts too pronounced for tea to do any good'. E. J. Martin, a Ceylon planter, disagreed, and planted tea in the Monica Estate early in the twentieth century. Congreve tells us that Martin was a great believer in drainage and had contour drains carefully traced and cut every forty feet. He was equally meticulous about the alignment of the bushes, and went so far as to plant with a lining rope, to ensure that every plant was in its right place. Martin's belief in tea caught on, and tea rapidly grew in importance.

One of the difficulties facing the pioneers, either in coffee or tea, was the absence of communication between the Anaimalais and the outside world, and it was not until 1903 that the first cart road was constructed by the PWD, the famous 'Carver' Marsh being in charge of the work under the contractors, Mitchell and Mackenzie. When Lord Ampthill, the Governor of Madras, formally opened the road, the planters, who had just formed the Anaimalai Planters Association, used the opportunity to petition for the construction of branch roads and also to ask that rubber be added to the list of crops which might, under the terms of the lease, be grown.

This prosaic account of development perhaps fails to make clear the extraordinary courage and determination which enabled the pioneers, here, as in the other tea districts, to cope with the difficulties of opening up jungle land. They had to begin by cutting bridle-paths through dense forests; they had to persuade primitive tribal people to work for them; they had to live in considerable discomfort in crude shacks built by themselves; and they had to act as doctors and surgeons to their labour forces. They succeeded because of their toughness and by 1900, 2,543 acres in the Anaimalais had been opened with plantation crops – coffee 1,115 acres, cardamoms 843 acres and tea 545 acres. At this stage the Government decided that it was desirable to preserve the forests and no further applications for land were entertained until 1911.

The South India position at the end of the century can be summarized as follows. Tea was an old-established crop in the Nilgiris, was developing rapidly in the Wynaad and Travancore and had begun to be planted in the Anaimalais. According to the United Planters Association of Southern India Report for 1897 nearly 21,000 acres in South India were under tea cultivation, of which about 6,300 acres were less than two years old. Production in South India was about 2,900,000 lb. The district breakdown was as follows:

District	Area under tea (acres)		Total area under tea (acres)	Total area under plantation crops (acres)
	Less than two years old	Over two years old		
Nilgiris	155	7,022	7,177	31,584
Central Travancore	1,684	3,623	5,307	6,586
South Travancore	159	5,410	5,569	7,661
Kanan Devan	1,584	581	2,165	4,914
Wynaad	Not given		1,032	13,093

Tea was not produced in Mysore and was not significant in Coorg.

During the next two or three decades, progress was even more rapid, as will be seen from the following figures –

(PRODUCTION IN LB)

	1900	*1910*	*1930*
South India	6,499,000	19,968,000	58,000,000
All India	188,589,000	261,927,000	433,000,000

The tempo of development was, however, not quite as uniform as these figures might suggest. At times, poor prices and the belief that the supply of tea was outstripping world demand led to abandonment of some areas as a measure of restriction – even before the more formal regulation of production in the thirties – and there was considerable fluctuation in areas plucked or rested from year to year. Nevertheless, South Indian tea was steadily growing in importance and at the beginning of the Second World War it represented sixteen per cent of the production of India.

EARLY PROBLEMS OF THE UNITED PLANTERS ASSOCIATION OF SOUTHERN INDIA

Unlike the pioneers who had to fend for themselves, the next generation of planters in South India were able to shelter under the wide umbrella of the United Planters Association of Southern India. The establishment and growth of that Association will be studied in a later chapter, but it will be of interest to see what were the main problems which the Association had to tackle in the last decade of the nineteenth century. It must, of course, be remembered that during much of our period tea was of considerably less importance than coffee and played a minor part in the discussions. Nevertheless many of the subjects discussed were of great importance to the future of the industry and require mention

here – though some of them such as labour and scientific research will be treated in separate chapters.

First and foremost came problems connected with labour. Act XIII of 1859, under which labour was bound by contract, was not working well and particular difficulties arose from the fact that several different Indian states and provinces were the recruiting grounds for plantation labour. A labourer who made his way to Mysore, for instance, could not be pursued in the Courts there for a breach, in Madras, of his obligations under the Act, and there was perpetual clamour amongst South Indian planters for an extradition procedure. This will be discussed in a later chapter.

Apart from labour, the United Planters Association's annual meetings and reports in the last decade of the century were largely concerned with problems of currency, freights, roads, and communications, and of these, currency aroused the greatest indignation. The gold value of the rupee fell seriously in the early nineties and as anybody presenting silver at the Calcutta or Bombay mint could have it coined into rupees, the issue of rupees was excessive. In 1893 the coinage of silver was suspended, with the object of gradually raising the value of the rupee from one shilling and twopence to one shilling and fourpence. The policy produced the desired result, but planters, both in South and North India, bitterly resented the change and from 1893 onwards, South Indian planters maintained that the real reason behind the new policy was the interest of government servants. 'The establishment of an arbitrary ratio is an idea which lies deep in the heart of every employee of Government,' said T. Clark at the 1893 conference, 'and we can all sympathize with them because they have to remit home considerable sums of money and the loss on these remittances increases yearly until it becomes a question whether it is advisable to stay on in the country and receive a salary of which so large a part is lost in exchange on remittances.' The criticism was not altogether fair, but it represented the general feeling of planters, who pointed out that the local price of commodities which were exported 'was largely regulated by the gold price of the exchange of the day'. The real trouble was that planters had to meet most of the expenditure of their estates in rupees and they would now get fewer rupees for their tea. A long and well-reasoned memorandum was produced by the Wynaad planters and certain other associations in 1894, but at the annual meeting H. Gomperz of the Shevaroys subjected it to a minute and destructive analysis and argued that the United Planters Association did not have sufficient information about India's imports and exports to justify a dogmatic attitude. He evidently convinced his audience and the memorandum was not submitted.

No further action seems to have been taken until the Indian Currency Commission examined the question in 1898. Two leading planters,

Acworth and Hodgson, put in memoranda and gave evidence on behalf of the United Planters Association of Southern India, but their case was rejected. In 1900 the Government of India resumed the issue of silver rupees and the controversy was at an end.

Shipping freights figure prominently in the reports of the early annual meetings. In 1893 W. L. Edmistone of the Nilgiris complained that the rates from South India ports to Britain were from thirty shillings to sixty shillings a ton as compared with twelve to fifteen shillings from Calcutta and ten shillings from Colombo. According to Edmistone the shipping companies contended that vessels at intermediate ports had to pay harbour dues on their total tonnage irrespective of the freight they received and that it was almost impossible for vessels to fill at Madras and the west coast ports. In 1894 the complaint took a somewhat different form. A combine known as the West Coast Chartering Coalition Company had been formed in 1876 to provide tonnage at reasonable rates in competition with the British India Company, but Hodgson alleged that the agents of the tea companies did not give gardens the benefit of these rates, but agreed amongst themselves every year what rates they would charge. Opinion was not unanimous on this matter. Some members argued that the agents obtained better rates for planters than could be obtained otherwise. Nevertheless Hodgson's resolution demanding that the tea companies' coast agents should show freight and commission separately in their accounts, was carried. In 1895 the United Planters Association resolved to approach the individual steamship lines direct for freight quotations, though they apparently realized that planters would have to guarantee cargoes. The approach was presumably unsuccessful as no further reference to the subject was made in the annual meetings.

In South India as in the North India tea districts, development was hampered by the lack of good roads – or in some districts, roads of any kind – and it is significant that at a meeting in 1895, even before the formation of the United Planters Association, a resolution was passed calling the attention of the Government to the sad state of communications. In 1895 the complaint was raised again and a planter from the Lower Pulneys stated that all produce had to be transported to the plains by cooly loads and that this was impossible when the rivers at the foot of the hills happened to be in flood. He went on to complain that there was no road to the sub-court thirty to thirty-five miles distant, or to the police station and he pleaded that if it were financially impossible to build a cart road, at least an eight-foot bridle-path should be constructed. At the annual meeting in 1896 representatives of other planting districts rushed forward with their competing claims and the Kanan Devan representative spoke of the lack of bridges. He stated that even government mails were sometimes delayed for twelve or fourteen days

owing to the lack of a bridge on the river between Travancore and British India.

In 1897 the subject was again raised, but the complainants from the Lower Pulneys took the unexpected line that in view of the financial stringency resulting from a widespread famine it would be unwise to press the Government just then. In 1899 satisfaction was expressed that the Government had at last provided funds for roads in some of the tea districts and planters had perforce to direct their complaints to the length of time that it had taken to achieve this result, as well as to the parochial attitude of certain district boards which were said to take no trouble over roads leading up to the Nilgiris. None of these discussions was in itself of great importance, but they illustrate the practical difficulties which South Indian planters had to face.

It will be noticed that most of the subjects dealt with were the same as those which occupied the attention of the Indian Tea Association. Two subjects of a slightly different character were discussed at about this time. In 1893 Baron von Rosenberg put forward the novel proposal that a planters bank should be established in order that loans might be obtained by planters at five per cent or six per cent instead of the normal nine per cent to twelve per cent. The Baron suggested that as a first step towards this end planters might unite and do all their business through one bank alone and thus obtain more favourable terms. The next stage would be the establishment of a planters bank which would do the planters business only. The conference does not seem to have been greatly impressed and contented itself with thanking the Baron for the excellent paper he had read.

Tea planters in South India were still learning their trade, and quality was often a cause of anxiety. It was apparently felt at that time that South Indian tea could not compete in the British market with those from the older tea districts of North India, and a commentator in *Planting Opinion* in December 1895 wrote as follows:

> Turning to Southern India, where the teas do not appear to combine the qualifications most suited to the home market, it would be advisable for us planters here to rely on our retail trade. We should stimulate and foster, as far as lies in our power, the taste already acquired in Persia, Bombay and other parts for the special kinds of tea we manufacture. In this way, Southern India will have a market of its own and be quite independent of other districts. Nay further, it will benefit others by relieving the home market in a great measure of the increasingly heavy influx that pours into it year by year.

This was, however, a very temporary difficulty and it was not long before South India teas could hold their own anywhere.

At the beginning of the twentieth century, planters were much exercized over the incidence of customs duties in the United Kingdom and

Ceylon. In 1904 the United Kingdom duty on the import of tea was raised from 6d to 8d per lb and though planting opinion was divided as to whether this increase would affect consumption, there was unanimity as to the importance of pressing the British Government for a preference in favour of India and Ceylon teas. Feeling on the subject was particularly strong in view of the rapid increase in the production of tea in Java and at the annual meeting of the United Planters Association the chairman went so far as to speak of 'Russia, Persia and our own beloved country having joined in a tariff war against us' – Russia having raised the tax on teas imported through Europe, and Persia having increased the duty on tea generally. In 1905 the United Kingdom duty was again reduced to 6d and a further reduction of a penny per lb was made in the following year. This did not affect the demand for preference. On this point there was complete agreement between the Indian Tea Association and the United Planters Association of Southern India, though the Indian Tea Association (London) considered that nothing could be done until after the next election. Opinion in the Ceylon Association appears to have been divided as to the action to be taken, but planters in both India and Ceylon subscribed to the Anti Tea Duty League, which appears to have been concerned with the abolition of the duty rather than with preference. The demand for preference was maintained enthusiastically through the pre-war period, but without results.

Akin to this topic was the demand for the abolition of the Ceylon import duty on tea, but this, too, was unsuccessful, and the Government of India flatly rejected the proposal of the United Planters Association for the imposition of a retaliatory duty.

Much attention was also given in United Planters Association meetings to schemes for market expansion, both in India and abroad. In 1901 the Calcutta scheme for the promotion of the sale of tea in India, through the agency of Andrew Yule & Company, was supported with donations of tea. Under this scheme small packets of tea were sold for one pice in many villages and each packet had a lottery ticket attached to it. Another scheme was apparently run by Parry & Company, from funds provided by the planters associations of Travancore and after the formation of the Indian Tea Cess Committee that committee subscribed to the scheme for about six months. Thereafter this contribution was stopped, partly because operations were not proving successful and partly because it was regarded as an interference with private business.

Other topics discussed in the first decade of the century included the familiar themes of adulteration of tea – which appears to have troubled South India long before the Indian Tea Association were worried about it – the need for better roads, though much improvement had been

effected, and the construction of a railway to the coast. The establishment of a good west coast harbour was also a recurring demand. Not unexpectedly, North Mysore voted for Mangalore, South Mysore and Coorg for Tellichery, the Nilgiris-Wynaad for Calicut. It was agreed that some of these ports were impracticable for the purpose, and the matter was left to the Government to decide.

Another matter which caused concern was the establishment of liquor shops – of which the Government had a monopoly – near plantations, with a resulting increase in drunkenness. The Association complained that liquor shops were established by the Abkari Department purely on revenue considerations and that the licensees were giving credit to labourers – otherwise, said C. E. Abbott of the Wynaad, at the annual meeting in 1905, 'it is impossible for a cooly, who gets 12 annas to buy grain at present prices and get drunk too'. The Association's remonstrances were successful and the local Association began to be consulted as to the location of the shops.

One subject of correspondence will perhaps comfort planters either in the North or the South today, who think that the hand of the Government bears heavily upon them. As we have seen, in 1905 the Chief Commissioner of Assam was very unpopular with planters and it may not unfairly be said that many of his strictures on them were unjust. G. L. Acworth, the Planting Member of the Madras Legislative Council, accordingly asked each South Indian district association to pass a vote of sympathy with the Assam planters on account of the 'systematic oppression' they were suffering and it is an interesting comment on the tolerance of British bureaucracy at that time that Acworth expressed himself in language that no State Government in India today would tolerate.

The only other subject of discussion in the early years of the century which requires mention is that of adjustment of world supplies of tea to demand. In 1901 the Ceylon Association proposed a reduction of the area plucked and the Indian Tea Association supported the proposal and drew up a scheme to implement it. The United Planters Association doubted the wisdom of the plan, but before a final decision was taken the Ceylon Association abandoned it for lack of adequate support by its members. In 1902 various schemes of regulation were prepared, but all were abandoned and it can be said that, on the whole the United Planters Association of Southern India, unlike the Indian Tea Association, was opposed to regulation of production. In practice, some estates evidently took a view of the market and from time to time 'rested' tea which on purely physical considerations could have been plucked.

The reports of the meetings of the United Planters Association in this period are full of interest. Whereas tea in the North was to some extent

controlled by a few agency houses – and therefore far from democratic – the membership of the United Planters Association of Southern India consisted in the main of sturdy individualists. Many of them spoke bluntly and were not prepared to be dragooned by anybody. Their views often lacked balance, but there was a great deal of corporate sense and altogether at the outbreak of the First World War the Association was in a healthy and progressive phase.

CHAPTER THIRTEEN*

THE FIRST WORLD WAR: 1914–19

After initial alarms and anxieties, the First World War was a time of prosperity for the Indian tea industry. The main difficulties were those arising from the shortage of shipping, or from the interpretation of the United Kingdom contract for the purchase of tea, or from the release of European planters for military service. These difficulties, however, did not prevent the industry from paying very satisfactory dividends and emerging from the war period with increased financial strength. At the annual meeting of the Indian Tea Association in Calcutta in March 1916, the chairman referred to 1915 as a time of exceptional prosperity and stated that the satisfactory profits made by most concerns were beyond question the outcome of the war. Seton's report on the results of the working of fifty leading Indian companies for 1915 shows an average ordinary dividend of 11 per cent – many of the dividends concerned being tax free – while the summary of rupee company results published in the Indian Tea Association Report for that year gives an average dividend of 24 per cent in Assam, 47 per cent in the Dooars and 26 per cent for North India as a whole. In the March 1917 meeting the chairman again congratulated the industry on having passed through another year so well, though there was, he said, a considerable quantity of the previous season's produce still unshipped. For 1916 the average dividend of Seton's listed companies rose to 13½ per cent, while the figure for Sterling companies given in the Indian Tea Association's report was 14¼ per cent – many dividends again being tax free.

In 1917 shortage of shipping became more acute, but in March 1918 the chairman was nevertheless able to say that the position was satisfactory and that the bulk of the 1917 tea would be sold before the 1918 tea came on the market. Seton's listed dividends for 1917 averaged 13 per cent.

* Chapters 13 and 14 deal mainly with North India as it has been impossible to obtain adequate documentation for South India in this period.

In 1918 sterling dividends averaged 13¾ per cent and in the companies listed in the Indian Tea Association's Report reserves were about 30 per cent of capital. Except for a sharp drop in 1916–17, exports of Indian tea had risen steadily during the war and in 1918–19 amounted to 323 million lb or 11 per cent more than in the last pre-war year. In March 1919 the Calcutta chairman rather understated the case when he declared that the industry had come through the war without disaster.

The war nevertheless gave rise to some difficulties. Perhaps the most serious of them arose from shortage of shipping, which compelled the British Government to announce in February 1917 that exports of tea from India to the United Kingdom would be restricted to an average of seven thousand tons per month inclusive of tea purchased by the War Office for military use. Five hundred tons were bought separately for military and service requirements and the remaining 6,500 tons monthly were allocated amongst the various shippers on the basis of three years' average exports. A committee, representing the Indian Tea Association, the Calcutta Tea Traders Association, the Calcutta Liners Conference and the Government Agents for War Office Contracts, was established, with the Collector of Customs at Calcutta as its chairman, to administer the allocation.

BULK PURCHASE

Later in 1917 the British Government proposed to enter into arrangements to purchase, for military requirements, a portion of the balance of the tea crops of certain gardens. This was regarded by the Indian Tea Association as unsatisfactory and the proposal was abandoned in favour of a scheme based on calling for tenders from all India and Ceylon producers. Still later in 1917 this scheme was superseded by a plan under which all tea required for civil or military purposes in the UK, as well as for military purposes elsewhere, would be purchased by the United Kingdom Tea Controller. The quantity required up to 1 May 1918 was calculated to be forty per cent of the total 1917 crop and every estate was therefore invited to tender up to forty per cent of its 1917 production of all grades of black tea. The contract price – f.o.b. at port of shipment – was to be based on the average auction price for the respective grades in 1911, 1912 and 1913, with an addition of a half-penny a lb for the increased cost of production. It was agreed that if the average increase in cost of production could be shown to be as high as three-farthings a lb or more, a further one farthing would be added to the price. Lieutenant-Colonel W.M.Kennedy, CIE, chairman of the Assam Labour Board, was appointed Tea Commissioner for India, representing the United Kingdom Ministry of Food and an advisory committee of producers and others was set up to collaborate with him.

The scheme was regarded by the North Indian tea industry as

reasonable. At the annual meeting in March 1918 the Calcutta chairman thus commented on it:

No section of the trade, especially the producing section, can be expected to welcome any form of Government control, but if control had to come then the scheme which has been brought into force may be considered as more or less satisfactory, and though the return to the grower will be but moderate, still it provides for the marketing of a fair proportion of our crops at rates which afford us a reasonable profit while the amount of freight which has been placed at the disposal of the industry for the transport of the Controller's purchases is a good deal in excess of what we might have expected were we still carrying on under previous conditions. At the same time I think it only right clearly to express the fact that the tea growing industry were in no way responsible for the situation which arose at home necessitating control. In the early part of the season we were starved as far as freight facilities were concerned, all commodities seeming to have preference over tea, and the large accumulations both here and at Chittagong were actually a matter of great inconvenience to us and the port authorities at both places.

Producers were subsequently given the opportunity of tendering to the Food Controller for a further percentage of the 1917 crop and a little later a contract on the same lines as in 1917 was arranged between the United Kingdom Food Controller and producers for 66⅔ per cent of the 1918 crop. After this 66⅔ per cent had been delivered, the termination of the war and the improvement in UK stocks of tea made it possible to return to free sales and no further contracts with the Food Controller were made.

In the meantime one serious disagreement between the industry and the Food Controller had arisen. Although the contract with the Food Controller provided for payment in rupees, as a matter of convenience and at the request of the United Kingdom Food Controller, producers had agreed to pass business through the ordinary channels of bills of exchange. In 1918 the sterling value of the rupee rose rapidly and the Food Controller declined to accept responsibility for the resulting position. The matter is thus described in the Annual Report of the Indian Tea Association, Calcutta, in 1918.

In March and April great difficulty was experienced in negotiating bills of exchange for the value of teas shipped to him, the banks being, at the time when the bills were submitted to them, unable to take them up and provide the necessary rupees. By the time the bills could be negotiated exchange had risen and it was accordingly necessary to draw against the Food Controller for a higher sterling amount to provide the same number of rupees; or alternatively, where the bills had been sent him without negotiation, it was necessary to submit bills for the exchange difference. The Food Controller declined to admit that he was liable for these exchange differences, and a lengthy discussion has taken place both at home and in India on the matter. There is, the Association have throughout maintained, no room for doubt regarding it.

Apart from any question of equity, the terms of the contract for the 1917 crop were quite explicit, and provided for payment in India in rupees. Shippers were, therefore, entitled to receive payment in rupees, but at the request of the Food Controller, through the Tea Commissioners here, they consented to pass the business through the ordinary channels. Fluctuations in exchange were accordingly no concern of theirs, their position being, as stated, that they were entitled to receive so many rupees for their shipments. Notwithstanding the fact that the terms of the contract clearly supported the view of the Association, the Food Controller maintained his attitude, and eventually the London Association demanded arbitration on the point under the arbitration clause in the contract.

Eventually the Food Controller accepted the contention of the Indian Tea Association. This controversy is of particular interest, since in respect of the bulk purchase from Pakistan the United Kingdom Ministry of Food adopted an equally intransigent attitude in 1949 when the United Kingdom devalued the £ while Pakistan maintained the value of the rupee. In that case, too, the Ministry ultimately had to accept the industry's contention.

FINANCE

In the early years of the war, exchange restrictions, together with long delays in shipping and selling tea, involved the industry in considerable anxiety as to the provision of day-to-day finance. The problem was lucidly explained in the Report of the Indian Tea Association, Calcutta, for 1917.

> Tea concerns obtain their finance requirements either (a) by selling bills of exchange on the Calcutta market against credits established in London, or (b) by drawing against shipments as these are effected, or (c) by sales of tea in Calcutta, the proceeds of these sales being realised in Calcutta: – or (d) by remittances from home. The third method of course gives facilities for providing only a small part of the financial requirements of the industry, and in any case local sales had, early in the year, to be practically suspended owing to the difficulties buyers had in selling bills of exchange against their purchases. The matter was discussed with the Exchange Banks Association, and it was ascertained that they were unable to give any definite undertaking as regards the future; it appeared, indeed, that unless conditions changed the banks might find it necessary to suspend purchases of bills altogether unless shippers could provide them with the necessary cover, in the way of remittances, against bills sold.

The Indian Tea Association therefore suggested to the Government of India that if tea agencies could not finance their estates by sale of bills on London in the ordinary way, Government should arrange for them to negotiate these bills against special allotments of Council Bills. The Government did not consider the proposal practicable, but pointed out

that His Majesty's Government had now decided that all tea exported to the United Kingdom, whether for military or civil purposes, would in future 'be included in the lists of exports of importance for the prosecution of the war for which financial facilities are provided'. Banks were in fact authorized to deal with private teas in the same way as in the case of War Office teas. This only went half-way towards the solution of the problem, since the new facilities did not become available until tea was actually shipped. The remainder of the difficulty was, however, largely removed when the United Kingdom Ministry of Food undertook purchase of tea for civil as well as military requirements.

REGULATION OF SALES

In 1917, expectations that limitations on the export of tea from India would continue led to a proposal that the industry in Ceylon and India should curtail production by fifteen per cent of the previous year's crop. Discussion took so long that nothing could be arranged for 1917, and by 1918 the necessity for the scheme had come to an end.

Restriction of exports to the United Kingdom necessitated some limitation of Calcutta sales. Regular Calcutta sellers were not entitled to any share of the available steamer space to the UK and it seemed unfair that they should be swamped in the Calcutta market by producers who normally sold in London. The Indian Tea Association, Calcutta, considered that teas normally sold in London should not be offered for sale in Calcutta, but in 1917 a compromise was arranged under which the sale in Calcutta of 'London teas not usually sold in the Calcutta market should be restricted to twenty per cent of the teas catalogued for sale'. The scheme worked well for two years. An important element in it was an agreement that there should be no private sales of any balances of the crop. In 1918, owing to a misunderstanding of the agreement, some balances of 1918 crops were privately sold. This led to the abandonment of the agreement.

TEA CHESTS

The supply of tea chests which were normally shipped to India from Britain, became a cause of anxiety in the middle of the war, when the Home Government placed an embargo on the importation into the United Kingdom of plywood and box boards. Representations were made by the Indian Tea Association through the Government of India and the embargo was removed, but at the same time the Government of India asked that inquiries should be made as to the possibility of extending the manufacture of tea chests in Bengal. In 1916 the Calcutta committee reported as follows:

> The difficulty experienced so far has been to obtain suitable timbers, for it is

quite essential that any wood used should be non-resinous, and free from any smell which would taint the tea. It will be observed that Messrs Davenport & Company, who are closely connected with the manufacture and importation of wooden chests, remark in their letter of 9 August that the position is that the bulk of the timber available on this side of India is not suitable, and that the supplies of such timbers as are suitable are annually becoming scarcer and will soon, apparently, not be available at all. Apart from this aspect of the matter, is the question of obtaining linings for wooden chests. As Government are no doubt aware, wooden chests require to be lined with tea lead, and in normal times there is no difficulty in obtaining such supplies as are required. At present, however, it is extremely doubtful whether, even if the wood for the boxes were available in sufficient quantities, it would be possible to obtain the lead linings and the necessary materials – nails, bands, etc., for completing the boxes.

After this representation the matter appears to have been dropped.

TAXATION

The war-time prosperity of the tea industry naturally attracted the attention of the Indian Finance Member and in his 1916 Budget he introduced an export duty of Rs 1/8 per hundred lb of tea. The Indian Tea Association argued that such a duty in effect gave an advantage to the teas of all other countries and urged that, even if the tax could not be dropped, it should be regarded as very temporary. The Finance Member pointed out that Ceylon had imposed a similar duty. He was not impressed with the danger of competition from Java and in view of the uncertainty of the future financial position, he could not promise that the duty would be temporary.

In 1918 the industry fell still more seriously into the tax-gatherer's net. Up to that time the income of tea concerns had been regarded as agricultural in character and therefore exempt from income tax. An opinion was given by the Advocate-General in 1916 to the effect that income from the sale of tea was in fact liable to tax and when in 1918 the Government of India amended the Income Tax Act, they decided to give effect to that opinion. Needless to say, the Indian Tea Association protested strenuously, but in vain. The Association was, however, successful in resisting the proposal to assess to income tax the value of rent-free quarters of managers and others.*

MILITARY MAN-POWER

Numerous problems arose with regard to the supply of coal and other requirements of the industry, but they did not attain the magnitude of the corresponding problems in the Second World War, nor was the industry so severely handicapped in the First as in the Second World

* See Chapter 37 on Taxation

War by the demand made on European man-power for military purposes. Planters showed considerable eagerness to volunteer and numerous discussions took place between the Association and the authorities as to the number who could be spared. A return prepared in the latter part of 1918 showed that out of a European staff which numbered 1,437 before the war, 310 had joined the Forces. Planters were also employed on duties connected with law and order, but the industry fortunately suffered no man-power demands comparable with those which were made in the Second World War for the numerous road-making projects in North-east India and the evacuation of refugees from Burma. The impact of the First World War on the industry was, indeed, altogether less severe than that of the Second World War.

CHAPTER FOURTEEN

THE POST WAR DECADE: 1920–30

Although the position at the end of the war thus appeared healthy, two elements of future weakness were present. In the first place war-time prosperity had stimulated new planting and the all-India area under tea had risen from 624,000 acres in 1914, to nearly 692,000 acres in 1919. In North India the tea planted during the war had not yet come into bearing, but the stimulus of war-time demand had given production a sharp upward jump between 1914 and 1915 and the higher level of production was maintained throughout the war. South India had been growing in importance in the tea world since the beginning of the century and during the war, production in that area had risen from 24,500,000 lb to 34,500,000 lb. In 1919 tea production in India as a whole was 64 million lb greater than in 1914 and there was a real danger of an excess of supply over demand.

A second disturbing feature was the seriousness of competition from the Netherlands East Indies. Tea there was mainly grown by Dutch and British companies, and efficiency was the watchword. The war-time restriction of United Kingdom imports to Empire teas had made it difficult for India and Ceylon to supply the needs of outside markets. Java and Sumatra producers had set themselves to capture those markets and for this purpose had made strenuous efforts to improve the quality of their teas. Alarmed at the rapid expansion of exports to the USA and Canada from the Netherlands East Indies, Empire tea producers sought tariff protection in certain countries.

In 1917 the Australian Government decided to exclude all non-Empire teas and attempts were made to secure similar restrictions in Canada with regard to Java teas. It was claimed that this was of particular importance in view of the advantages enjoyed by Java as compared with Ceylon and India in the matter of freight to the American continent. Unfortunately the Australian Government soon decided to

remove the embargo on the import of Java teas and this made it difficult to press the representation to Canada effectively.

The only adequate reply to the threat from the East Indies would have been an improvement in the quality of Indian teas, but high prices had tempted many gardens in India to sacrifice quality for quantity and thereby to lose their reputation in the countries to which Java and Sumatra were giving special attention.

In a trade report quoted by the chairman of the Indian Tea Association, Calcutta, in his speech to the annual meeting in March 1918, the position was stated as follows:

> A remarkable feature of the Java tea trade has been the increase of popularity of Java teas in all tea consuming countries. The quality and manufacture of Java teas have shewn a steady marked improvement in the past few years. The old gardens which were planted from China *jat* and from inferior Ceylon *jats*, and which undoubtedly produced a tea with an inferior liquor, and characteristic flavour, have now mostly been uprooted and replaced by better types of the Indian variety. One rarely hears now of Java teas being passed over in favour of India and Ceylon on account of *Javary liquor*. In the make of leaf and style Javas now can be considered as ahead of Ceylons and quite equal to most Indian growths with the exception of fine Assams. Sumatra teas also promise to show excellent style in leaf and good quality liquor, and the latter should continue to improve as the gardens mature. Russia, the most fastidious of tea drinking countries, has for some time past been obtaining her increasing requirements from Java rather than from India and Ceylon. The American and Canadian markets as already reported are likewise taking Java teas in largely increasing quantities.

POST-WAR DEPRESSION AND RECOVERY

The transition from war to peace was accompanied by a short-lived but serious depression in the tea industry. In his speech at the annual meeting in March 1921, the chairman of the Indian Tea Association stated that 'never in the history of the industry was the financial position so serious as at present'. Either the chairman was in a gloomy mood, or he was not aware of the history of the tea industry. Nevertheless, conditions were less favourable than during the war, and although dividends of the sterling companies listed in the Indian Tea Association's report for 1920 averaged four per cent, no fewer than forty-seven out of one hundred and two companies failed to pay a dividend in that year.

The decline in profits was partly due to the sharp rise in the value of the rupee and the resulting increase in costs in terms of sterling, but a secondary cause was the excess of world supply of tea over demand. Production in India had risen from 313,000,000 lb in 1914 to 377,000,000 lb in 1919, while the Ceylon figure had remained fairly constant. Exports from the Netherlands East Indies had increased from 70,000,000 lb in 1914 to 120,000,000 lb in 1919. At the same time, the release by the

Food Controller of large accumulated stocks of common tea lessened the immediate United Kingdom demand, while the Bolshevik Revolution put an end to the import of tea from India and Ceylon into Russia.

Prices for 1920 teas dropped, both in Calcutta and London, by three annas per pound as compared with the previous year. It was thought that some gardens would have to close down and conferences were held with the Government to consider remedial measures. One obvious remedy was adjustment of production to world demand. In September 1920 the Indian Tea Association (London) proposed that production for the current season should be restricted to ninety per cent of the average production for the preceding five years, or alternatively that plucking should be discontinued from 15 November. The Calcutta committee supported the latter alternative and it was adopted. Certain important Assam interests declined to support a similar scheme for the 1921 crop and there was therefore no regulation in that year, though individual members were strongly urged to curtail production. It was also proposed by the Association that the shipment of tea from India to the United Kingdom should be spread evenly over an extended period. Effective co-operation was not forthcoming from either the Calcutta buyers or the Liners Conference, but shippers themselves agreed to a limitation of shipments from the beginning of 1921.

Individual reduction of output must have worked quite well, since all-India production fell from 345,000,000 lb in 1920 to 274,000,000 lb in 1921. Fine plucking was widely adopted, quality was improved and Calcutta average prices rose from $5\frac{1}{2}$ annas in 1920, to 9 annas in 1921. Profits were generally satisfactory and the dividends of the sterling tea companies listed in the Indian Tea Association's Report averaged $9\frac{1}{2}$ per cent. The industry had in fact been able to return to normal peace conditions after only one year of dislocation and the Director-General of Commercial Intelligence and Statistics reported that 'the industry is now on a sound financial basis again and the prospects for 1922 appear to be most favourable'.

A PERIOD OF PROSPERITY

The story of the Indian tea industry in the third decade of the century is mainly a tale of prosperity, relieved by the occasional gloomy forebodings of chairmen, most of which proved to be unfounded. In March 1923 the Calcutta chairman, reviewing events in 1922, referred to the remarkable financial results achieved, but pointed out the danger that high prices would depress consumption. The 1922 crop was actually higher than that of 1921, though considerably less than that of the years 1915–20, but careful plucking maintained quality and Calcutta prices were three annas higher than in the previous year. The chairman most earnestly warned the industry against any return to coarse pluck-

ing, though he did advise increased production in order to prevent prices from rising too high and thereby reducing consumption. Dividends in 1922 were high. They averaged 32·7 per cent in the case of the rupee companies reported by the Director-General of Commercial Intelligence, while sterling dividends for 1922 listed in the following year in the Indian Tea Association's Report, averaged 19¼ per cent.

The year 1923 was regarded as being a record year for the industry, even though, according to the speech of the Calcutta chairman in March 1924, there had been some falling off in quality and an undue proportion of stalky teas had been produced. The Association seriously warned managers against manufacturing inferior teas, and the chairman thus expressed his views:

> I shall not expound on the increasing quantities of stalky tea, frequently disguised by the name of broken tea, which is being sold. I admit that it is clean, in comparison with the lower grade dusts, and the liquors are not unsatisfactory. The practice is not one which can be commended however, and I wish an understanding could be arrived at not to sell tea which consists of an excessive percentage of stalk, etc. There should be a committee of experts which could decide when a tea is not in the interests of the industry generally. The laws of this country, except in one or two isolated instances, do not provide machinery for dealing with unwholesome tea. On the one hand we contribute to the Tea Cess to popularize the consumption of good black tea, on the other we dispose of stuff which can hardly be described as tea, although quite drinkable.

Production had in fact increased greatly – partly as a result of coarse plucking under the stimulus of high prices – but the USA and other countries took more tea than usual. Prices rose still further and in Calcutta reached record levels. Dividends for 1923 reported by the Director-General of Commercial Intelligence averaged thirty-eight per cent. In 1924 production was maintained at the same high level and prices and profits remained good.

In the early months of the 1925 season, North Indian bonded stocks in the UK were considerably in excess of the previous year and prices began to fall. According to the report of the food council 'the downward movement was aggravated by the refusal of large quantities of Common grade tea produced by coarser plucking resorted to by producers who had been tempted to increase their consignments owing to the high prices prevailing during the latter months of 1924'.

In February 1925 producers decided to restrict offerings on the London auctions to 25,000 packages of Indian tea and 12,500 packages of Ceylon tea per sale. A temporary revival of trade followed, but it soon gave way to a depression and by August and September prices were from 8d to 10d a lb below those of the previous year. In the middle of September, the Indian Tea Association introduced regulation of produc-

tion – which was assisted by climatic conditions – and in the first half of November, tea manufactured in India was six million lb less than in the corresponding period of the previous year. Prices rose rapidly and the chairman's expectations that profits would compare unfavourably with the previous year were scarcely realized. In the rupee companies reported by the Director-General of Commercial Intelligence, dividends for 1925 averaged twenty-eight per cent.

Prospects for 1926 were considered good and no crop regulation was arranged for that year. In the middle of the season, however, it seemed likely that the crop would be very heavy and the Indian Tea Association therefore recommended that plucking should be discontinued from 20 November. The remarks of the chairman of the Indian Tea Association, Calcutta in 1927 are of interest.

> We had our difficulties during the past season, as the crop outlook owing to the statistical position in other producing countries as well as India, caused us some anxiety, and we had visions of prices falling until they were well under production costs. It is not in our interests to curtail outturn unduly as a high level of prices is bound to react on consumption; on the other hand the cost of production has increased so very appreciably in recent years that we could not view a fall to the level of 1920–1 with equanimity. It may not be appreciated that the cost of producing our teas is about one hundred per cent more than in 1913 and twenty-five per cent or so more than in 1920, the increase being explained by the higher earnings of our coolies, increased recruiting expenses, heavier expenditure on the care of labour, in fact there are few items which have not increased. I recognize that our action in stopping plucking on 20 November is liable to be criticized but the finish to the season promised to be an exceptional one, and we were faced with heavy stocks at home. Our action reduced a possible increase of over 35 million lb in North India to 27½ million lb. The market for last season's teas has been erratic, but throughout there has been a demand for well made teas, free from stalk.

Final outturn figures were high at nearly 393,000,000 lb – an all-time record – and prices fell by about one anna in Calcutta and 2¾d in London. Dividends nevertheless remained good, with an average of twenty-five per cent for the companies listed by the Director-General of Commercial Intelligence.

Once again the chairman of the Indian Tea Association, Calcutta, indulged in a gloomy forecast for the coming year in view of the heavy stocks held in the United Kingdom – and once again he was proved wrong. At a meeting in March 1928 the new chairman had, indeed, to report that the season had on the whole been a very satisfactory one. The recurring falsification of all these pessimistic forecasts did not, nevertheless, prevent the Calcutta chairman from declaring in March 1928 that he could not take an optimistic view of prospects. In spite of this pessimism, shareholders had no cause to complain of the 1928

results. Production was 4,500,000 lb higher than in 1927 and as a result of high UK stocks at the beginning of the year, less tea than in the previous year was exported to the United Kingdom. Fortunately, the outmarkets took more than their usual quantity, and although prices declined by over three annas in Calcutta, rupee dividends still averaged twenty-three per cent.

Although prosperity continued, it should be noted that the area under tea was expanding almost uniformly at a rate of about two per cent per year, while production had increased by sixteen per cent since 1914. As long as world consumption continued to rise, all was well, but the situation could rapidly become dangerous if for any reason world demand fell off, or if the rise in production became too rapid.

REGULATION OF CROP

In 1929 there was a wholesale surrender to the temptation of increased production and the all-India crop rose to nearly 433,000,000 lb – nearly 29,000,000 lb more than in 1928. Calcutta prices fell by 1½ annas per lb as compared with 1928 and the fall in two years was thus practically 5 annas. Reasonable dividends were paid, but it was obvious that trouble was ahead and a scheme to adjust the 1930 crop to world demand was prepared by the Indian Tea Association (London). The main principle of the scheme was similar to that adopted in 1901. Limitation would be applied more drastically to gardens producing common tea than those producing high quality. The details of the proposal were thus described:

> Members were recommended to adopt a limitation scheme, based on the 1929 crop outturn, the limitation to be effected in relation to the average London prices, or Calcutta prices plus two pence per pound, for the three years 1926, 1927, and 1928, according to the following scales:
>
> (a) Estates whose teas sold below an average of 1s 5d per lb for the years 1926–1927–8 to reduce to 85 per cent of the 1929 crop.
>
> (b) Estates whose teas sold *above* an average of 1s 5d per lb for the years 1926–1927–8 but below 1s 7d per lb, to reduce to 90 per cent of the 1929 crop.
>
> (c) Estates whose teas sold *above* an average of 1s 7d per lb, for the years 1926–1927–8 but below 1s 9d per lb, to reduce to 95 per cent of the 1929 crop.
>
> (d) Estates whose teas sold at or over an average of 1s 9d per lb for the years 1926–7–8 to reduce to 97 per cent of the 1929 crop.

Gardens producing less than 400 lb per acre were not expected to restrict their crops. The whole scheme was contingent on the support of seventy-five per cent of North Indian producers and on the co-operation 'on a comparable basis' of South India, Ceylon, and the Dutch East Indies. The necessary support appeared to have been secured and the scheme was put into operation. Unfortunately, indigenous interests in the Netherlands East Indies did not co-operate and the reduction of 41,000,000 lb in the North Indian crop did not therefore bring stocks down to a proper level. Prices remained much as in the

previous year and though the report of the Director-General of Commercial Intelligence and Statistics shows average rupee dividends of fifteen per cent, it appears from the list published in the annual report of the Indian Tea Association, Calcutta, that forty-two out of one hundred and two sterling companies paid no dividend for 1930. The period of great prosperity was at an end and in view of the stock position regulation of crops should have been continued in 1931. Unfortunately insufficient support was forthcoming from South India and the Netherlands East Indies and the scheme was dropped. Subsequent experience suggests that it would have paid the Indian Tea Association to continue regulation even without the co-operation of South India, but this view did not prevail at the time.

MISCELLANEOUS PROBLEMS

Before following the fortunes of the industry in the phase of adversity now opening, it will be convenient to mention a few of the miscellaneous problems of the years of post-war prosperity – though the most important matters such as labour, transport and scientific research will be reserved for treatment in the appropriate chapters.

In view of the damage frequently done to the entire industry by the resort of a minority of companies to selling inferior tea, it is not surprising that this subject should have figured prominently in the proceedings of the Indian Tea Association. At the annual meeting in March 1928 the chairman referred to the 'large quantity of undesirable tea which finds its way on to the Indian market'. At the beginning of 1925 a sub-committee was appointed by the Calcutta Tea Traders Association to examine and report on samples of teas of doubtful quality offered for sale on the Calcutta market which might be submitted to them for adjudication. In the first year after its appointment, the committee characterized one hundred and sixty lots as unfit for consumption. Sale of stalky teas was also a cause of anxiety at this time and it was suggested that a minimum standard should be prescribed for such teas. During 1925 the problem became more serious and was investigated by the sub-committee referred to above, in conjunction with the Indian Tea Association. The resulting recommendation 'that if a tea, other than a Dust tea, contained more than twenty-five per cent of pure stalk, it should not be catalogued' received the support of the Calcutta committee, but was rejected by the London committee, who considered it not desirable to lay down hard and fast percentages.

Closely linked with this problem was the sale of tea waste from gardens. The problem was thus set forth in the Report of the Indian Tea Association for 1923:

> It is of course when prices are high that the questions come into prominence. Exaggerated prices are then offered for tea waste and sweepings from the fac-

tories, and there is little doubt that considerable quantities of these find their way into the bazaar for human consumption; and the temptation to pilfer teas in transit from the gardens to Calcutta or Chittagong is naturally greater at such times than normally. One of the difficulties is that the demand for tea in the tea districts themselves has expanded during recent years. In a very large number of cases proprietors, agents and managers have co-operated to prevent the sale of tea locally, with a view to eliminating the possibility of undesirable qualities finding their way into consumption, and the result is that there is no regular machinery for providing supplies locally adequate to the demand.

The Tea Cess Commissioner took a hand at this stage and pointed out that the available supply of tea waste and sweepings was about double the requirements of genuine buyers for conversion into caffeine. It was therefore suggested that fifty per cent of sweepings should be destroyed or used as manure on the gardens, while the balance should only be sold to recognized shippers of tea waste for chemical purposes. The Association supported the second half of this recommendation, but the policy was not implemented by all gardens and in 1928 the Calcutta Committee of the Indian Tea Association found it necessary to minute as follows:

> As reports continue to reach the Committee to the effect that certain parties with whom members have contracted for the sale of their tea garden waste and sweepings are not abiding by the terms of such contracts in so far as quantities of these tea waste and sweepings which were sold for export are constantly finding their way into the bazaar, members were hereby reminded of the Committee's recommendation that, before entering into contracts with anybody other than the approved firms, namely. (1) Messrs Balmer Lawrie & Co Ltd, (2) Messrs Barlow & Co, and (3) Messrs Lyall Marshall & Co – to which list the name of Messrs E. S. Stewart & Co, has since been added – reference should be made to the General Committee in order to ascertain whether contracts should be given to contractors outside the approved list.

In 1930 it appeared that in spite of this agreed policy, tea waste and sweepings were still being sold to parties not on the approved list of exporters, and agency houses were again asked to keep the rule.

Tea waste sales were only an aspect of a rather broader question. At an early stage it had been decided that it was to the advantage of producers that tea should be sold in auction, either in the producing countries, or in London, or Amsterdam. Private or forward sales clearly offended against this general principle, and were therefore constantly under review. In 1924:

> At a special meeting of sellers on the Calcutta market held on 14 November a resolution was adopted approving and supporting a decision of the London

Association to discontinue forward sales for the United Kingdom of crops or parts of crops for 1925. The resolution expresses the views of practically the whole of the industry. By the term 'forward sales' partial crops are included, but the sale of an invoice to arrive, or ex-ship, would not be an infringement of the understanding.

Thereafter it was agreed, almost unanimously in North India, that there should be no forward sales for the United Kingdom of crops or part crops for 1925 or 1926. A few small proprietors remained outside the agreement and it was also generally agreed that tea on the water might be privately sold as an exception to this general rule. The agreement continued for 1927, though one particular agency house reserved its rights in this connexion. For the 1928 crops it was impossible to obtain unanimity and there was no agreement to bar private or forward sales for the 1928 crop.

Import and export duties also occupied much of the time of the committee of the Indian Tea Association in Calcutta. It will be remembered that India had imposed an export duty on tea in 1916 and that periodical efforts were made by the Indian Tea Association to secure its abolition. It was ultimately abolished as from 1 April 1927.

Duties on the import of tea chests and tea lead into India were increased in the 1923–4 Budget from 2½ per cent to 15 per cent. In the Report of the Indian Tea Association, Calcutta, for 1923 it was stated:

> that manufacturers of tea chests in India could supply only a small percentage of the total requirements of the industry, and that the proposed increase in import duty, coupled with the export duty imposed during the war and the income tax to which the industry had only recently been subjected, would adversely affect India's teas in competition with those from other countries.

The Association therefore urged that the import duty should be maintained at the same rate as the duty on machinery, namely 2½ per cent. Protests of this kind are seldom effective and the next move was an approach in 1926 from the managing agents of the Assam Saw Mills & Timber Company Ltd, asking that the tea industry in North-east India should buy more of the company's tea chests. The company also hopefully suggested a remission of the export duty on tea packed in Indian-made boxes. This proposal did not receive the support of the Indian tea industry.

Next came a proposal for the protection of the plywood tea chest industry in India, and in 1927 the Government of India referred the question to a Tariff Board. The Association submitted a memorandum protesting against the proposal to grant protection and the following was the most important paragraph of that memorandum:

> It will be seen that, notwithstanding the present protection enjoyed in the form of the existing fifteen per cent import duty, the Indian box industry,

while only having to pay the cost of the import duty on imported linings and parts, can, under the most favourable circumstances which may not materialize, produce a box at a figure which cannot be less than Rs 3–1–9 as compared with the Rs 3 price of the imported box saddled as it is with all these extra costs. On the other hand, any increased duty on imported tea chests and relative parts would increase the Indian box producers costs as well, as they would obviously require to pay the increased rate on the imported parts purchased by them. Any protection, therefore, to the local box industry would not only hit the tea industry unfairly, by increasing the cost of the boxes imported for the carriage of its production, but would at the same time defeat the object for which protection is now sought.

It is interesting to notice that the parties who first sought discrimination against imported chests were British-owned concerns. The Tariff Board recommended a considerable measure of protection, to take the rather unsound form of an export duty on every tea chest not of Indian manufacture. They proposed also that a large proportion of the proceeds of the duty should be handed over to the Indian Tea Cess Committee. The Government of India went further than this recommendation of the Tariff Board and proposed an import duty of thirty per cent on all forms of plywood. Vigorous protests were made and the matter was left in abeyance.

Other problems with which the industry was confronted at this time were food supplies, the state of the roads, the need for telephones in certain areas, the Port Commissioner's sheds, and the sale of tea to Australia. None of these matters need be discussed here, but the way in which they, together with more important questions, were handled, shows that the industry was well organized and able to make its voice heard.

CHAPTER FIFTEEN

SLUMP AND RECOVERY: 1931–38

THE SLUMP 1931–2

We have already seen that the 1930 voluntary crop restriction scheme was to some extent impaired by increased production by indigenous owners in the Netherlands East Indies and it was partly for this reason that sufficient support for a similar scheme for the 1931 crop was not forthcoming. A further reason for the failure to secure support was that British Java-Sumatra interests were only prepared to enter crop restriction if India and Ceylon abandoned the demand for preference for Empire teas. South India also was divided in its support for this scheme and in his address at the annual meeting of the United Planters Association of Southern India in August 1931, the chairman put the matter as follows:

> There has been a great deal of talk as to the benefits of restriction on output, and there would appear to be two schools of thought, one in favour and the other against any form of artificial restriction, and it seems to be very difficult to express any opinion one way or another. Looking at the results of restriction in the case of Rubber and Coffee in the past, the present position of both products does not appear to argue much in favour of it, and my personal view is that in the case of all produce, or indeed of all articles whether grown or manufactured, the end must be the survival of the fittest, and the only healthy way to put matters on a sound basis is to increase consumption.

The Chairman of the United Planters Association nevertheless had to admit that prices had fallen by 4·83d per lb between 31 July 1930 and 31 July 1931.

In 1931 production was therefore completely unrestricted. In August of that year producers in India were profoundly disturbed at price trends and the Indian Tea Association, Calcutta, suggested that all producer countries should agree to cease manufacturing entirely during August. The proposed *modus operandi* was thus described: 'To keep the gardens in good trim by regular plucking of leaf three or four times during the month, stopping all manufacture, and destroying the gathered leaf, thereby keeping the bushes ready for plucking in the

beginning of September in the usual way.' The London committee of the Indian Tea Association did not consider the proposal practicable. 'It would', they said, 'at best be only a temporary alleviation of the large crop position and also would only be postponing the ultimate clearing up of the whole situation as regards over-production.' This answer was not very convincing to the Calcutta committee, who pointed out that their proposals would take more than 100,000,000 lb of tea off the home market. The London committee, however, reported that the Ceylon Association were not prepared to adopt this suggestion and it was dropped. The India crop for 1931 was 3,000,000 lb more than in 1930, and was in fact the third highest crop ever made. At the same time, exports from the Netherlands East Indies increased and the fact that potential exports from that source in the near future were estimated to be very considerable perhaps had an even more serious effect than the large India crop on world prices.

An outsider looking at the statistical position for 1931 might not have expected the comparatively small increase in production to produce disaster. It is, however, well established in the history of the tea industry that a relatively small excess or deficit weightage can affect prices disproportionately. Moreover, the position in 1931 was the effect of cumulative factors which must be briefly studied.

In 1929 world supply of tea exceeded absorption by 58,000,000 lb and although there was a deficit in 1930, the following year opened with a surplus of 45,000,000 lb. This figure by itself might not seem large enough to account for a catastrophic drop in prices, but it must be remembered, firstly that world tea consumption at that time was only of the order of 950,000,000 lb and that, secondly, under conditions then prevailing, any surplus tea tended to gravitate rapidly to London where it depressed prices. The following table showing monthly figures of stocks in bond in London during the four years ending 1930–1 will make it clear that by 1931 stocks had become dangerously high.

	1927/8	*1928/9*	*1929/30*	*1930/1*
			(in million lb)	
April	175·0	220·4	245·0	252·0
May	157·1	195·9	215·0	236·0
June	144·5	179·2	205·0	227·0
July	136·5	170·5	203·0	218·0
August	146·6	179·1	213·0	231·0
September	163·8	194·6	225·0	244·0
October	185·1	209·7	243·0	260·0
November	213·8	224·7	255·0	260·0
December	239·0	233·1	275·0	288·0
January	252·9	251·3	283·0	296·0
February	249·9	253·7	282·0	293·0
March	239·8	259·6	267·0	269·0

The effect of the accumulated stocks in 1931 was disastrous and at the annual meeting of the Indian Tea Association, Calcutta, in March 1932, the chairman referred to 'the unsatisfactory position of teas which are normally regarded as being of good quality selling below the cost of production'. Calcutta prices for 1931–2 were about three annas below those of the previous year. The average Calcutta price, of 6 annas 6 pies, was in fact lower than in any year except one since 1904 – and in the intervening years cost of production had risen considerably.

According to the report of the Director-General of Commercial Intelligence and Statistics, thirty-eight out of one hundred and forty-four rupee companies paid no dividends in 1931. The list of sterling companies published in the Indian Tea Association's Annual Report for 1932 showed that in 1931 forty-two out of eighty-seven listed companies passed their dividends.

When the proposal for restriction of the 1931 crop fell through, the demand arose for the adoption by the United Kingdom of Empire preference in respect of tea and a memorial was sent to the Chancellor of the Exchequer by tea producers in India. The Government of India gave no backing to the proposal, but merely passed it to the Secretary of State for India 'for any action he might think fit to take on it'. The matter was pressed energetically both in India and in the United Kingdom, but to no immediate effect. At the same time, attempts were made to secure an Empire preference in Australia, where Netherlands East Indies teas were making rapid advances at the expense of India and Ceylon.

In the same year, 1931, the desirability of limiting the quantity of tea offered weekly on the Calcutta market, and so spreading sales over the whole year, was considered. As against this proposal it was argued that it would be inadvisable to extend the sales beyond January since some of the principal buyers were in the habit of leaving India for the United Kingdom at that time. It was nevertheless agreed to limit Calcutta offerings to thirty thousand chests at each sale, exclusive of Dust. Partly as a result of this agreement, Calcutta average prices showed a distinct improvement, which unfortunately proved only temporary.

The absence of any scheme of international regulation was sorely felt in 1932 when the situation was made worse by an unusually favourable season in India. All-India production was nearly 40,000,000 lb in excess of that for 1931 and reached a level equal to the previous record in 1929 – and this at a time when a world-wide depression made the expansion of consumption of any commodity unlikely. In August 1932, speaking at the annual meeting of the United Planters Association of Southern India, the chairman considered matters to be in a worse position than they had been in the previous year and saw very few indications of any likely improvement in the near future. Exports to the United Kingdom in 1932 were 40,000,000 lb more than in the previous year, while re-

exports from the United Kingdom were down. Prices fell even lower than in 1931, and in Calcutta dropped to 5 annas 2 pies. The industry was, in fact, in a precarious condition. Of the one hundred and forty-five rupee companies reported by the Director-General of Commercial Intelligence and Statistics, only thirty-six paid a dividend, while of the eighty-four sterling companies reported in the Indian Tea Association's Annual Report for 1933, forty-one paid no dividends in 1932. Of the companies so listed by the Association, thirty passed their dividends in each of the years 1930, 1931, and 1932.

REGULATION OF EXPORTS AND PRODUCTION

Disaster, which had overtaken some companies, was clearly round the corner for many others and at last the industry was galvanized into co-operative action. The position was graphically described by the chairman of the Indian Tea Association, Calcutta, in March 1933.

> There surely cannot be any doubt that a form of regulation of production is necessary, and in support of this view it is possibly superfluous for me to refer to the level of prices which ruled in London and Calcutta last September. In the sales held in Calcutta on 26 and 27 September the average was As 4–3 per lb as compared with As 10–1 per lb in 1929, and it was evident to all that without some regulation we had not even then reached the bottom. It was impossible for many concerns to continue working at the prices quoted above. Further, it was evident that, with little or no discrimination between low and medium, and medium and better quality teas, the policy followed by some producers last season to reduce production costs, by going out for quantity at the expense of quality, would have been even more widely adopted this season. The North East India crop for last year is estimated at 366·6 million lbs, little short of the record of 1929; and what will be the position at the end of this season if restrictive action is not taken? Stocks in London, which reflect the clearance of production, at present exceed 7½ months consumption, and can we expect more than the normal offtake, when consideration is given to general world depression? There are some who question the utility of artificial restriction and others may support the policy of the survival of the fittest, a policy, which, apart from political considerations is, in my opinion, unsupportable. Such a policy would result in the closing down of many estates, depriving a large number of Europeans, educated Indians and labourers of their livelihood, and would seriously impair the finances of those more fortunately placed to weather the storm. Nor do I accept the argument against artificial restriction of output. I do not advocate such a policy being utilized to force prices up to an unduly high level, thereby reacting on consumption; but we have ample evidence in these days that we are not alone in utilizing the regulation of output as a means of stabilizing an industry. The position of the jute mills is known to you. The output of 85 per cent of the world's tin production is also being restricted under Government control with not unsatisfactory results; and the coal industry at home is being saved from drastic over production by a definite system of Government control of output.

The Association addressed the Government of India officially on the question of control of exports by means of an international agreement between the producing countries. As we have seen the effects of the depression had been as serious in South India as in North India, and the United Planters Association supported the proposals of the Indian Tea Association. That Association was able to report on 22 February 1933 that 92·14 per cent of the total Indian production approved the scheme and 2·52 per cent dissented. No replies had been received from 5·34 per cent.

The details of the scheme now introduced will be discussed in the appropriate section of this book and it is only necessary to say here that its essence was an agreement between producers and Governments in India, Ceylon, and the Netherlands East Indies to adjust exports to world demand and to restrict the extension of areas under tea. An essential part of the agreement was the undertaking to set up a joint tea market expansion organization. An International Tea Committee was set up to co-ordinate all this action and in India the Tea Control Act to give effect to the agreement was passed in 1933.

Even in these desperate circumstances it was impossible in 1932 to obtain support for regulation of production as distinct from export. By 1933, however, wiser counsels were beginning to prevail. In January of that year a referendum showed almost unanimous support from sterling interests in both North and South India for crop regulation, but rupee interests in South India were still divided and the plan had to be dropped for the time being. In June 1933 the matter was raised again and a fresh referendum resulted in over ninety-three per cent support for a scheme which can be roughly described as limiting production for sale in India to twelve per cent of each estate's best crop basis. The Indian Tea Association and the Indian Tea Planters Association, Jalpaiguri, considered that a voluntary basis was inadequate for a scheme of this character and asked Government to give it legislative effect. This, however, was not done, partly because of the opposition of the United Planters Association.

The effect of the evident determination of producers to adjust supplies of tea to world demand was quickly felt, and in March 1934, reviewing the 1933 position, the chairman of the Indian Tea Association, Calcutta, was able to say that as a result of legislative control of export India was again marketing tea at prices which represented a profit. The industry had emerged from the doldrums remarkably quickly.

Although the scheme of regulation benefited the industry as a whole, it operated harshly on particular sections and gave unfair advantages to others. The regulation of exports was enforced by the issue of quotas. In South India quotas were issued, in some cases, on district averages. There were many small estates which sold their quota, and

lived on the proceeds without producing at all. Others sold their export quota and sold their tea for Indian consumption. Many of these could never have produced the district average of crop anyway, and so received saleable quota for no production effort.

The well-organized company estates in South India were nearly all comparatively young developing estates compared with the older-established mature tea gardens in North-east India. A lot of South Indian planters felt that this fact was not given sufficient consideration. This was one of the main reasons for the South's failure to back voluntary restriction of crops whole-heartedly.

It is interesting to note that the improved position soon stimulated a desire to plant more tea, and in 1933–4 the areas covered by applications from producers in Assam for permission to plant tea were ten times as great as the permissible extensions under the Tea Control Act. Fortunately, voluntary crop restriction was accepted by over ninety-three per cent of the Indian tea industry for the 1934 crop. Production which in 1932 had risen to 434,000,000 lb fell in 1933 to 383,000,000 lb and only rose in 1934 to 400,000,000 lb. Thanks to these measures, Calcutta prices recovered to the extent of over 4 annas per lb in 1933 and in spite of the accumulation of stocks in London, and a poor offtake by other consuming countries, only fell by about half an anna in 1934. In 1933 all except thirteen of the eighty-seven sterling companies listed in the Indian Tea Association's Report for 1934 paid dividends, and the average paid was 8½ per cent. In 1934, twenty-two companies passed the dividend and the average paid was about 6 per cent.

At the annual meeting in 1934 the chairman of the United Planters Association of Southern India remarked as follows regarding the restriction of output:

> Considering that the scheme was a voluntary one, it worked well, but it soon became evident that if the restriction of crop was to be continued during the period of export regulation, it would have to be assured by legislation. As the vast majority of producers of tea in India were in agreement with this idea, the Government of India has been approached with a view to introducing legislation for the restriction of crop in India, and the Bill will probably come before the next session of the Legislative Assembly. In the meantime producers have agreed to another year of voluntary restriction in anticipation of the legislation becoming effective in ample time before next season.

The year 1935 was the third year of regulation of exports and its effects now began to be felt in a reduction of stocks in London, while there was a further improvement in prices over 1934. The announcement early in 1935 that the rate of export release would continue at 82½ per cent, as in the previous year, had a stabilizing effect and according to the chairman of the Indian Tea Association, one aspect of the improvement of market conditions during 1935 was 'the wider margin

of price between common and better quality tea'. In May 1935, since the industry's proposals for legislative control of production had not been accepted by the Government of India, voluntary crop restriction was continued with the support of more than ninety per cent of the industry. This step was fully justified by the fact that whereas tea consumption in India at this time was about 60,000,000 lb, potential supplies after fulfilment of export requirements were in the neighbourhood of 160,000,000 lb. Not all signatories to the restriction agreement adhered to it in practice, and in March 1936 the chairman of the Indian Tea Association felt it necessary to refer to estates which were signatories to the gentlemen's agreement in name only. At the same time he made it clear that the real solution of the industry's problems lay in market expansion in India, Russia and the United States.

Results in 1935 were reasonably good and Calcutta prices slightly exceeded those of 1934. Of the sterling companies listed by the Indian Tea Association, Calcutta, only thirteen failed to pay dividends in 1935 and the average paid was about eight per cent. At the annual meeting in the following year, the chairman of the United Planters Association of Southern India spoke of the improvement in conditions and attributed it partly to the method of crop regulation adopted by the industry. He again stressed the need for putting this on a sound legislative basis.

In his review of 1936 the Calcutta chairman stated that market conditions had been disappointing, in the sense that while prices for common tea were a little better than in 1935, prices of quality teas were down. Nevertheless, London stocks had fallen to a manageable figure and average prices in 1936 were 3¼d per lb more than at the time of the 1932 depression. Great difficulty was experienced in securing the minimum necessary measure of support for a crop regulation scheme in 1936, but it was achieved in the end. The international and domestic regulation schemes were again justified by results. In 1936 only eight of the sterling companies listed in the Indian Tea Association's Report failed to pay dividends and the average paid was ten per cent.

In 1937 the permissible exports were increased by the International Tea Committee to eighty-seven per cent of the standard exports in view of the depletion of stocks in the United Kingdom. Voluntary crop restriction was continued, but in May 1937 an examination of the trend of tea consumption in India led the Indian Tea Association, Calcutta, and the United Planters Association of Southern India, acting jointly, to increase the permissible production for consumption in India to fourteen per cent as compared with the twelve per cent which had been in force in the previous year. Throughout the working of this scheme for the regulation of production, great care was in fact taken by those who operated it to see that Indian tea supplies kept pace with the growth in consumption. Since the export quota was higher than in 1936, Indian

production was also increased from 393,000,000 lb in that year to 430,000,000 lb in 1937. London prices were nevertheless twopence higher and Calcutta export prices a penny higher than in 1936.

A new international agreement came into operation in 1938 and for the first year the export allotment was fixed at 92½ per cent – an increase of five per cent, which was questioned at the time, but was fully justified by the world stock and demand position. The voluntary crop restriction scheme was also continued and indeed received increased support in 1938 as a result of its obvious success in 1937. Production was naturally higher than in 1937. London prices fell by three-farthings and Calcutta export prices by 1¾ annas. Dividends of the listed sterling companies nevertheless averaged nearly eleven per cent and only five of those companies passed their dividends. At the end of 1938 stocks in the United Kingdom stood at a reasonable figure – considerably below that of 1931 and yet fully adequate to keep India's most important customer well supplied. The tea industry thus ended the last year before the Second World War in a strong position.

It is interesting to note that in the four successive quinquennial periods after the First World War, South India's production of tea increased by thirty-eight per cent, eleven per cent, seventeen per cent, and twenty-three per cent respectively. The rapid increase in the first of these quinquennia was clearly the result of the stimulus provided by the First World War, but it is remarkable that the depression of the early thirties had no apparent effect on the growth of the industry in South India. At the time of the International Tea Agreement, South India's annual production of tea amounted to about 57,000,000 lb out of an all-India production of nearly 384,000,000 lb and its breakdown by districts was as follows: –

	(million lb)
Anaimalais	12
Kanan Devan	13¾
Central Travancore	11
South Travancore	3
Nilgiris	6¾
Nilgiri-Wynaad	5¼
Wynaad-Malabar	5½

By 1938 this figure had risen to 75,000,000 lb out of a total Indian production of 452,000,000 lb.

It will be convenient at this stage to glance at some of the other important problems that occupied the attention of the leaders of the Indian tea industry during the decade before the Second World War, though once again some of the most important subjects such as taxation, labour, transport, scientific research, propaganda, and the detailed working of

the various export and crop regulation schemes will be left for treatment in the appropriate chapters.

TEA WASTE

Another subject appearing almost regularly in the annual reports related to tea waste. In 1932, 95½ per cent of sterling and 96½ per cent of rupee companies in the membership of the Indian Tea Association agreed only to sell tea waste to three recognized caffeine-extracting firms and either to destroy on the garden, or to use as compost, any balance not so sold. In 1933 thirty-eight gardens in the membership of the Indian Tea Planters Association also adopted this agreement. In 1934 it appeared that the quantity of tea waste exported was more than double that in 1932 or 1933, and the committee of the Indian Tea Association in Calcutta came to the conclusion that good tea was in fact being exported as tea waste in order to escape the provisions of the Tea Control Act. The committee therefore proposed that the sale of tea waste should be completely discontinued, but support for this proposal was not forthcoming, and the 1932 arrangement was continued. South India producers pointed out that there was no approved buyer of tea waste there and Messrs Harrisons & Crosfield therefore undertook to fill this gap. Thereafter, eighty-three per cent of the tea producers represented by the United Planters Association of Southern India came into the agreement and by December 1934 interests covering ninety-one per cent of the acreage under tea throughout India had joined. Estates were asked to certify destruction of tea waste where it was not sold to approved buyers and in a number of cases the genuineness of the returns and certificates was checked. In 1936 temporary permission for the sale of tea waste to the Bengal Chemical and Pharmaceutical Works Ltd, Calcutta, was also given. Attempts were also made to discourage the illicit sale of tea waste by persuading the railway and inland steamer companies to adopt differential freight rates. Tea waste was to be charged at ninth-class rates, but a refund was to be given where it was subsequently exported for the purposes of chemical manufacture. Additional importance was given to strict control of the sale of tea waste by the pilferage of tea which was common at this period.

IMPORT DUTIES

Tariff matters figured in the proceedings of the Indian Tea Association and the United Planters Association at this time, though perhaps not so frequently as a few years earlier. In 1933 the committee of the Indian Tea Association were exercised over the position in New Zealand. As a result of an agreement between New Zealand and Ceylon, the former country withdrew, in the case of Ceylon tea only, the tariff surcharge of 0·67d per lb. Indian tea was thus left at a disadvantage and the Associa-

tion strongly urged that India should make an agreement with New Zealand similar to that made by Ceylon. The Government of India were not unsympathetic and stated that they would deal with this matter when a trade agreement with New Zealand was negotiated. It was pointed out, however, in the Annual Report of the Indian Tea Association, Calcutta, for 1935 that as 'the balance of trade between the two countries is in India's favour, there is no stimulus to move faster than the pace set by New Zealand'. Strangely enough, after 1935 no further reference was made to the matter in the Association's reports. A similar difficulty arose in the case of Newfoundland, but here the Government of India stated frankly in 1934 that they did not propose to negotiate a trade agreement with that country and that therefore the matter could not be put right.

Minor changes made in 1934 and 1935 in import duties on tea entering South Africa and Ireland call for no comment, but in 1938 the industry was seriously perturbed at the proposal of the British Chancellor of the Exchequer to add 2d a pound to the duty on tea imported into the United Kingdom. The Indian Tea Association (London) together with the Ceylon Association, the South Indian Association, and the British Chamber of Commerce for the Netherlands East Indies, sent in a joint memorandum, pointing out that the 1936 increase in duty had encouraged the purchase of low-grade tea from the non-regulating countries and the further addition now proposed would make matters still worse. The representation was not successful.

LABOUR IN NORTH INDIA

In the years immediately preceding the war some anxiety was caused by labour unrest, mainly fomented by agitators from outside the Province who evidently considered that the attitude of the Assam Congress Government at that time had created circumstances favourable to their operations. The Assam Oil Company's installation at Digboi was the focal point of the trouble, which spread rapidly outwards into the tea districts. Strikes, in many cases found not to have been justified by economic grievances, took place in many gardens and certain sections of the Press made the situation worse by what the chairman of the Indian Tea Association rightly described as irresponsible, malicious, and slanderous attacks on the industry. The action taken by the industry to meet this situation and the combination of firmness with the removal of grievances will be discussed in the chapter dealing with labour relations. Here we need only note that the unwillingness of the then Congress Government to incur unpopularity by dealing with trouble-makers led to a paralysis of the will on the part of many officials in Assam. For a time the Province was a happy-hunting-ground for those who sought to bring about chaos. Wider political events connected with the war soon

led to the resignation of the Congress Government and this resulted in a change in the general tone of the administration. The situation rapidly returned to normal, and during the war the North Indian tea districts were relatively free from trouble.

MISCELLANEOUS PROBLEMS

Medical affairs were very prominent in the reports of the Indian Tea Association during these years, but can more conveniently be treated in the section of this book dealing with labour. Similarly, political representation, the development of which was a feature of the decade before the Second World War, will be discussed in the chapter concerning the organization of the industry. Other matters which occupied the attention of the Association were the Pure Food Act, the packing of tea, tea chest linings, the tea tasters' glossary, and, of course, the perennial subject of communications. These topics cannot be discussed here, but the consideration given to them appears clearly in the annual reports and is evidence of the soundness of the organization of the industry.

SOUTH INDIAN PROBLEMS

The major activities of the United Planters Association of Southern India at this period were closely parallel to those of the Indian Tea Association and there was a good deal of co-operation between the two bodies on such matters as the regulation of exports and production, representations regarding Indian income tax difficulties, the sale of tea waste, and Empire preference. Nevertheless, the proceedings of the United Planters Association of Southern India year by year differed from those of the Indian Tea Association in two important respects. In the first place, problems connected with road transport loomed much larger in the eyes of the United Planters Association of Southern India than in those of the Indian Tea Association. Whereas, in the North motor transport was of importance mainly as a short-distance feeder to the railways and the rivers, in the south long-distance hauls were commonly necessary and satisfactory road transport arrangements were vital to the tea industry. The state of the roads, and the operation of the various Motor Vehicles Acts were, therefore, very prominent in the annual proceedings of the United Planters Association. Particular resentment was caused by the immunity of bullock carts from any kind of taxation. Thus in his address to the annual meeting of the United Planters Association in 1932, the chairman expressed the general feeling:

> The Madras Motor Vehicles' Act continues to bear most unjustly on a small proportion of the users of the public roads. Owing largely to the work of our representative on the Legislative Council, certain amendments have been passed which may prove to provide some alleviation for the grossly unfair taxation we are labouring under at present; but though there have been many

public meetings of protest, and though all sorts of bodies have protested against the continued immunity of bullock carts from any sort of taxation, nothing has been done, with the result that our roads are daily becoming more and more congested by strings of country carts, all heavily loaded, and doing enormous damage to their surfaces without paying any kind of taxation . . . Though it is recognised that the country cart, carrying as it does very heavy loads on tyres much too small, does more harm to the road surface than almost any other type of vehicle, yet no form of taxation to compensate Government for this damage is levied, and all representations so far made have fallen on deaf ears. Unless something is done ere long, not only will a large number of firms and individuals be ruined, but the roads will become so bad, due to lack of sufficient money to keep them in order, that the cost of re-making them will be prohibitive, and they will degenerate into a state more suitable for the dark ages than modern times, with roads along which it is impossible to travel except in springless carts or on horses.

In 1934 the United Planters Association again protested against the 'intolerable conditions imposed on motor transport in India in general and South India in particular', and in 1935 they again returned to the charge with a demand for the levy of tolls on all unlicensed vehicles. The matter was, of course, complicated by the fact that the tea districts were scattered through several states as well as the Province of Madras. The Madras Government were always able to claim, with some justice, that the surrounding states would not co-operate with them and they used that plea with particular force when the United Planters Association pressed in 1936 for inter-availability of motor licenses – a result not achieved until the passing of all-Indian legislation.

A second characteristic of the United Planters Association of Southern India as compared with the Indian Tea Association during this decade was its greater awareness of current political events and tendencies – not only in relation to economic subjects such as the Ottawa Agreement, but also in respect of the events leading to provincial autonomy. This more alert attitude may have been partly due to the fact that at this time Indian planters were more numerous and more influential in the South than in the North, but probably the greater reason was the keen stimulus to political thought constantly provided at the United Planters Association meetings by F.E. James, now Sir Frederick James. As far back as 1929, in the United Planters Association meetings, James declared that the end to be kept in sight was 'a federation or unit of State and Provinces in which each is permitted to develop autonomously according to its peculiar character and tradition'. Few Englishmen in 1929 were as imaginative as that and James was able to communicate to the United Planters Association meetings something of this spirit of looking forward.

In South India the pre-war labour situation was not so difficult as in the North, but the United Planters Association wisely took time by the

forelock and James drew up a statement of the conditions on which unions might be recognized. The United Planters Association had to deal in Madras with a Government which was on the whole more sympathetic and more practical than that of Assam and contact between the planters and the Labour Ministry in Madras was fairly close.

Just before the war, three other important subjects required attention. The first of these related to the adulteration of tea with black gram husk. A regular industry for the dyeing of gram husk had grown up in and around Bombay and supplies of adulterated tea made their way thence freely to all parts of South India. The United Planters Association strongly urged the Government of Madras to take drastic action against the suppliers and at the same time pressed the Government of Travancore to prohibit shipments of black gram husks and similar materials when there was reason to believe that they were intended for use as tea adulterants. It is, however, notoriously difficult to deal with this kind of fraud unless public opinion is strong against the offenders and nothing effective was done.

A second matter to which the United Planters Association of Southern India gave much attention was the Madras sales tax. The Madras Government was in a taxing mood and in his speech at the United Planters Association annual meeting in August 1939, W. K. M. Langley, the Planting Member of the Madras Legislative Assembly, thus described the situation:

> In February-March came the Budget session. Then the Prime Minister* gave us an indication of what was in store for us in connection with commercial taxes and we got down to them with a vengeance. There was the Electricity Tax Bill, Motor Spirit Taxation Bill, the Entertainment Tax Bill, the Tobacco Tax Bill and finally the most important of all, the General Sales Tax Bill. You would have thought that all these Bills would require several sessions; but these five Bills of major importance were all crowded into what was practically one session. One must in that respect pay a tribute to the Prime Minister for his consummate ability in being able to tackle five such major Bills as these and at the same time in doing so attempting to alter the whole fiscal system of the Madras Presidency. He is engaged in altering the whole system of taxation; he is faced with the prospect of throwing away Rs 4 *crores*† of revenue from Excise, and his Revenue Minister is endeavouring to commit him to a relief in land revenue of fifty per cent. Thus in a province whose revenue is approximately 16 *crores* of rupees he is practically abandoning half his revenue and he has got to find entirely new sources of revenue in order to make up for that. It is an enormous feat and if he brings it off I think we shall be able to claim him to be not only a consummate politician but also a most consummate and skilful financier. It remains to be seen what he will get out of these taxes, but one cannot help admiring the ingenuity

* His correct designation was not Prime Minister but Chief Minister.

† Rs. 1 crore = Rs 10,000,000.

of any man who in the space of twelve months is proposing entirely to alter the whole fiscal system of such an important province as this.

The Madras Sales Tax Bill provided for a tax of one-half per cent on sales, with the exception of agricultural produce (when sold by the producer) and of certain other commodities. The Bill was badly drafted and the United Planters Association levelled at it a good deal of well-justified criticism. Eventually a ruling was obtained that 'except in such special cases as the retail sale of tea in packets, tea and coffee as sold by members of the Association was not subject to the tax'. A few preposterous cases then occurred where a sales tax officer sought to tax estates on sales of rice and blankets to their labour. The Association strongly contested this ruling, with satisfactory results.

Another matter of interest in South India shortly before the war related to scientific research. The United Planters Association had for some time felt the need for an expansion of its scientific research but was unable to produce the necessary funds. A proposal was therefore made to the Government of Madras for legislation providing for land cesses on agricultural produce, the proceeds to be devoted to research work connected with the particular products on which the cess would be levied. The Government of Madras turned the proposal down. It is interesting to notice the difference between the attitude of the United Planters Association of Southern India, which sought help from the Government, and that of the Indian Tea Association which, with its greater resources at this time* insisted on financing and controlling its own research without government intervention. The two associations understood and respected each other's views.

Other matters which attracted the attention of the United Planters Association at this time were the need for the development of Cochin Harbour, the unsatisfactory arrangements for the drawback of duty on imported tea chests, and the need to encourage the Estates Staff Association of South India. Tea propaganda was also a subject of keen and intelligent questions at the United Planters Association meetings. Altogether there was a liveliness and a sense of reality about the meetings which greatly impressed frequent visitors like the present writer, and indicated that the United Planters Association was a sound and healthy body.

It can, indeed, fairly be claimed that, both in the North and the South, the industry was well equipped to meet the impact of war.

* This policy has been modified since the end of our period.

CHAPTER SIXTEEN

THE SECOND WORLD WAR

It would be impossible to deal comprehensively, but in a reasonable compass, with the many complications which beset the Indian tea industry during the Second World War. Some of them will be discussed in detail in separate chapters, but here it is necessary to describe in broad outline the principal war-time problems.

TEA PURCHASE BY THE MINISTRY OF FOOD

The war necessarily altered the whole pattern of supply and demand. In the first place, shipping difficulties limited external demand, while from 1942 onwards the enemy occupation of Indonesia and the cutting of exports from China, Formosa and Japan seriously affected world supply. It had been realized before the war that, under a system of rationing in Britain, the ordinary commercial machinery of supply and distribution could not operate, and conversations between the British Government, the Government of India, and the tea industry, had resulted in agreement on three principles which must govern any war-time bulk purchase of tea: Britain must be adequately supplied with tea, there must be no profiteering, and the mechanism of the International Tea Agreement must as far as possible be kept in operation.

The plan was put into operation smoothly at the beginning of the war. The British Government requisitioned all stocks of tea in the United Kingdom and shortly thereafter became the sole importer of tea. A simple *ad hoc* arrangement was made for the initial period, but from 1940 a more scientific scheme known as the long-term contract was instituted. Every exporter of tea from India was invited to contract for the delivery of tea to the British Ministry of Food, at an Indian port, at a price based on pre-war average prices with an additive for any increased cost of production of the industry as a whole. Similar arrangements were made with other Commonwealth producing countries. The Tea

Controller for India, who was stationed in Calcutta, had a double rôle to fulfil. On the one hand he was responsible to the Government of India for seeing that the industry received fair play; on the other hand he was a representative of the United Kingdom Ministry of Food. Y.N. Sukthankar held this important post during the early years of the war and it was largely due to his fairness, and the respect in which he was held by the industry, that the scheme worked smoothly.

The necessity for meeting the full war-time needs of the United Kingdom was paramount, and from 1940 onwards it led to fears that there might be a serious shortage of tea for what are known as the outmarkets – that is, markets other than the United Kingdom and India. The loss of continental markets in 1940 lessened this risk, but in 1942, because of the cessation of exports from Indonesia, buyers were unable to fill the shipping space available for the outmarkets and therefore proposed a temporary switch of Ministry of Food teas for this purpose. The proposal was not accepted, but later in the year the Ministry took over the whole of the exportable surplus of Indian tea and allocated it between the United Kingdom and other countries.

When it was known that this arrangement – known as the block purchase scheme – was contemplated, an apprehension that there would be a shortage of tea in India led to considerable speculative buying and a consequent increase of prices in India. Unfortunately, there was some delay between the prohibition of private exports from India and the implementation of the block purchase scheme, and this not only encouraged speculation, but also resulted in failure to utilize available shipping space.

The Ministry's purchases from India, either for the United Kingdom or other allied countries, from this time onwards were as follows:

	(million lb)
1942–3	418·5
1943–4	411
1944–5	362
1945–6	395

India's internal demand for tea was rising at the same time and the Ministry's needs therefore required a stepping up of production. To some extent this was achieved by plucking tea which had been 'rested' – i.e. left unplucked – during the pre-war period of regulation of crop and exports. In addition to this it was necessary to practise freer plucking and as can be imagined the easy-going habits this inculcated in labour were not easily corrected after the war. Figures of war-time production of tea in India are as follows:

	(million lb)
1939	466
1940	474
1941	503
1942	572
1943	554
1944	509
1945	529

The average annual production in the last four years of the war was 541,000,000 lb, an increase of twenty per cent over the pre-war figure.

The internal sales restriction scheme, which for some years had regulated the amount of tea offered for consumption in India, was continued during the early years of the war, though in 1942 the ceiling was rightly fixed at a level beyond the producing capacity of the industry. In 1943 North Indian interests considered that the mechanism of the scheme should still be kept in being, but South India opposed its continuance and it was terminated.

In spite of the stepping up of production, in 1942 internal prices rose considerably, partly as a result of speculative activities and partly on account of transport and labour difficulties in India which hampered distribution. The announcement by the Government of India that it would not permit stocks of tea in India to fall below 130,000,000 lb, had a steadying effect, but the price situation continued to cause anxiety, and in 1945 the Government established tea supply advisory committees – one for North India and one for the South – to advise on all questions affecting the availability and price of tea, the occurrence of local shortages, and the extent to which distribution was hampered by transport difficulties. No price control was imposed. In general it can be said that the industry amply fulfilled the war-time obligation of producing sufficient tea for India as well as meeting the needs of Britain and her allies. Quality inevitably suffered as a result of the rapid expansion of production and after the end of the war several years of the discipline of competitive sales were required to restore pre-war standards.

FOODSTUFFS FOR LABOUR

The supply of foodstuffs to labour was perhaps the biggest cause of anxiety during the Second World War. The arrangement by which labour was screened from the rising cost of living will be discussed later, but in this chapter we are concerned with the problem of food supply. Difficulties first arose in the Dooars, where prices began to rise in 1940, partly as a result of increased export activities on the part of the local rice mills. It was agreed that agency houses should stock on the gardens sufficient supplies of rice to stabilize prices, and that rice for this purpose should be purchased in Calcutta rather than in the tea districts. In 1941

the shortage was aggravated by a decline in exports from Burma on account of limitations imposed by the Government of that country. At the same time, war-time conditions and the expanding economy increased the general demand for rice and led to abnormal movements of that commodity out of Assam. The policy previously followed by Assam gardens, namely of importing rice and paddy only from outside sources, or from the surplus districts of Assam, was abandoned in 1941 and it was recommended that gardens should purchase rice locally in order to prevent its export out of the province. Managers were to co-operate and avoid the competition between gardens which would necessarily lead to further price increases. At the same time, steps were taken to encourage the cultivation of improved strains of paddy by labourers on garden land.

In 1942 the complete cessation of Burma imports and the tremendous pressure on the transport system in North-east India resulting from military operations created an extremely difficult rice supply situation. In Assam the problem was largely one of moving grain from surplus to deficit districts. In September the Government of Assam appointed Steel Brothers & Company as their agents for the purchase and distribution of imported *dhal*, salt, *atta* and other essential commodities. The Indian Tea Association appointed grain-purchasing officers in the various circles of the Assam and Surma valleys to purchase rice and paddy for distribution to all gardens. The necessary funds were provided from a common pool, to which the agency houses contributed. It was recognized that, in a collective scheme of this kind, member gardens must not be penalized merely because they happened to be more remote than other gardens from the sources of supply and a uniform average price was therefore fixed, month by month, for all gardens. In 1943 the Government of Assam agreed that a certain percentage of the purchases of grain made by Steel Brothers as government agents should be made available to the industry in the Assam Valley – a measure which considerably relieved the situation.

In the Dooars, it was agreed at the end of 1942 that gardens should endeavour to stock six months supply of rice and a special rice and *dhan** sub-committee of the Dooars Planters Association entered into a contract with local millers, which it was hoped would secure supplies equivalent to two months' requirements. For the balance of their needs, the sub-district rice and *dhan* sub-committee members were to purchase locally in conjunction with their regular sources of supply. These operations were made more difficult by the general famine conditions of 1943 and by the tendency of the Government's own purchasing agents to look on the Jalpaiguri District as a surplus area, from which supplies could

* Paddy.

be made available to deficit districts. In July 1943 it was realized it was impossible for honorary sub-district officials to cope with this problem alone and Steel Brothers were appointed as purchasing agents for Dooars gardens. A little later Steel Brothers took over a similar responsibility for Darjeeling.

In 1944 no particular allocation of a percentage of Steels' purchases was made to the tea industry in Assam, but the Government assumed the entire responsibility for making good any quantity which the circle grain purchasing officers were not able to procure. By 1945 the position had eased and no great difficulty in procurement of rice was anticipated. The common finance pool was therefore discontinued and agency houses financed their own purchases through Steel Brothers. Planters believed – wrongly as it turned out – that their food supply problems were at an end. They looked back with relief and pride on a period during which, it can be said without exaggeration, that the planters who acted as honorary grain purchase officers, helped greatly by the efficient organization of Steels, had stood between the labour force and starvation. To a great extent the Indian Tea Association had done much of the work of Government, particularly in Assam.

The United Planters Association of Southern India had similar difficulties and took on the same responsibilities. As early as the annual conference in 1942 the president referred to the way in which the problem of increasing food supplies had been accentuated by the cutting off of the usual imports from Burma. He was able to state that 'every available square yard of land on estates is growing food of some kind', and he emphasized the fact that in the food production drive the industry was not considering its economics at all. In the following year this was considered so important that W. W. Mayne, the chief scientific officer – who always seemed to thrive on being overworked – was asked to supervise food production on South India tea plantations. According to the United Planters Association's Report for 1943–4,

> primary limiting factors in the production of staple foods were the lack of suitable land, unsuitable climatic conditions, shortage of labour and in some districts, game depredation. On the whole, root crops gave the best results . . . in districts north of the Nilgiris, land permitted considerable areas of wet paddy . . . and fair to good crops of *ragi* were obtained on dry land.

In spite of great efforts, the Association's conclusion was that 'estates could make only limited contributions to the supplies of staple foods required by labour and that attention would be better devoted to the production of protective foods'. The new policy had only a limited degree of success and labour suffered in health when food grain rations had to be reduced in 1945. No labourer actually went hungry, but both in the

North and in the South, malnutrition was widespread. The anxieties of planters over the difficulty of feeding their labour have been well described by a prominent South Indian planter.

The tea areas in the South, which could grow paddy successfully and well, were limited to the Wynaad, the Nilgiri Wynaad, Coorg, North Mysore, and South Travancore. Most of the reserve lands in these areas which were suitable for paddy were brought into cultivation and leased to the labour on nominal rents.

Both rice and millets were strictly rationed from about 1941 onwards. Bulk rations to estates, and sometimes districts, such as the Anamallais, were allotted by the Government collectors of districts. In the case of districts like the Anamallais and the High Range, these bulk supplies were then distributed to estates by the planters' own organisations. In the Nilgiris and other smaller districts, allotments were made direct to estates by the collectors' offices. This distribution system often came very near to breaking down. Estates were not allowed to keep any buffer stocks and the collectors' offices were frequently short of supplies and behind with their allotments.

The staple food of Tamil and Malayalam labour is rice though a lot of Tamils will eat *cholam* (giant millet, the same as *milo*) as a staple alternative. Canarese and Telegu labour are basically *ragi* (millet) eaters, and only eat rice as an alternative. *Ragi* supplies were very short in the Nilgiris, where there is a lot of Canarese labour.

Great efforts were made to accustom South Indian labour to eat other grains and pulses as part of their ration. Some of these were quite strange to South Indian labour – in particular, wheat. Few of them had any idea how to cook wheat, and arrangements were made to teach them by sending round parties of cooks in vans.

By the end of the war, South Indian labour had accustomed itself to a much more varied diet than it had ever had before, but there were occasions when estates were down to the last bag of grain a few days before the next issue was due. I have a personal memory of one such occasion when the collector's head clerk in the Nilgiris told me, the day before my ration issue was due, that I could have no grain for two weeks. It was only when I got as far as the collector himself and told him that I was going to shut down the estate and pay off the labour that I got my grain.

TEA CHESTS

We must pass on to the continual struggle to obtain the essentials of production during war-time. Difficulties arose first with regard to tea chests and linings. Towards the end of 1940 the industry was informed that, on account of war-time export restrictions, aluminium foil for linings could no longer be obtained from the United Kingdom and might not be available from the USA. Lead had to replace aluminium, but, in the provisions of the American Importation Act, this necessitated the use of paper linings. The supply of paper for this purpose was arranged with the British Ministry of Supply, but further complications

arose when the Government of India refused to allow the export, except to the United Kingdom, of aluminium used as linings for tea chests. The restriction applied even to teas already packed and its sudden imposition caused a considerable dislocation of shipments. In due course, the order was withdrawn, though the embargo on the purchase of aluminium for this purpose in future continued in force.

Tea chests themselves soon became a greater cause of anxiety than their linings. Supplies of plywood from Scandinavia were cut off early in the war and manufacturers had to utilize maple and walnut plywood from the USA and Canada. These woods were not so strong as the birch wood previously used, but were the best available. Considerable anxiety was therefore caused when the dollar shortage led to the imposition of a rule limiting imports from dollar countries on the basis of the imports in 1940–1. After representations by the Indian Tea Association, the United Planters Association of Southern India and the Calcutta Chests Association, the Chief Controller of Imports decided that the number of tea chests allowed to be imported from 1942 onwards would be fixed each year at such a figure as was necessary for packing tea to be exported from India. In a sense the limit was academic, inasmuch as the American manufacturers had to devote an ever-increasing proportion of their production to other war industries and supplies of tea chests were considerably curtailed. Many estates were forced to make use of country-made wooden boxes, while for the internal trade some estates began to pack in bags, in view of the difficulty of obtaining nails and metal strips for wooden boxes.

South Indian planters shewed considerable ingenuity in this matter. Collapsible, reinforced gunny and cardboard chests were also used for a time, and quite a lot of tea was shipped in salvaged second-hand chests. Apart from this South India was probably better off for packing materials than North India, as several plywood factories were established on or near the west coast, which made use of reasonably good timber and battens from local forests.

An indigenous plywood industry now sprang up, but its products at this time were unsatisfactory. The position is thus described in the Annual Report of the Indian Tea Association for 1943.

> Apart, however, from the chests manufactured by the few well-established firms whose products had been in use before the curtailment of imported supplies, the chests offered by these newcomers to the field proved on the whole to be of extremely unsatisfactory quality; many were unfit for the packing of tea even by the time they arrived at the gardens, while considerable quantities were unable to withstand the journey to Calcutta, with the result that large quantities of tea were lost en route and in the warehouses and much time and labour and material had to be expended in repairing chests to render them fit for storage in the warehouses or for export. In many such chests, too,

the batten materials used were of unsuitable quality or inadequately seasoned wood, with the result that they were extremely liable to borer infection and caused tainting of the tea.

The Government of India pressed the industry to manage almost exclusively with indigenous chests, but representatives of the various associations were able to convince the Government that this was not practicable. The Government accordingly increased the tonnage available for the import of tea chests, but refused to allow the import of battens, since suitable timber for the manufacture of battens was said to be available in India. This embargo gave rise to considerable difficulty. Bengal wood was too soft and liable to be infested with borers, while the purchase and transport of timber from the Punjab, in competition with the demands of the military authorities, was far from easy. A partial relaxation of the ban on import of battens was granted at the end of 1944. Attempts were then made to use jute-backed chests for the export of tea, but the results were not sufficiently satisfactory to justify their continuance. There can be no doubt that if understandable economic nationalism had not conditioned the post-war policy of the Government of India, the industry would in due course have reverted to the practice of importing nearly all of its chests.

COAL SUPPLIES

Coal supplies began to be a cause of anxiety in North India towards the end of 1942, when the shortage of wagons made it impossible to build up stocks in the period from September to November which was normally regarded as the slack season for the railways. Early in 1942, the Coal Controller allocated a priority in railway wagons to the tea industry and although floods, shortage of river flats, congestion of steamer *ghats*, riots, and sabotage, all combined to hamper movement, gardens were in fact adequately supplied for the 1942 season. For 1943 it was arranged that Assam Valley gardens – except a few in Mangaldai – should be supplied from the Assam collieries with a coal ration calculated on the formula that one maund of manufactured tea requires the consumption of one maund of coal for driers, together with half a maund for prime movers in factories which have only steam as a motive power. Unfortunately labour troubles curtailed production in the Assam collieries and the tea industry in that province only received sixty per cent of its requirements calculated according to the formula. Consideration had been given to the installation of oil firing, but it soon became clear that under war-time conditions this would be impossible as a general measure. The greatest possible use was therefore made of wood instead of coal, but on some estates the depletion of the labour forces by the demands of the roads and other military projects made the felling of timber for this purpose difficult. In 1944 the situation in Assam became so serious that

many gardens had to cut down shade trees for fuel and although supplies improved somewhat in 1945, it was not until 1946 that any real easing of the situation occurred.

Similar difficulties were experienced in the Dooars. It had been arranged that gardens in that area would be supplied from the Bengal collieries, but the difficulties of transport were accentuated in 1943 by the requisitioning of the output of some of the collieries concerned. In 1944 the Association considered that of the coal supplied to the Dooars, about sixty per cent was good-quality steam coal, while 'the balance was from very low quality seams badly graded and containing excessive adulteration and dust'. In 1945 the cessation of hostilities and the diminution in military demands led to some relief from these difficulties, though it is reported that much of the coal supplied in that year was of poor quality. It is right to record the energy shown by the authorities in dealing with this matter and the close co-operation between them and the tea industry.

The position of South India was somewhat different. No South Indian estates have ever used coal, either for prime movers or dryers. Until about the beginning of the war, they used firewood for the dryers from fairly plentiful local supplies, and charcoal to drive producer gas engines as prime movers. Both these fuels were starting to run short by the beginning of the war.

Government hydro-electric power was available in most of the larger areas, and wherever it was not, oil was taking the place of charcoal for the prime movers and firewood for the driers.

Those estates, which were unlucky and had no government electricity available, had a very worrying time as oil supplies were limited and chancy and it is reported that one isolated estate was forced to run two Petter engines on groundnut oil for a short time.

FERTILIZERS

It is perhaps not necessary to discuss the difficulties in obtaining cement, iron and steel, tools and spare parts, or medical supplies, since these shortages were suffered by all industries, but brief reference must be made to the shortage of fertilizers. Strangely enough, this shortage was more marked just after than during the war. In 1945 the Government of India fixed the quota of sulphate of ammonia for the North Indian tea industry for 1946 at 21,000 tons – the quantity estimated by the Association as its requirements – but it arrived somewhat late. In June 1946 Government inquired whether, in view of the world shortage of ammonium sulphate, the industry could accept fifty per cent of its fertilizers in the form of ammonium nitrate. The Association after careful examination of this subject informed the Tea Controller that:

although the nitrogen content of ammonium nitrate made it theoretically an effective substitute for sulphate of ammonia, the experience of the industry was that its other properties precluded its use in Bengal and Assam, save during a very restricted period of the season. Ammonium nitrate is extremely hygroscopic, and has a tendency to cake on storage. Experiments made by one of the fertiliser firms on specially treated ammonium nitrate demonstrated that, even after one month's storage during the hot weather in Bengal, all the packs were wet, and the material inside had set into a solid cake.

Nevertheless in view of the deterioration of the world supply situation and of the Government's decision to divert ammonium sulphate to the purpose of essential food production, the industry once again had to go seriously short of this essential fertilizer.

The South suffered equally with North India from the shortage of artificial fertilizers and at the annual meeting in 1943 the president spoke frankly of the poor prospect of receiving supplementary supplies. The United Planters Association pressed strongly for additional supplies of oil cake and other indigenous fertilizers, but supplies in the Madras Presidency were inadequate even for food production and the Government refused to allow their export. This created considerable difficulties for Travancore and the other Indian States, and the order was to some extent modified in the following year.

In February 1944 nine hundred tons of ammonium sulphate were allocated to the United Planters Association for distribution and later in the year a further 1,300 tons were received. This was inadequate for members' needs and a representation by the Association that they had been treated unfairly in comparison with North India secured for the South an additional hundred tons. The position nevertheless continued difficult.

TRANSPORT AND COMMUNICATIONS

These various shortages were made worse by the inadequacy of the transport system of North-east India to cope with the tremendous pressure imposed by the war. Up to 1941 Assam was a sleepy backwater in which only the oil and tea industries made serious demands on rail and river transport, but after the entry of Japan into the war, Assam was transformed into an area of large-scale military operations. The Assam transport system had to provide the escape outlet for many thousands of refugees, to transport the Allied armies in retreat from Burma and then to convey the armies which were to carry the struggle back into enemy territory.

The difficulties became acute almost immediately after the commencement of the war in the Far East. The unprecedented volume of inward traffic caused serious congestion on the railways and at steamer *ghats*, and the priorities which necessarily had to be given to military movements involved the slowing down and at times the stoppage of move-

ments of fuel, food and stores to the gardens, or of teas to Calcutta. The Assam economic advisory board, which was set up by the Government of Assam on the suggestion of the Indian Tea Association and of which the Association's dynamic political secretary, A. E. Whittaker, became the moving spirit, exerted itself vigorously to see that military priorities were used with discretion. Unfortunately, the Assam Government, generally recognized as one of the weakest administrations in India, was not very effective in the days of crisis, and only too often much of its work had to be done by the efficient organization of the Assam Branch of the Indian Tea Association.

Special difficulties were created in the middle of 1942 by the closing of the port of Chittagong and the temporary closing of the port of Calcutta as the result of enemy activity in the Bay of Bengal. Arrangements had to be made at one stage for the diversion of export teas to Karachi and Bombay – and this at a time when wagons and warehousing accommodation were alike far short of the country's needs. Fortunately, the Calcutta port did not remain closed for long, but many gardens were not able to despatch more than a small proportion of their 1942 teas until well into 1943. A factor which aggravated the troubles was the shortage of garden lorries, many of which had been placed at the disposal of the military authorities in Assam or had been requisitioned in the Dooars. In 1943 the situation in Assam became even more difficult, though in the latter part of the year the assignment to the tea industry of three hundred lease-lend lorries helped materially. In Bengal no such allocation was made till some time later and as a result of shortage of garden transport and congestion on the railways, more than fifty per cent of Dooars teas remained undespatched from the garden by the end of 1943.

In 1944 a substantial improvement occurred. Wagons were assigned to the districts for the carrying of tea and were allocated to the gardens by the branch Associations. Messrs Duncan Brothers & Company, performed a similar service with regard to the upward movements of coal, while the despatch of other commodities to the gardens was arranged by various agency houses. Co-operation with regional controllers of priorities was admirable and was made more fruitful by the increased number of lease-lend vehicles now available to the industry, both in Assam and the Dooars.

Although movement of troops and military stores did not affect South India directly, the general strain on the Indian transport system dislocated the economy of plantations in many ways. In 1943, for example, limitation of movement of tea by rail threatened to deprive South India of its important Bombay market. Some modification of the restriction was secured and the industry responded to the request that it should make the fullest possible use of the sea route. Nevertheless, the movement of tea was seriously hampered. Even greater difficulty arose

from the considerable extent to which South India estates depended on road transport, but the situation was to some extent eased by the allocation of lease-lend lorries. The United Planters Association of Southern India acted as the distributing agent – and once again one is reminded of the many ways in which the Association carried out duties which might have been thought to be those of Government.

Before the arrival of the lease-lend lorries, considerable use was made of small charcoal gas plants fitted to lorries. These plants were manufactured in Madras, Coimbatore and Madura, and the Anaimalai Ropeway Workshops also made and fitted them. After the lorries arrived the main trouble was the serious rationing of petrol.

EUROPEAN MANPOWER

Serious though these material shortages were, a still greater difficulty arose from the inevitable shortage of European manpower in North and South India alike. By the end of 1941, out of 1,655 Europeans employed on tea estates in North-east India, over six hundred had been released for military service. Early in 1942, the Japanese invasion of Burma gave rise to a sudden demand for planters and doctors to establish camps in Assam for the reception of refugees from Burma, and for the construction of roads and other military projects. The part played by the industry in the war effort will be described in detail in a later chapter. Here we must record that at one time in 1942 as many as two hundred and forty planters were engaged in these military activities and the strain on those who remained was very great. As the years went by, advancing age and length of service without home leave made the strain greater, and in 1944 it became necessary to recall to the gardens most of the planters who had been employed in the supervision of labour working on the Eastern Frontier projects. The Association nevertheless continued to run these projects through what was known as the Indian Tea Association War Establishment, consisting of temporary army officers and BORs who had been planters in civilian life and who were now sent back from the Army to work in this establishment.

Attempts were made in 1944 to secure the release of planters from the Army, but even though such attempts were sponsored by the National Service Advisory Committee, few of them were successful.

It must not for a moment be thought that because of her remoteness from the theatre of war, South India escaped these difficulties. The drain on European manpower there was in fact very heavy. The trouble was not to find European candidates for military service, but to see that not too many were allowed to go and in 1941 it was laid down by the United Planters Association of Southern India that in the case of the tea industry estates should not employ more than one active planter for

every thousand acres. Four area sub-committees were established to assist in carrying out this policy and reporting to the National Service Advisory Committee. By 1942, fifty-two per cent of all European planters in South India had gone on National Service and except for one who was unfit, none under thirty remained. To replace the two hundred and eighty-five who had gone, only forty appointments were made. The strain on those who remained – a considerable proportion of whom were over sixty years of age – was great. A fair picture of it is thus given by the South Indian planter to whom we have already referred.

As an example, Tea Estates India staff of Europeans, scattered from Mysore to Central Travancore, was thirty-seven at the beginning of the war, and had been reduced to six in 1942. By 1944, there were only four left. To fill in the gaps, we recruited any old or unfit men we could find. Their ages varied from over forty to over seventy, and many of them had not had anything to do with planting. This supply was very limited, and by no means filled all the gaps. Some, of course, did not last the pace. It was at this time that we went out to recruit Indian covenanted staff on a large scale – a policy which has since paid very good dividends.

Even our head office in Coimbatore had no Europeans in 1944–5. It had to be left in charge of a Brahmin head clerk,who was promoted to covenanted service. Many other companies had similar problems. The Bombay Burma Corporation were, at one time, reduced to only two (I think) of their regular staff. These were, I think, the two outside cases of extreme shortage.

I would particularly like to stress the enormous debt that estates in South India owe to their subordinate staff. They rose to the occasion in a grand way, and it was they who largely kept the estate wheels turning round when supervisory authority was removed. Without their loyalty and hard work, I am sure that the machine would have creaked much more than it did. Before the war, one would have said that it would have been impossible to work estates on such short staffing.

RECRUITMENT OF LABOUR

The demand for labour for war projects was as great as that for army officers. The contribution of labour to the ultimate victory of the Allies was notable, and will be described in a later section of this book. Here it is sufficient to quote a paragraph from the Report of the Indian Tea Association for 1942.

From practically every estate in North-east India labourers volunteered for work on the Projects – roads, aerodromes, etc. – and in many cases where either the estates' buildings or parts of their tea bearing land were requisitioned for military purposes, or where an estate was situated adjacent to a project for which very large numbers of labour were required, almost the whole of the estate's labour force was so employed. The result was that some estates were unable to pluck any tea at all throughout the season, while in other cases large areas had to be left out of the plucking round either for several months at a stretch, or altogether. In consequence there was a

substantial loss of crop and, although Government undertook to compensate the estates concerned for the monetary loss involved, the reduction in India's output of tea at a time when there was a world-wide scarcity could ill be afforded. It was extremely difficult – indeed, impossible – for the Committee to remedy matters: the work of the projects was of primary importance and brooked no delay. Looking at the future, however, the Committee evolved a scheme, which was accepted by the Military authorities concerned, whereby during 1943 large numbers of labourers would be recruited by the gardens on Government account so that, for all projects that might have to be undertaken with tea garden labour during 1943, an adequate number of trained labourers could be made available by the estates, while at the same time the work of the estates, and the production of tea, would not suffer by reason of lack of labour.

This proposal for the recruitment of labour on government account was sound, but in war-time India there were many opportunities of employment for unskilled labour and at no time during the war in the East was it possible to obtain as much labour as was really required for the combined needs of military projects and the tea industry.

In the last year or so of the war the demand for manpower for military labour units and for civilian labour forces working on war projects compelled the various recruiting agencies to cast their net very wide and to include South India in it. Plantation labour, which had become accustomed to leaving home was exactly the type required. Direct recruitment of labour actually employed on plantations in South India was perhaps uncommon, but the agencies concerned naturally drew on the normal plantation recruiting areas. The wages offered were tempting, and as a result many former tea estate labourers who would in the ordinary way have returned to the tea districts after their annual holiday, went off to war work of one kind or another. The Provincial Labour Supply Committee, on which the United Planters Association of Southern India was represented, endeavoured to spread recruiting over as wide an area as possible and to take a balanced view of military and civil needs. The drain on tea estate labour was nevertheless serious – all the more so because plantation labour was generally recruited on the family system, so that if a man went off to war work the estate lost his wife's services also. By the end of the war, according to the United Planters Association figures, there was a labour shortage of eighty thousand on South Indian plantations and it was not until about 1947 that the position again became normal.

POSITION OF THE INDUSTRY AT THE END OF THE WAR

We have described a few of the major difficulties which beset the Indian tea industry during the war and the determination with which they were met. It is now necessary to examine their effect on the general posi-

tion of the industry. The long-term contract and the block purchase had left the industry with virtually no problem of marketing and had guaranteed the continuance of reasonable, but not immoderate profits – and the operation of the excess profits taxes had limited the financial benefit which might have accrued from the increased demand for Indian tea after the enemy conquest of Indonesia. The reserve position of the industry was reasonably sound, judged by pre-war standards, but in many cases not strong enough for the needs of the post-war era of high labour and general costs. Moreover, many companies had been unable under war conditions to replace plant and machinery – and some indeed felt it wrong to do so – and there was a big backlog of renewal and replacement which would have to be done at inflated post-war costs. There was also the difficulty that Britain's war-time needs had necessitated an emphasis on quantity rather than quality and inadequate European supervision had strengthened this tendency. Labour had developed a habit of coarser plucking than would have been permitted before the war and as the bonds of discipline, in the tea districts, as well as in most of the world, had become relaxed, it would not be easy to enforce a return to the better standards of plucking which would be necessary when competitive buying and selling were restored.

There were thus elements of weakness as well as strength in the condition of the industry at the end of the war.

CHAPTER SEVENTEEN

PROBLEMS OF THE POST-WAR PERIOD IN INDIA: 1945–60

The transition from war-time to peace conditions was much longer drawn out than had been expected. Planters and labourers who had been on service or engaged on military projects returned to their gardens fairly soon, but they were not the same men as when they went away. Many of the planters had missed what are normally the formative years of a young assistant's life. In the Army they had commanded men and carried heavy responsibilities and it was not very easy for them to resume the positions which they had occupied five or six years earlier. Yet they knew little about tea and were not ready for managerial charge. Many tea companies thus had to choose between entrusting their gardens to inexperienced hands, or leaving them in the charge of tired, older men who had borne the strain of the war years and now wanted to retire. Labour, too, was restless. Labourers who had worked on military projects had seen something of the outside world and no longer took the authority of the manager for granted, while those who had remained on the gardens had grown accustomed to the poorer discipline which was the inevitable result of the absence of a large proportion of European planters. They had got into the bad plucking habits necessitated by war-time insistence on quantity rather than quality.

Apart from these problems of personnel, four major factors operated in the transition period, namely, the continued bulk purchase by His Majesty's Government; the inadequacy of transport and communications, which was made worse by the partition of India; shortages of essential commodities; and the growth of governmental controls and economic nationalism.

BULK PURCHASE

An important aspect of the transition from war to peace, was the delay in the return to normal methods of purchasing tea. At the end of 1946

the bulk purchase scheme was discontinued. His Majesty's Government still continued to be the sole buyer for the United Kingdom, but the ban on private exports from India was removed, and producers were free to sell their export teas either to outmarkets, or to the United Kingdom Ministry of Food. The Government of India had taken it for granted that the London auctions would be reopened immediately after the end of the war and learned with surprise that His Majesty's Government proposed to buy for the United Kingdom direct from producers. There had for some time been a desire in India to see Calcutta take the place of London as the world's most important tea market, and since London auctions were not to be opened yet, the Government of India favoured the auction of the total North India crop in Calcutta. The Indian Tea Association was able to persuade the Government of India that this was impracticable and, in 1947, producers were allowed to contract with the United Kingdom Ministry of Food for 286,000,000 lb of tea, of which 246,000,000 lb came from North India. A similar arrangement for an increased quantity of tea was made in 1948 and 1949 at somewhat better prices than in 1947, since some allowance was made for the increased cost of production. In 1949 the Ministry of Food expressed serious concern at the falling off in the standards of the teas delivered and the large proportion of sub-standard teas, and they announced a somewhat more drastic system of deductions for poor quality than that which had prevailed during the war years.

The industry was concerned at the delay in getting back to normal channels of trade and its anxiety was heightened in 1948 when the Government of India decided to make a bulk purchase on behalf of Russia, with which country India had just concluded a barter deal. It might have been thought that the industry would view with satisfaction the reappearance of Russia as a customer, but unfortunately the matter was mishandled by the Government of India. The Russians insisted on purchasing only tea of a high quality, of which thirty per cent must be leaf grade. The prices fixed were inadequate for these teas. Moreover, the industry was only asked to tender late in the year, when it was difficult to obtain the high grades required. A great deal of pressure was brought by the Government of India on the industry to make up the desired quantity of five thousand metric tons and this was in the end achieved. As a result of this deal, India's normal outmarkets were deprived of 9,500,000 lb of the type of tea they required. A similar bulk purchase of four thousand metric tons for Russia was made in 1949. Prices were more satisfactory than in the previous year and the industry was given ample notice. Nevertheless, the Association considered it essential that normal trade should be restored and they heard with great relief that there would be no bulk purchase for Russia in 1950.

Unfortunately, the United Kingdom Ministry of Food was still

unwilling to discontinue rationing and the war-time system of purchase. Repeated representations were made by the Indian Tea Association and sister associations, which considered that the Ministry took a wholly unrealistic view as to the stock of tea necessary in the United Kingdom before free trading could be resumed. If the leaders of the industry had only considered immediate profits, they might have been well satisfied with a system which gave them a guaranteed price, but they were profoundly convinced that nothing but the discipline of auctions would ensure a radical improvement in the quality of tea and that in the absence of any such improvement, consumption would decline. At last the Ministry were half convinced and the first post-war auction of tea in London took place on 16 April 1951. Tea still remained subject to control over distribution and:

> all purchases of the United Kingdom buyers, whether from the auctions or from the private contracts, were limited to their individual entitlements as primary wholesalers under the United Kingdom rationing scheme. They were also subject to price ceilings resulting from the maximum retail selling prices which had been imposed by His Majesty's Government, and which in May were increased by 4d a lb when the Government subsidy was reduced by a similar amount from 1s to 8d a lb.

There was an essential artificiality about auctions subject to a statutory retail price limit and these resumed auctions were frankly described by producers as 'phoney'.

Still the Ministry proceeded with caution, or even timidity. In July 1952 the embargo on re-exports of tea from the United Kingdom to the Continent was removed. On 7 September, the ration was increased from $2\frac{1}{2}$ oz to 3 oz per head per week and on 2 October, the Ministry abolished tea rationing altogether and removed all price limits. The severe financial discipline which resulted from the recovery of freedom will be discussed later.

Here we must note that when auctions were resumed after an interval of nearly twelve years, a great deal of valuable experience had been lost. Producers, buyers, brokers and retailers all had to make a fresh start at studying public taste and estimating market trends. The process could not be rapid.

Fortunately, the removal of rationing led to a definite though unspectacular rise in consumption in the United Kingdom. Pre-war consumption per head had averaged 9·32 lb per annum. The corresponding figure for 1952 was 8.63, but it rose to 9·52 in 1952 and has since fluctuated between $9\frac{1}{2}$ and 10 lb.

TRANSPORT AND COMMUNICATIONS

The second major factor requiring study in this period is the difficulty

of transporting tea and tea-garden stores. During the first few years after the war, transport and communications were a great cause of anxiety to the tea industry in North-east India. The movement of military stores and equipment during the war had thrown a great strain on the railways and by 1946 repairs and replacements of rolling stock and locomotives were heavily in arrears. In January 1947 the Calcutta dock strike led to such congestion in the port that all bookings of tea to Calcutta, either by rail or by river, had to be suspended. Attempts were made to alleviate the situation by diverting Dooars teas to Chittagong, but tea lay unshipped in Calcutta for some months and it was not until April that bookings to that port were resumed. The supply of wagons was then quite inadequate to clear off the backlog and with a large proportion of their 1946 teas still lying in their factories, many gardens had difficulty in finding accommodation for the new crop.

In August 1947, the Partition of India made confusion worse confounded, since the whole of the export teas from North-east India either had to pass through Pakistan to Calcutta or to go into Pakistan for export from Chittagong. The situation immediately resulting from Partition was not unlike that which arose after the First World War from the dismemberment of Austria-Hungary, when the unwillingness of each of the new states to allow its rolling stock to go into an adjacent state produced chaos and starvation. The position was graphically described by R. L. Hards, then chairman of the Indian Tea Association, in his speech at the annual meeting in Calcutta in March 1948.

> The causes of this congestion are many; there is the aftermath of war; there is the absence of repair facilities; and there is, I fear, a hesitancy of the railway administrations to entrust their wagons to their neighbours. The transfer of staffs has brought railway officials into areas with which they are unacquainted, and where their domestic problems inevitably prevent them from giving all their energies to their work. There are long lines of railway wagons, of good quality, now occupied as residential quarters, or as godowns for the storage of the family belongings of migrating officers. . . . The wagon allotments to tea remain inadequate, and even teas for direct shipment under the contract with Britain, which should all have been delivered in the UK by now, are still lying in Jalpaiguri and in Darjeeling; so that the Tea Controller himself has been constrained to take up the matter with the Railway Board.
>
> We have read the Budget speech of the Minister for Railways and we have taken heart at his optimistic utterances; but I can assure him that nothing would give us so much hope as a couple of special trains to clear our teas now lying at Siliguri Station, or an arrangement with Pakistan to send specials to clear our upwards traffic stranded at Santahar and Parbatipur. Practical steps of this kind would be a great tonic to our harassed managers and buyers.

In the early part of 1948 the position grew steadily worse. On 29 February, the standstill agreement between India and Pakistan came to an

end and land customs formalities were introduced. Even if relations between India and Pakistan had been good, the administrative difficulties involved in the new procedure would have been considerable. At a time when hostility between the two dominions was intense, the formalities inevitably resulted in prolonged delays and much irritation.

Assam again experienced the advantage of having river as well as rail communications, but in the Dooars where one-third of the 1947 crop was still on the gardens in March 1948, the position soon became so serious that special arrangements had to be made to take tea by road to Siliguri, where it was met by special trains reserved for the movement of tea-garden stores from Calcutta and tea back from Siliguri. It was also arranged that twenty wagons a day should be provided to take tea from the Eastern Dooars to Dhubri in Assam, whence it would be transported by steamer to Calcutta. This route did not prove satisfactory, partly because sufficient wagons were not available, 'but also because of the distance of the station from the steamer *ghat*, the lack of storage accommodation and the limitations of the railway siding'. After a great many initial difficulties had been overcome, the road-cum-special train plan worked satisfactorily and by the end of the year seventy-five per cent of the Dooars crop had been despatched to Calcutta. Darjeeling and the Terai experienced less difficulty than the Dooars in moving their tea.

An important development in 1949 was the completion of the Assam Link. Up to this time all rail and river traffic between Assam and Calcutta had to pass through Pakistan, but in view of the bitter antagonism between the two countries, the Government of India were determined to establish an all-India rail link between Assam and Siliguri and thence to Calcutta by a route wholly within India which already existed. This project, which will be described in a later chapter, involved carrying the track across a number of rivers hitherto regarded as incapable of being permanently bridged in view of their torrential character during the monsoons. It was completed in 1949.

In that year more wagons also became available on the main Siliguri–Calcutta route and special trains were replaced by the provision of regular wagons for the tea industry on the normal services. The position thus improved steadily throughout the year, until December, when economic disputes between the two governments led to the complete suspension of Indian goods through Pakistan either by rail or by river.

The Assam Rail Link thus became the only route from Assam and the Dooars to Calcutta and it at once became obvious that it was incapable of carrying more than a fraction of the traffic now offered. There was, moreover, a lack of adequate facilities at the Ganges crossing, where a change was effected from metre to broad gauge wagons. Delays and damage to tea as a result of rain were inevitable and when agreement was reached between India and Pakistan about the general dispute, the

movement of tea and stores by river was resumed. The Government of India nevertheless tried to insist that those tea districts which had previously used the rail route through Pakistan, must now use the Assam Link. Within a few months, the Government were compelled to admit that even this traffic could not be carried regularly and safely by the Link, and in May 1949 it was agreed that a daily quota of ten wagons should be provided for the carriage of stores from Dhubri to the eastern areas of the Dooars.* Transport between Dhubri and Calcutta would be by river. The wisdom of this decision to make more use of the rivers was manifest in January 1950, when a cyclonic storm of unusual intensity breached the Assam Link at the Tista River. Those who had scoffed at the possibility of constructing the Link were more than ready to cry, 'I told you so', but against all probability the breach was repaired and within two months the Link was in operation again. It could, nevertheless, not have carried more than a fraction of the necessary traffic if the river route had not been used.

The restoration of the Link, together with the extended use of river steamers, resulted in a rapid despatch of the 1950 crop. The large part played by the river steam companies in this improvement was recorded in the Association's Annual Report for 1950 and the moral drawn was 'that it is of the utmost importance to ensure that the steamer routes are maintained in use' – a testimonial given in spite of the fact that the earthquake in Assam of that year made it impossible for river steamers to reach Dibrugarh.

In 1951 the improvement continued though it must be recorded that the quota of wagons for the despatch of stores to the Dooars, via the Assam Link, was never adequate and the struggle for wagons was con tinual. Major troubles were not again experienced until the great floods of 1954, to which the chairman of the Indian Tea Association thus referred at the annual meeting in March 1955.

There were the floods in the Dooars; deafforestation in Bhutan: torrential storms with rainfall that on one day exceeded forty inches; landslides and the blocking of rivers by the debris; and then the bursting of the dams so created; bringing to sections of the Dooars devastations of such completeness that no one who has not visited the area can imagine the havoc which has been caused. The Assam Rail Link was breached in forty-four places; bridges were washed away; and on one occasion a locomotive was carried a quarter of a mile downstream by the force of the current. A thousand acres of tea lies buried in sand, while, most tragic of all, nearly 150 people were drowned on two gardens which stood in the way of the turbulent waters as they carved out a new channel. The Railway was out of action for three and a half months, and though the Administration worked heroically to effect repairs, new breaches were created as soon as old ones had been repaired. Now, although through

* Which the planter calls, not quite correctly, the 'Eastern Dooars'.

running has been restored, many of the bridges are of a temporary nature, and we face the strong probability that there will be further breaches in the coming monsoon. Indeed, we are greatly worried by the whole situation, and by the enormity of the task of river control and of rebuilding which lies ahead.

This breakdown in the normal lines of communication inevitably disrupted the despatch of tea from the gardens, and added greatly to the anxieties of the market. What was even more dangerous was the shortage of foodstuffs and of supplies essential to manufacture, notably furnace oils. To make good these shortages, we had to turn to the one form of transport which was able to continue undisturbed – the air. It is difficult to pay adequate tribute to the pilots who, operating in deplorable weather conditions, and on airstrips all of which had been affected by the monsoons, and one of which had been partly washed away, managed to keep the gardens and their labour forces supplied with essentials until the floods subsided, and until surface transport was able to resume. In those difficult monsoon months, Jamair pilots made 803 emergency flights on our behalf, and I am glad to have this opportunity of expressing my admiration.

From 1955 onwards, although transport in North-east India was always a matter of anxiety, the tea industry was in general able to despatch its tea without undue delay and we need not pursue this theme further.

Whereas the anxieties of the tea industry in North India regarding transport were concerned with the rail and river routes, their colleagues in the South were more than a little worried about road transport – garden lorries had been badly run down during the war and in spite of the efforts of the Provincial Motor Transport Controller, import restriction prevented any early remedy of this state of affairs. Roads too had fallen into disrepair and at the annual conference in 1948 the president, F. G. Wallace spoke feelingly on this subject:

> Transport of foodstuffs is made doubly difficult, by the shocking condition of some of the first-class roads, to say nothing of the second class and District Board roads. Some of these latter do not deserve the name of roads. A more apt description would be a track consisting of a series of pot-holes and what were presumably at one time Irish Drains, but what had now, in many cases, become grand canyons. I heard them being described as back axle breaking gullies.

Shortage of wagons at this time seriously interfered with the despatch of tea from South India to important markets in Central and Northern India, but in 1949 the authorities did their best to help and with the arrival of new locomotives and rolling-stock the position gradually improved. A further difficulty, however, arose from the fact that the Sholapur–Nilamber Railway and the Madura–Bodinayakkanir Railway, which had been dismantled during the war were not restored for some years. Nor did the position with regard to lorries and motor vehicles improve at all rapidly, though in 1952 it was admitted in the Annual

Report of the United Planters Association of Southern India that 'the availability of lorries has been easier on the whole'. From 1954 transport problems ceased to occupy a prominent place in the deliberations of the United Planters Association and it can be assumed that conditions were back to normal.

SHORTAGES OF ESSENTIAL COMMODITIES

(a) *Foodgrains*

A third factor seriously affecting the industry for much of the post-war decade was the shortage of many essential commodities, the most important being foodstuffs for labour. In North-east India what little relief had been experienced in the foodgrains supply position after the end of the war was rapidly nullified by Partition, which affected the matter in two ways. In the first place it dislocated communications and made the supply of deficit districts more difficult; while, secondly, it left India more dependent on imports than before 15 August 1947.

The first impact of Partition was felt in West Bengal where government supplies ceased altogether and the situation was saved by purchases from Nepal. Those purchases were only possible because Leavy Burton, chairman of the Terai Planters Association, had built up valuable contacts in that country. At the end of 1947 the Nepal Government suspended the export of rice and the industry in the Dooars had to rely on local procurement through Steel Brothers.

In the Dooars the position fluctuated considerably during the year. Shortage of bullock carts limited the importation of Nepal rice when it was again permitted, while lack of petrol and road transport hampered the distribution of stocks after import. These difficulties were exacerbated by the insistence of some gardens on making contracts with local middlemen whose activities merely lessened the tranport facilities available to Steel Brothers & Company. Further difficulties arose from the fact that the only government stocks of rice available were in West Dinajpur, whence they could only move to the Dooars and Darjeeling through Pakistan – and many weeks of struggle were lost before the necessary permit could be obtained from the Government of East Pakistan. Eventually these difficulties were overcome. The Dinajpur rice was received, Siam broken-rice was imported, a special train was despatched to Darjeeling with rice, and Nepal supplies again became available. Except for apprehension with regard to the high price which would have to be paid for rice, the Darjeeling Dooars Sub-Committee felt able to take a fairly optimistic view of the prospects for 1949.

The year 1949 was in fact one of less anxiety in all districts and at one stage Dooars gardens complained of having too much rice. The industry protested bitterly at the price discrimination against it compared with

other rationed populations in West Bengal. The Association's view was thus set forth in the Annual Report.

Government should supply the industry with rice and paddy at the controlled rates at various suitable points in the district in which gardens are situated. Under existing procedure grain is usually supplied from Government sources at controlled rates but at loading points in other districts from which the expense of transport to gardens by rail and/or road forms a most costly addition to the price paid for supplies. As an example, rice was made available to the industry by Government at Rs 16/10/- per maund ex Hili which represents not less than Rs 18/10/- per maund landed at Darjeeling gardens compared with a price of Rs 16/8/- per maund which was the official rate charged by local dealers in Darjeeling town. These extra charges involve an additional expenditure of some Rs 25 *lakhs* per annum which the industry cannot continue to pay.

In 1950 things took a turn for the worse. The closing, for political reasons, of the broad-gauge line from India through Pakistan to Siliguri made it difficult to obtain supplies from West Dinajpur and the hoped for consignments from Assam proved disappointing. Rice was available in East Pakistan, but the difficulties of obtaining it in the absence of any effective trade agreement between India and Pakistan were insuperable. At the beginning of the rains, stocks on Dooars gardens amounted to only $2\frac{1}{2}$ months' consumption and in Darjeeling gardens were as low as one month's demand.

Additional substantial supplies by ordinary routes could not be expected for another four months, and it was plain that the situation must be tackled by extraordinary measures. These took the form of arranging for the movement by air of rice from Balurghat airstrip to Bagdogra, Hasimara, Telepara and Grassmore. No less than 1,10,000 maunds of rice were moved in this way in collective effort, probably without precedent in India. A further 70,000 maunds were moved by circuitous bullock-cart and country-boat routes to the O & T railheads.

In spite of this large-scale airlift, the stock position at the end of the year was very weak and the supply by Government of *atta** was much welcomed. Fortunately, after a certain amount of reluctance, labourers accepted *atta* in part replacement of rice.

The difficulties of the Dooars in 1951 were as great as those of 1950. Crops in West Dinajpur were insufficient for local needs and the allocation to the industry of 40,000 tons of foodgrains in East Bengal, bought under the India/Pakistan Trade Agreement, proved a disappointment. Much of the grain supplied was scarcely fit for consumption; endless delays occurred over despatch; and in the end the industry received about 6,400 tons of wheat out of the 40,000 tons for which it had

* Wholemeal coarse flour.

hoped. Imports from Karachi and elswhere were then allocated to the industry, but it was soon found that 'procurement often represented only the first part of the battle and transport still had to be arranged'. Once again the Indian Tea Association had to transport foodgrains to the gardens by air and this time it cost Rs 8 *lakhs*. Estates had to live on a hand-to-mouth basis throughout the year. The ration in the Dooars has to be reduced to one and a half *seers** of rice, one and a half *seers* of wheat, and half a *seer* of *milo*† per worker per week. *Milo* was quite new to tea-garden workers and never became popular.

In the Assam Valley, many gardens found themselves left towards the end of 1947 with very inadequate stocks of rice and had to reduce the ration. A good harvest put things right at the beginning of 1948, but the inefficiency of the official procurement arrangements, together with the Assam Government's delay in permitting circles which had become surplus areas to purchase locally, led to increasing difficulties. Ultimately, the Assam Government gave up their attempts to control the price of rice and the Indian Tea Association were allowed to appoint Steel Brothers as their sole procurement agents. In spite of extensive damage to the aus crop by floods, the position at the end of the year was better than at its beginning.

In 1950 the situation again deteriorated. In Assam, communal disturbances, a severe earthquake followed by floods in important rice-producing areas, and a shortfall of procurement, led to rising prices and insufficient stocks and as usual local middlemen reaped a rich harvest.

If 1950 was a year of anxiety, 1951 was soberly described in the Assam Valley as a year in which the difficulties of food supply were greater than ever before. Voluntary procurement failed and the Government of Assam showed itself unwilling to use its power of requisitioning foodgrains. The rice ration of the tea-garden labourer was reduced, and a further indirect reduction was effected by setting off against his ration-entitlement any rice produced by him on garden land. Import of wheat and rice under the India/Pakistan Agreement was arranged, but the formalities involved in moving these supplies were considerable and before they or the rice allocated by the Central Government had arrived, garden stocks were practically exhausted. Local purchase became unavoidable in June, and the price of rice in Upper Assam rose to Rs 75 a maund. Once again, the Association had recourse to an airlift for the allocation now received from the Central and States Governments and this airlift kept the tea-garden labourers fed until the belated supplies reached Assam by the ordinary route.

In 1952, supplies of foodgrains in all areas improved and thereafter

* *Seer* – was an Indian weight officially 2 lb.
† i.e. sorghum – a small seed, like millet, supplied from the United States.

the difficulties of feeding labour never again became as acute as in the first six years of the post-war decade. These difficulties had imposed a very heavy financial burden on the tea industry and an intolerable strain on garden managers – a strain which is sometimes forgotten by armchair critics who talk about the poor quality of tea produced at that time. A more just view would be that the industry managed to feed its labour force with the minimum of help from the governments concerned and that but for the highly developed organization of the Indian Tea Association, tea-garden labourers would more than once have been without food. It is only necessary to add that Steel Brothers proved themselves incomparably superior to any governmental organization in the procurement and distribution of rice.

The difficulties of South India in the matter of food supplies for labour were almost as serious as those in the North, and require no separate description. It was not until 1953 that the United Planters Association of Southern India considered the food situation 'a little better' and in the following year the Association declared that food supplies were abundant.

(b) *Coal supplies*

Coal was almost as great a cause of anxiety as foodstuffs during the first few years after the war, though the difficulties arose not from short raisings, but from the transport difficulties that have already been described. In 1947 it was arranged that most Assam gardens would be supplied from coalfields in that province, while Bengal, Cachar, and Sylhet gardens would in the main be supplied from Calcutta, via the Bengal–Assam Railway or the steamer route – but later the supply to those areas had to be supplemented from Assam. Partition upset the distribution plans considerably, but the industry in India did not in fact go so short of coal in 1947 that production suffered. The year 1948 proved difficult and the Dooars received only sixty-four per cent of its requirements and stocks were low at the end of the year.

In 1949 the Assam Railway decided to rely on coal from that Province. This left less Assam coal for the tea industry and six circles of the Assam Valley were supplied by river from Calcutta. Greater anxiety existed in regard to the Dooars. It was obvious early in the year that nothing like the full promised quantity could be moved to the Dooars via the usual Santahar route and a system of despatch of half-rakes and later rakes to Siliguri, whence the coal was transported by lorry to gardens west of the Toorsa, was adopted. The eastern districts of the Dooars continued to be supplied via Santahar. The arrangements worked well, except that the route to the Western Dooars via Siliguri was expensive.

At the end of 1949 the Government of India banned the export of coal

to Pakistan and therefore considered it necessary to close the river route to Cachar. The supply of coal to Cachar from Assam via the hill section soon proved impracticable and despatches from Calcutta to Cachar by river were resumed. West Bengal gardens also presented a problem. Coal was transported there via the Assam Link, but after the breach of that line in June 1950, it had to be sent by the river to Dhubri and conveyed thence to coal-distribution centres operated by the Dooars Branch of the Indian Tea Association. Both in Assam and Bengal the needs of the industry were ultimately met.

In 1951 West Bengal gardens were supplied via the route adopted in the latter half of 1950 – that is by steamer via Dhubri. This was an expensive route, but the full requirements of the Dooars and the Terai were met, while Darjeeling received seventy-five per cent of its needs. Supplies to Assam and Cachar were reasonably satisfactory, but at one time anxiety was caused by the coincidence of increased demands for Assam coal from the Assam Railways with a shortage of oil, which compelled a number of gardens to abandon oil and turn back to coal for firing. In 1952, in spite of flood difficulties, the industry received its requirements of coal.

The year 1953 was fairly satisfactory for most districts in the Dooars and the ability of the Assam Link to carry a large proportion of the coal for West Bengal gardens minimized the use of the more expensive rail-cum-river route. Cachar experienced special difficulties in 1953 owing to the insistence of the authorities that gardens in that area must be supplied solely from Assam collieries. Circumstances compelled some relaxation of this rule during the year, but it was made clear that this was not to be a precedent. The Assam Valley's difficulties at this period were of a different kind. Assam gardens were compelled to take a large proportion of the inferior Khasi coal, so that railways and steamer services could increase their utilization of the more satisfactory Ledo coal. Representations on this point produced no response.

In 1954 the demands of various development projects in Bihar led to a reduction in the availability of coal wagons for the tea industry via the Assam Link and the Indian Tea Association accepted an offer of the Joint Steamer Companies to reduce freight rates if the companies were assured of fifty per cent of the Association's coal quota for carriage by the river route.

In 1955 the situation was considerably improved by the reopening of the Indo-Pakistan rail route by Santahar. For the Dooars, special arrangements were made with the Joint Steamer Companies for early despatch of coal via Dhubri or via a new Rajmahal–Manihari route. Cachar again suffered from the inability of the Assam coalfields to deliver the promised quantities and the consent of the Coal Commissioner to a supplementary supply from Bengal came too late for the Joint

Steamer Companies to be able to move it all before the seasonal closing of the river. The industry has justifiably criticized the Coal Commissioner for this consistent over-estimation of deliveries from collieries and for his unwillingness to recognize sufficiently early that his estimates were wrong.

Although the industry always received the bulk of its requirements, the yearly struggle for coal was a nightmare and such success as was achieved was largely due to the tenacity of the heads of Duncan Brothers & Company, who acted as the Association's executive in this matter and of the branch officials who controlled local distribution.

(c) *Fertilizers*

Shortage of iron and steel was suffered by the industry for a decade or more in common with most other industries. A problem more peculiar to the tea industry was that of obtaining adequate supplies of fertilizers – and the North and South were equally affected. During the war, as we have seen, the industry had necessarily gone short of artificial fertilizers and the effect on the bushes was said to be obvious. In 1947 when world supplies of chemical nitrogen were still controlled by the United Nations, there was a world shortage, which, expressed in terms of sulphate of ammonia, amounted to 10,000,000 tons. Supplies were imported by the Government and then allotted to approved suppliers. The Indian Tea Association asked for 35,000 tons of sulphate of ammonia, but stated that a certain proportion could, if necessary, be in the form of ammonium nitrate, provided that – in view of its hygroscopic character – it arrived between October and January. The Government of India was only at first able to make available a little over half of the nitrogen required by the industry and only a small proportion of this was in the form of ammonium sulphate. Fortunately, it was possible later in the year to allot to the tea industry 15,000 tons of Russian sulphate of ammonia and the needs of tea gardens were more or less met. South India fared much worse.

In 1948 the Indian Tea Association called the attention of the Government of India to the unsuitability of nitrate of soda and ammonium nitrate to the tea bush, and emphasized the fact that the declining yield in Cachar was largely due to lack of suitable fertilizers. It was at first proposed to allocate all the available ammonium sulphate to provincial governments without making a specific provision for the needs of the tea industry, but the Associations concerned protested successfully against this proposal and secured an allocation of 10,250 tons of sulphate of ammonia and 21,000 tons of nitrate of soda. The Government's attention was again drawn to the authoritative scientific view, that if nitrate of soda were to be used at all it must not be in a higher proportion than four parts of nitrate to three parts of

sulphate of ammonia. An additional allocation of sulphate of ammonia, which more or less maintained this proportion, was then made.

In the following year a better allocation was made, but the North India tea industry – which was not free to buy all its requirements from a few reputable and experienced suppliers as before the war – experienced difficulty as a result of unsatisfactory mixtures sold by certain suppliers. The Government then approved of certain importers, some of whom were newcomers to the business and allotted particular quantities for the tea industry to those suppliers. In 1948 and 1949 it was found in a number of cases that the fertilizers were not up to standard. The Indian Tea Association therefore drew up a code of rules and advised members to include them in the contract. These rules were subsequently approved by the Ministry of Agriculture and compliance with them was made a condition of the allocation of imports of fertilizers. The United Planters Association of Southern India still experienced a serious shortage.

In 1950 the supply situation was better, but gardens had to accept a certain proportion of superphosphates and nitrate of soda – the latter being included since there were supplies of it still unused from the previous year. The industry sought permission to buy the various ingredients separately – and had this been allowed many gardens would not have utilized the nitrate of soda at all, even though they had had to pay for it – but the Government insisted on the sale of fertilizers as mixtures. The Association acquiesced in this procedure for this year as a time-saving measure, but the fertilizer suppliers agreed not to incorporate any sodium nitrate in their mixtures for the tea industry.

In 1951 a satisfactory allocation to the industry both in the North and the South was made and it was agreed that estates should be free to arrange with their suppliers the type of mixture most suitable to their requirements and to take sulphate of ammonia and superphosphates separately if they so wished. This was a considerable step forward. In the following year, the industry's estimated requirements rose to 55,000 tons of sulphate of ammonia and 8,000 tons of superphosphates. The Government of India was unable to allot this increased quantity, but as it happened the financial condition of the tea industry in North India severely limited the application of artificial fertilizers and the allocation was more than sufficient to meet the effective demand.

In 1953 the supply and demand situation was completely transformed and there was an accumulation of ammonium sulphate at the Sindri factory. The Government reduced the price in order to dispose of the surplus, but the industry had reasonable grounds for complaint in that it was charged a higher price than the general public.

For a time there was no shortage of sulphate of ammonia and the only problems were those connected with price and distribution. It was not long, however, before the industry again began to experience difficulties.

In August 1956 the Government of India announced their intention of reducing imports of sulphate of ammonia and increasing the supply of urea and ammonium sulphate-nitrate, since these were the products that would be manufactured by the fertilizer factories to be set up in the Second and Third Five Year Plans. The Indian Tea Association lost no time in pointing out the unsuitability of these particular fertilizers for tea – partly on account of their hygroscopicity – but the industry was nevertheless compelled to accept a certain proportion of its nitrogen requirements in these forms.

In 1958 the Government of India appeared to have accepted the industry's statement that ammonium sulphate was the only suitable artificial fertilizer for mature tea, but foreign exchange difficulties severely limited imports and in 1958 the industry obtained only fifty per cent of its requirements. Throughout the remaining two years of our period, tea gardens were kept seriously short of this essential commodity.

The difficulties resulting from shortages of essential commodities have warranted discussion in some detail, not only because of their direct effects on the economics of the tea industry, but also because they involved a serious drain on the energies of managerial and agency personnel. Men who could more profitably have concentrated on quality and yield, had to spend much of their time writing about the non-arrival of the essentials of production, badgering railway executives or station-masters and improvising methods of doing without real necessities. Many managers would indeed regard the first five years of the post-war decade as in some ways more difficult than the war period. They would also express the view that, although governmental intervention in matters of supply and demand was perhaps unavoidable, it almost invariably led to delays and inefficiency, and that the most competent and devoted civil servant could not effectively fill the rôle of the merchant.

ECONOMIC CONTROLS AND NATIONALISM

The next group of factors affecting the Indian tea industry arose from a new, post-war, economic concept. Independent India had from the beginning a firm conviction that the economy of the country must be controlled at all points, and the nature of the control was determined by the strong economic nationalism which characterized the whole of Asia at this time. The Congress leaders believed that the evils attendant on industrialization in nineteenth-century Europe were not the inevitable consequence of rapid development, but resulted from the free play given to the capitalist system. The planners assumed that the Government could so direct economic activities as to secure progress without tears. Any such direction would naturally involve the maximum possible diversion of trade and industry from foreign into Indian hands.

This did not mean that India contemplated the nationalization of the tea and other industries. The rulers of independent India had far too many inescapable problems without seeking further burdens, and they soon began to be conscious of the need of help from private enterprise. Nehru and Vallabhai Patel made their attitude clear within a few months of the transfer of power and in spite of the wild speeches of certain less important Ministers, the Cabinet as a whole has steadily refused to play with doctrinaire ideas of state-ownership. Shri Morarji Desai, the then Commerce Minister, had some pungent things to say on this subject in the Indian Parliament on 22 March 1957. In rejecting a resolution moved by a communist member urging nationalization of the tea industry, Desai pointed out that the efficiency of a major foreign-exchange-earning investment would be disrupted at least initially, that the proposed action would be incompatible with India's desire to encourage foreign investment, and that though the industry was to some extent dominated by British capital, it was Britain who was the principal buyer. Morarji Desai spoke with the authority of the Government as a whole and it can safely be said that during the post-war period, nationalization of the tea industry has never been a serious issue.

(a) *The Central Tea Board*

The tendency, indeed, was towards control rather than nationalization and it was in accordance with this trend of thought that in 1949 the Central Tea Board was brought into being. Up to that date the industry had run its own affairs and even tea propaganda, though financed by a statutory cess, had been controlled by the industry. K. C. Neogy, the Commerce Minister at the time of the inauguration of the board, was at pains to explain that the Central Government had no intention of interfering with the normal activities of the industry. The current of Indian thought was, however, stronger than the practical-minded Neogy and the preamble to the Bill made it clear that the industry was to be developed under central control. The first outward and visible sign of the change was the replacement of the old Indian Tea Market Expansion Board – which had been exclusively non-official and had always had a prominent tea man as its chairman – by the Central Tea Board, with an officially appointed chairman. The board had a succession of chairmen of differing calibres and backgrounds, but proved itself unsuited to carry out the propaganda work formerly done in India by the Indian Tea Market Expansion Board, and most impartial observers today would admit that the Government of India's interference with the efficient machinery of the tea industry for market expansion propaganda within and without India was extremely unwise.

The board had many duties to perform apart from propaganda and since the Government was determined to interfere actively in the

affairs of the industry, it was perhaps to the good that it should have a permanent agency in Calcutta. This agency naturally took over the work of the Tea Licensing Committee, but its powers were much wider than those of that body. It was generally admitted, both in Delhi and Calcutta, that the Central Tea Board achieved little and with the strong though perhaps mistaken conviction that increased authority must produce greater efficiency, the Government of India secured the passage of the Tea Act 1953 which set up a new body, known as the Tea Board, in place of the Central Tea Board. It combined the functions of the Indian Tea Licensing Committee, the old Indian Tea Market Expansion Board, and the Central Tea Board. If the powers of the Tea Board were to be interpreted literally they would confer almost unlimited authority over every aspect of the industry's operation and would enable the board to control price, quality, distribution, scientific research, propaganda, and many other matters. Fortunately, the board's power has been exercised sensibly and some degree of freedom has been left to the industry. Nevertheless, an arrangement under which a highly technical industry is liable to interference by a board, some of whose members know nothing whatsoever about most of the matters discussed, must be unsatisfactory and those who have attended meetings of the board have learned to recognize democracy at its worst. Some of the chairmen have been outstanding, but they cannot wholly counteract the effect of a misconceived system.

(b) *Tea Chests*

A planned economy necessarily meant emphasis on economic nationalism and it is not surprising that the use of imported tea chests attracted the early attention of the Government of independent India. The indigenous tea-chest industry had expanded considerably during the war, but a considerable proportion of its products was still unsatisfactory and expensive. The Indian Tea Association considered that the delivery and transport delays which were so common in the early years after the war made it desirable that a stock of 2,000,000 tea chests should be maintained. In 1947 the Association estimated that 4,900,000 chests would be required to pack the season's crop of North India, and after allowing for the carry forward from the previous season, the Association asked to be allowed to import about 4,200,000 chests. Sanction was granted, after considerable delay, for just over 1,500,000 chests and the industry embarked on the next season with greatly depleted reserves.

In 1948 the Plywood Development Panel of the Forest Research Institute at Dehra Dun drew up recognized standards for tea chests, but the Indian Tea Association estimated that India's annual productive capacity for chests of this standard did not exceed 1,500,000. An-

other struggle for import licences took place, but the quantity finally sanctioned for both North and South India was quite inadequate, in spite of abundant evidence of the harm being done to India's reputation as a tea producer by bad packing. The attitude of the tea industry on this matter was consistent and reasonable. It was prepared to utilize the entire production of indigenous tea chests of satisfactory standard and to dispense altogether with the import of battens, but it was bound to protest against the forcing upon it of an unsuitable and more expensive article. The statements of the Indian Tea Association and the United Planters Association of Southern India as to the inferior quality of many of the indigenous chests were fully confirmed by a report from the Indian Consul General in New York, while in 1949 the Tea Controller for India himself complained severely about the standard of chests in which tea sold under the Russian contract was packed. Similar complaints from American buyers were common.

Even though imported chests had to bear a heavy customs duty, they were still cheaper than indigenous chests and the local manufacturer stated firmly that 'circumstances beyond their control such as the cost of timber and other raw materials' made it impossible for them to make their prices competitive. The Government nevertheless insisted that the industry should utilize 2,750,000 indigenous chests in 1949 and at the same time issued a list of reliable producers. The Indian Tea Association advised its members only to buy indigenous chests from suppliers who undertook to stamp each shook with the maker's name.

At this stage, motives of economic nationalism led the Government of India to insist that a share in the import trade in a number of commodities should be reserved for Indian merchants and in 1948 the Government announced their intention of issuing twenty-five per cent of the licences for imported tea chests to newcomers. The industry wholly disapproved of a policy which would make it partially dependent on inexperienced traders and urged that import licences for tea chests should be issued direct to tea producers, who would make their own arrangements for import. In 1950 this proposal was partially accepted and eighty per cent of the licences were issued to tea companies, subject to two conditions. The first of those conditions arose from the jealousy with which India at that time regarded the London *entrepôt* trade. The Government of India stipulated that tea companies must make their contracts for their imported chests direct with the country of origin and not through a London intermediary. It was pointed out to Government that this was impracticable, since contracts for the total plywood production of the producing countries had already been made by the London distributors. The Government of India then proposed to make a bulk purchase from Russia, and to allot the tea chests to the various producers' Associations. The negotiations broke down and import

licences were then issued to the producers' associations. The stipulation regarding direct purchase from the country of origin was still retained and the associations were advised to approach four Indian firms who claimed to be in a position to buy direct from the chest-manufacturing countries. The four firms soon found that this was impossible and licences were then issued to the various tea-producing associations, free of the previous stipulation. A second condition of the licences was that each purchaser of imported chests must buy an equal number of indigenous chests, but the industry had no difficulty in showing that this condition had been more than satisfied. Subsequently, this condition was made more stringent and each buyer was required to purchase 2·6 indigenous chests for every imported chest.

Although there was now no stipulation as to direct contracts, the Indian Tea Association thought it right to accede to the Government's known wishes and was eventually successful in arranging for a supply of tea chests from the Finnish mills. Some difficulty was experienced over Government's insistence that the price of a set of imported panels should not exceed 6s 2d c.i.f., but this matter was amicably settled. The quantity licensed was again inadequate and as acceptable indigenous production was far below the original estimate for 1950, the industry found itself short of good chests and had to use many of an unsatisfactory character.

At the Tariff Board Inquiry in 1950, the Indian Tea Association and the United Planters Association of Southern India expressed the view that,

> although one or two Indian factories had made strenuous efforts to improve the quality of their production since 1947, the quantity of Indian-made plywood of a quality comparable with that of the best imported plywood was still negligible despite the fact that the price of the indigenous article was well above that of the imported chest, import duty notwithstanding.

The Association, therefore, strongly urged the progressive reduction of the duty, the removal of the quantitative restriction on imports, and the issue of licences direct to tea estates. Notwithstanding these protests, the duty – which had originally been imposed in 1946 – was continued up to 31 December 1952. In 1952 the Indian Tea Association was given another opportunity of expressing its views on this subject. It stated that though there had been some improvement, a considerable proportion of indigenous manufacture was still of a poor quality and that the competition of imported chests was the only effective method of eliminating unsuitable production. Protection was nevertheless granted for another three years and in 1953 only token imports were allowed.

It is not necessary to pursue this subject further since for all practical

purposes the industry has had to rely for some years entirely on indigenous chests. It is satisfactory to note that the quality of Indian tea chests has improved considerably year by year, thanks to the efforts of the Plywood Producers Association and to a system of government inspection. The industry has nevertheless continued to have just grounds for complaint as to the excessive price of the Indian-made chests and as to the inability of a certain proportion of them to stand up to rough handling. In one sense Government's policy may be regarded as having been successful, since it has provided the conditions in which a healthy Indian tea-chest industry could develop. Opinion will nevertheless continue to differ as to whether this end justified the difficulties inflicted on India's most important export industry in a few rather critical years.

(c) *Tea Auctions*

The same forces of economic nationalism which had produced the attack on the London tea-chest *entrepôt* trade led to a demand that tea should be auctioned in Calcutta and Cochin rather than in London. The Indian Tea Association contended that regulation in this matter was both unnecessary and unwise. It was unnecessary, since the quantity of tea auctioned in Calcutta was steadily increasing and by 1953 had reached 273,000,000 lb as compared with the highest figure of 135,000,000 lb before the war. It was unwise, since the existing freedom enabled the producer to sell particular teas where the demand for them was strongest. It also met the need of the big blenders who were India's most important customers, and avoided the difficulties which would arise if all Indian tea had to be sold in the hot, damp climate of Calcutta or Cochin. Indian sentiment in this matter was nevertheless strong – particularly as there was an exaggerated idea of the middle-class employment which could be provided if the Calcutta auctions were expanded – and the Government of India were under constant pressure to exercise compulsion. In 1954 the Tea Auction Inquiry Committee was appointed to examine the question of a progressive reduction of the quantity of tea exported to London for auction. The chairman of the Tea Board was appointed chairman of the committee and its members were:

Mr H. Mackay Tallack (chairman of the Indian Tea Association, Calcutta)
Mr R. E. Culverhouse (a London buyer)
Mr E. da Costa (editor of *The Eastern Economist*)
Mr H. P. Barua (of the Assam Tea Planters Association)
Mr M. K. Sinha (a former president of the Calcutta Tea Merchants Association)
and the writer.

The Association's views had been presented very fully in 1949 to the

ad hoc committee,* but the principal arguments were again submitted in writing to the Tea Auctions Inquiry Committee. At the outset, however, it was made clear to the committee by the Government that its function was not to consider the wisdom of limiting the quantity of tea to be auctioned in London, but to suggest how and to what degree such limitations could be effected without harm to the industry.

The committee first inquired as to what factors determined whether teas were sold in London or Calcutta, and reported as follows.

> The general pattern – at least as far as important Producers are concerned – is that at the beginning of the season the Board of Directors decides what proportion of the tea manufactured by its particular company should be offered for auction in India and how much should be exported to London for the purpose of auction. This decision is based upon an assessment and balancing of various factors such as the likely trend of market prices in the two countries, the grade and quality of tea produced by the garden, and, where the Producer is himself also a Blender and Packer, his own requirements. It is an established fact that not all teas are suitable for all markets and also that in many instances a garden has found from experience that its produce secures the best price in a certain market, the requirements of which have, therefore, to be taken into account in arriving at a marketing policy. The same considerations apply to Forward Contracts. In other words we consider it justifiable to hold that the policy decision on apportionment of the crop between London and India is governed almost entirely by economic considerations. The decision is liable to be modified according to changing market conditions or any fluctuations in the quality of the tea manufactured – although, in practice, such modifications are understood to be infrequent and there have been cases where no substantial change has been found to be necessary for several years in succession.

The committee reported in January 1955 and recommended that the ceiling for direct shipments to London auctions should be fixed at thirty per cent of the 1955–6 crop, with progressive reductions in later years to a minimum of twenty per cent of the year's crop. On the assumption that the 1955–6 crop would be 510,000,000 lb, the Government of India fixed the ceiling for direct shipments from North India to the London auctions for that year at 140,000,000 lb.

The United Planters Association of Southern India pointed out to the Government of India certain difficulties that would arise in the South, namely, the existence of a large number of independent small owners of tea in South India, and the completely different pattern of the tea trade in North and South India. The United Planters Association undertook, however, to assist in the Government's plans by increasing the quantities sold in the Cochin auctions by an agreed percentage amount. The Government of India accepted this representation and imposed no limit

* *Vide* page 238.

on the quantity which might be sent from South India to the London auctions.

The industry was given to understand that if private shipments outside the auctions went much above the normal level, a downward adjustment would be made in the quantity permitted to be sent to the London auctions. In practice this situation has not arisen. No statutory force was given to the order and it was agreed that the controls should be administered on a voluntary basis by a joint committee of the various producer associations in North India.

It is now generally admitted that the ceiling was fixed too low, but it was particularly unfortunate that the restriction was introduced in a year of special difficulty. As it happened, the 1955–6 crop was higher than had been expected and at the same time private sales – which were still permitted, though the chairman of the Tea Board expected that they would not exceed 40,000,000 lb in a year – were unusually low. Prices in the Calcutta auctions declined, congestion became serious and in February 1956 the Government recognized the necessity for prompt action and withdrew the limitation on direct shipments until May 1956. This release was somewhat late and the industry was only able to export 152,000,000 lb from the 1955 North India crop for the London auctions. In 1957 the limit was fixed at 155,000,000 lb at which figure it remained until, just after the period with which this book is concerned, the Government of India realized that the restriction was hampering their export trade. It was not formally withdrawn, but has not been rigorously enforced.

(d) *Employment of Expatriates*

Nationalist feeling naturally led to a demand for the increased employment of Indians in superior posts on tea gardens. This demand had been anticipated by many agency houses – and indeed the difficulty of recruiting and retaining young British planters would have compelled a measure of Indianization even if the Government had not intervened. A five-year recruitment plan, drawn up by the Indian Tea Association and accepted by the Government of India at the end of 1955, provided for recruitment of Indians on a scale which would result in twenty-eight per cent of all covenanted posts being held by Indians at the end of the period. For this purpose agency houses were divided into groups according to their then degree of Indianization, those who were least Indianized being required to take in the largest proportion of Indians amongst their recruits during the five-year period.

It is important to note that the Government of India fully recognized the right of the industry to continue to recruit Europeans, subject to the recruitment of the agreed proportion of Indians. The agency houses of North-east India have more than implemented their undertaking and the progress achieved will be seen from the following figures:

POSITION AS AT 31 DECEMBER 1960

Total covenanted staff	1,238
Indian staff	481
Percentage to date	38·85
Number of vacancies which were filled from 1 July to 31 December 1960	42
Number filled by nationals	20
Percentage filled by nationals	47·6

No corresponding specific arrangement appears to have been made with the United Planters Association of Southern India, though they were, of course, included in the general arrangement made somewhat later under which the Government of India calls for returns of employees of Indians and Europeans from all foreign firms.

COMMITTEES OF INQUIRY

In a period when a planned economy was taken for granted, it was natural that governmental committees of inquiry into the affairs of an important industry should be set up at frequent intervals. Apart from the various inquiries into matters affecting the conditions of labour, during the first decade after the war there were three committees of inquiry into the general economic problems of the North Indian tea industry – the *ad hoc* Committee of 1949 under the chairmanship of K.K. Chettur; the Rajaram Rao Committee of 1952; and the Plantation Inquiry Committee of 1954 under the chairmanship of P.M. Menon. These committees demand brief notice.

The Chettur Committee of 1949 had somewhat limited terms of reference and appeared to be concerned only with warehouse accommodation, the training of Indians in tea broking, and methods of improving the quality of tea exported from India. In practice, the inquiry covered a much wider field and the questionnaire issued dealt with practically every aspect of the tea industry and trade. The committee reported in 1950 and its report contained a good deal of valuable material. It need not be discussed since it led to no practical action.

Government's faith in committees was still undiminished – and the Indian Tea Association to some extent shared this faith – and in 1952 when the industry was in grave difficulties, the Government, at the request of the Indian Tea Association, appointed an official team consisting of E. Rajaram Rao and M.A. Mulky, to inquire into the economic condition of the tea industry and to advise on the relief to be afforded. The team's recommendations were interesting and sensible, but again little practical result followed.

The Plantation Inquiry Commission of 1954–56 made a comprehensive survey of the problems of the tea industry and other plantation

industries, but it produced one of the most unpractical reports ever sponsored by a responsible committee. The proposals, if adopted, would have led to almost complete control of the operations of the industry by the Tea Board and the report itself was marred by a persistent refusal to believe that the old-established companies knew anything about the business of producing and selling tea. The committee tried to maintain an unhappy balance between showing that Indian tea gardens were more efficiently run than British companies, and suggesting that it was the Indian companies which needed and deserved help. The Government of India wisely decided not to adopt most of the recommendations of this commission. It is unfortunate that a commission, from which so much was hoped, should have shown so little understanding of the problems of the tea industry. It can fairly be said that the main inquiry committees of this period collected a wealth of information, but that no practical result accrued from their labours.

We have now examined in broad outline some of the most important developments affecting the Indian tea industry from 1947 to 1960. There are other matters, such as labour problems, scientific research, and taxation, which will require detailed treatment in other sections of this book – and there were a host of lesser though important problems which occupied the attention of the committees of the Indian Tea Association and the United Planters Association of Southern India very fully during this period. A glance at the tables of contents in the reports suggests that prominent amongt those matters were warehousing, sale of tea waste, ocean freight, tea-garden leases, the use of waste land, pilferage of tea, the reception of refugees, and natural calamities. In the South, Madras agricultural income tax and the taxes levied by local *panchayats** also received much attention from the United Planters Association. All these problems are dealt with in great detail in the annual reports of the associations and those reports make it clear that few industries can have been better organized and better documented than the Indian tea industry in the post-war era.

* *Panchayats* = Village Councils.

CHAPTER EIGHTEEN

THE ECONOMICS OF THE POST-WAR PERIOD: 1945–60

The economic history of the Indian tea industry in the first fifteen years after the Second World War divides itself naturally into four phases – the period of post-war prosperity; the disastrous year of the return to normal marketing; the recovery in 1953–4; and the fluctuations of the following six years.

POST-WAR PROSPERITY: 1947–51

We have to examine world supply and demand, prices and cost of production in each of these phases and it will be convenient to begin by considering the supply situation in 1947. The efforts of India and Ceylon during the war to make up for the loss of tea supplies from Indonesia had been remarkably successful. Production in the last three years of the war had averaged 530,000,000 lb in India and 280,000,000 lb in Ceylon as against 449,000,000 lb and 236,000,000 lb respectively in the three years before the war, and in the first year of our period, as will be seen from the following table, the production of India, Pakistan and Ceylon exceeded the pre-war outturn of those countries together with Indonesia.

1938	(million lb)		*1947*	(million lb)
India	452	India	561	
Ceylon	247	Pakistan	41	
Indonesia	178	Ceylon	299	
	877		901	

By 1947 Indonesia had, for all practical purposes, not come back into production, while Japanese production had fallen considerably since

1939 and exports from China and Formosa were only about one-third of the pre-war figure. In Africa, on the other hand, production had risen from 25,000,000 lb in 1938 to 37,000,000 lb in 1947. The total exports from all producing countries in that year were 796,000,000 lb as compared with an average of 898,000,000 lb in the three years before the war. This comparison is, however, misleading since it includes green tea and brick tea which had their own special markets. A more useful comparison for our purpose is between black tea exports from all countries of 765,000,000 lb in 1947 and the corresponding average figure of 789 million lb for the three years before the war. Unfortunately world consumption had decreased in the interval. In Europe, excluding the United Kingdom, the war had seriously curtailed tea-drinking and the imports of tea in 1947 to the Continent were half of the pre-war average. In Britain, rationing was still severe and in the three years 1945–7 average imports amounted to only 384,000,000 lb as against a figure of 477,000,000 lb for the period from 1937 to 1939. In the USA, too, consumption had declined and in the world as a whole, total imports for consumption in 1947 were over a 100,000,000 lb less than before the war.

This, of course, was an artificial and temporary decline, resulting from unavailability of supply. The real causes of anxiety in the first post-war phase were, first, the certainty that production in India, Pakistan, Ceylon, and East Africa would continue to expand; secondly, the expectation that exports from China and Indonesia would gradually return to the previous level; and thirdly, the doubt as to whether people who had learned to drink less tea or to do without it in war-time, would return to their old habits.

The first of these apprehensions was soon proved to be well founded, as will be seen from the following table:

	PRODUCTION (million lb)				
	1947	*1948*	*1949*	*1950*	*1951*
India	561	568	585	613	629
Pakistan	41	44	46	52	52
Ceylon	299	299	299	306	326
Indonesia	3	29	60	78	103
Africa	37	36	36	45	46
	941	976	1,025	1,094	1,156

As regards the second apprehension reliable figures for exports from China are unobtainable for this period, but it can safely be said that in 1951 world supply was over 1,200,000,000 lb, or nearly 200,000,000 lb more than the pre-war figure. Fortunately, the third of our apprehensions proved to be unfounded, since consumption had also

risen since the war. By 1941 American imports were almost back to the pre-war figure. African consumption had gone up considerably, and although in the United Kingdom the tea ration in 1951 still stood at two ounces, imports had returned approximately to the average level for 1937–9. Nevertheless, the official statistics of the International Tea Committee show that in the two years 1950–1 taken together, world tea supplies exceeded world absorption by 74,000,000 lb.

During this phase, United Kingdom prices were to some extent stabilized by the Ministry of Food contract, or to put it more accurately, they were allowed to rise by something rather less than the actual increase in production costs and this naturally affected the price of teas other than those sold to the United Kingdom. Export prices at the Calcutta and Colombo auctions, for markets other than the United Kingdom, rose considerably between 1947 and 1950, and even though they declined somewhat in 1951, they still stood some three or four annas higher than in 1947. In Cochin, where auctions only began in 1948, export prices rose by ten annas a lb between that year and 1950, but fell by two annas in 1951.

Costs of production increased significantly in this period. Wage increases, scarcely justified by the economic condition of the industry, were granted under pressure from the Government of India in 1947 and 1949; the price of rice rose and the supply of foodstuffs at concession rates became a heavy burden; the movement of coal by expensive routes involved a serious addition to expenditure; the industry was compelled to buy indigenous tea chests at higher prices than it would have paid for imported chests; stores of all kinds increased in cost; and finally a substantial export duty had been imposed by the Government of India in 1947.

The magnitude of the increase in costs can be illustrated by the following random samples taken from both North and South India.*

	1947		*1950* (cost per lb)		*1951*	
	s	d	s	d	s	d
Company A	1	5½	2	1½	2	6¾
Company B	1	4½	1	9½	2	3¼
Company C	1	9¼	2	1½	2	10½
Company D	1	7½	2	0	2	6
Company E	1	6	1	8	2	4¾
Company F	1	7	2	2	2	4½
Company G	1	4½	1	8½	1	11
Company H	1	6	1	10¾	2	8½
Company I	1	5½	1	8½	2	1½
Company J	1	4½	1	10¼	2	2¾
Company K	1	7	1	7½	1	7¾

* Company figures are not all prepared on the same basis and are not comparable *inter se*.

It is not necessary to examine the figures of individual companies, but it may be said in general that up to 1950 increased prices largely compensated for the rise in costs and that the period from 1947 to 1950 was one of general prosperity. In 1951 conditions became less favourable. The failure of the governments concerned to supply foodgrains in time compelled the industry in North India to transport supplies to the gardens by air at a crippling cost and for this and other reasons costs of production both in the North and the South rose steeply. Even if prices had remained good, the effect of this rise on the less prosperous estate would have been serious. In this year, too, bulk purchase by the Ministry of Food was replaced by the 'phoney auctions' already described. Retail price control, rationing and prohibition of re-exports still remained in force in the United Kingdom, and at this time 'the feat of commercial juggling' which a buyer had to perform in order to fit the good teas into the structure of packet price tea, necessarily depressed prices. Although the 'quality' grades did well enough, the profits of many gardens fell considerably and in the Dooars and Cachar more than two-thirds of the companies generally listed made a loss.

The subsidy given by the United Kingdom Government on the retail sale of tea came to an end on 15 June 1952 and thereafter the industry pressed very strongly for the removal of all controls. This was not achieved until October 1952.

A YEAR OF ADVERSITY: 1952–3

The tide of prosperity during the war and post-war period had in fact turned and 1952 was a year of great adversity. The normal remedy for the statistical surplus that existed at the beginning of 1952 would have been regulation of production, but the timidity which led the Ministry of Food to refuse to decontrol tea until stocks had reached an unreasonably high level, made such a remedy impracticable. At this stage nature took a hand and as a result of an exceptionally favourable season, by the end of July the North Indian crop was 40,000,000 lb in excess of that of the previous year. From that point onward the character of the season changed suddenly and production began to fall off rapidly. Buyers were slow to observe the change and in the middle of the year, counting on large supplies of tea towards its end, curtailed their buying radically. In their purchasing policy, buyers were also influenced by two other factors. In the first place it was believed that when decontrol took place the Ministry of Food would have considerable stocks of inferior tea to unload on to the market. Secondly, it was realized that under the changed financial conditions, distributors, dealers, and retailers would all be likely to carry rather smaller stocks than before the war. Auction prices continued to fall throughout the year. In spite of the fall, both in London and Calcutta, buyers were reluctant to bid at all and in the case of

medium- and lower-grade teas, sales were often as much as 1s a lb – and sometimes more – below the cost of production.

This drop in prices came at a particularly unfortunate time in as much as the high cost of concession foodstuffs in 1951 had depleted the resources of many companies, while other labour costs had also risen heavily as a result of the minimum wage rates in West Bengal and Assam.

The Indian Tea Association made numerous representations to the Government of India as to the seriousness of the position and asked for relief. In particular it urged that excise and export duties should be reduced; that foodstuffs should be made available to the industry at controlled rates; that the minimum wage awards should be revised; that the import duty on plywood should be reduced; and that advance payments of income tax should be waived. The Association pointed out that although all districts needed these reliefs, action in the case of Cachar and Darjeeling was very urgently required. The Government of India nevertheless took no action beyond setting up the Rajaram Rao Committee and even when that committee reported at the end of 1955, the only immediate result was that the provision of the Income Tax Act relating to advance payment was waived.

Numerous discussions took place with the governments concerned and with labour during 1952, but each of these parties succeeded in constantly returning the ball to the other court. Labour first denied that there was a crisis and then contended that any relief must come from the Government, which threw on the industry the responsibility for arriving at a settlement with labour. Seldom can the Central Government have shown more indifference to the difficulties of an important industry. The State Governments appeared at one stage to have a more lively appreciation of the situation, but during 1952 no practical result came of the endless discussions with them.

In his speech at the annual meeting of the Tea Section of the United Planters Association of Southern India in August 1952, the chairman took a serious view of the situation and, following an estimate by the writer, attributed the drop in prices to the excess of potential supply in the early part of the year. It was, he considered, essential to produce a smaller quantity of better tea, and he advocated throwing out of production uneconomic areas, and retrenching labour where necessary. These were long-term remedies and in the meantime both in the North and the South many companies had to make such drastic economies as discontinuing the use of fertilizers. By the end of 1952:

> more than 120 tea estates, some of them belonging to large and long established tea companies, had been forced to close down; and in the absence of any general relief, it was evident that only some reduction in labour charges

could prevent further closure, since there was no scope for other economies and the banks were naturally unwilling to make further loans to gardens which had no prospect of operating economically.

The Government of India announced the terms on which they would guarantee bank loans, but the conditions were so restrictive as to make the offer meaningless.

At the beginning of 1953, labour showed itself more realistic than the governments concerned and unions in the Dooars agreed to a temporary reduction of wages, by means of an increase in the selling price of concession rice. In the meantime, the majority of tea producers in North-east India had decided to adopt a voluntary crop regulation scheme for 1953 – a scheme which was abandoned before it had begun to be implemented. The promulgation of the scheme together with the view taken in South India that production must be curtailed, nevertheless had a tonic effect on the market and stimulated the competition of the buyers, some of whom had perhaps held off too long. Whereas it had been found necessary to suspend Calcutta auctions in December 1952 for lack of buying demand, when sales were resumed in January 1953 the market was able to absorb the tea offered, at improved prices. From then onward, prices, even for common tea, rose steadily both in Calcutta and in London. The situation was still difficult and in some areas managers accepted a reduction of salaries to assist in reconciling Government and labour to a cut in wages.

RECOVERY 1953–4

When the final production figures for 1952 became available, it was seen that in the second half of the year climatic factors had resulted in low yields in all producing countries and instead of the large surplus which buyers had anticipated, the year 1953 opened with a reasonable balance of supply and demand. This naturally produced a firmer market tendency which was strengthened in the middle of 1953 by increased demand in the United Kingdom. It had been hoped that this increase would occur as soon as rationing came to an end in 1952, but either because most consumers had accumulated stocks or because they did not readily abandon the careful habits of the rationing period, consumption remained more or less stationary until the second half of 1953.

The improvement in prices made it possible for the North-east Indian tea industry to restore the emergency wage cuts in the Dooars in June 1953. It must not be thought, however, that the damage done in 1952 was repaired in 1953. Many common tea producers still suffered from depleted resources and had to lean more heavily on the banks than was desirable. They had, moreover, considerable arrears of maintenance to make good as a result of enforced neglect during the period of crisis, and they needed two or three prosperous years in which to build up reserves.

Developments in 1954 almost defy rational analysis and seem to have resulted from miscalculation on the part of all sections of the trade. Crop regulation, introduced early in 1953, had been first curtailed and then abandoned, since the final figure for 1952 showed that tea was in short supply, and the crop prospects early in the new season did not look good. A little later, the season proved favourable and the Indian crop was much the same as in 1952. World exports in 1953 were much higher than in the previous year and there was a reasonable balance of supply and demand which might have been expected to maintain prices steady in 1954 at the reasonable level of 1953.

Two factors now led to a sensational rise in prices. In the first place, tea prices depend not only on world supply and demand, but also on stocks in the world's most important market, which is, of course, London. At the beginning of 1954, London bonded warehouse stocks stood at 148,800,000 lb. That figure is not low by recent standards, but it was a little more than half of what would have been considered minimum stocks before the war – and it must be remembered that no experience had yet been gathered as to proper stock levels under the new conditions of high prices and restricted credit. London buyers seem to have been convinced that there was a serious shortage of spot tea. At the same time there was a general belief that world demand was increasing and that the supply deficit, which was thought by the trade to have prevailed over the three previous years, would be accentuated. The writer was quite unable to understand this view of the available statistics of the time and finds it still more difficult now to appreciate the reasons for the panic which seized the buyers. The fact is, nevertheless, that buyers who had run themselves short of stock scrambled wildly for tea in the London auctions in a manner which would normally have been associated with a poor season and short supply. The same buyers who had held off bidding in 1952 competed desperately for tea in 1954, although the world statistical position showed a considerable surplus compared with 1952. The rise in prices began in January 1954 and its progress will be seen from the following table of average prices:

	s	d
7 January 1954	4	1·04
25 January 1954	4	9·38
24 June 1954	4	9·43
30 September 1954	6	3·43
23 December 1954	6	11·60
6 January 1955	6	11·56
20 January 1955	7	1·29
10 February 1955	6	8·95
17 February 1955	6	1·56
24 February 1955	5	10·31
24 March 1955	5	1·57

The average London prices of North and South Indian tea for the year were 5s 4d and 5s 7½d respectively as compared with 3s and 2s 10d in 1952. Record profits were made and tea men will long regard 1954 as a year of madness.

The boom boded little good to the tea industry, for it led inevitably to the demand that labour should share in the new prosperity. In North India the wage cuts of 1953 were refunded and a heavy bonus to labour, forced on the industry by the Government of India, absorbed funds which should have been used for rehabilitation and for the strengthening of reserves after the crisis of 1952.

The instability of this period may be illustrated by the published figures of profit and loss of several typical companies from North and South India:

	1952	*1953*	*1954*
Company A	Profit £163,239	Profit £556,720	Profit £1,051,903[1]
Company B	Loss £18,014	„ £463,119	„ £630,571[1]
Company C	„ £11,311	„ £393,266	„ £901,689
Company D	„ £388,336	„ £318,160[1]	„ £407,852
Company E	„ £118,935	„ £83,844	„ £409,944[1]

[1] Not allowing for bonus payments on the 1954 profits.

One general comment made by the writer in the *Financial Times* of 13 October 1955 may be of interest.

One fact is now abundantly clear in the detachment of a *post mortem*. It is that, though there was no likelihood of Britain being short of tea in 1954, stocks were too low to stabilize prices. In November 1954 stocks in bonded warehouses fell to 64 million lb. Of this perhaps 20 million lb were in the hands of producers in the pre-sale stage, so that stocks in the warehouses under the control of distributors amounted only to about four weeks' supply. This was a very low reserve, and these facts suggest an important general consideration. At a time when world consumption and production are both expanding and when a surplus or deficit of 20 million or 30 million lb may easily arise with little warning, stocks held in the world's principal market today are inadequate to exercise a stabilising influence on prices. Before the war, tea stocks in the United Kingdom varied from 130 million to 300 million lb. Today, in spite of an increase in world consumption, they range between 60 million and 120 million lb.

A PERIOD OF INSTABILITY 1955–60

In 1955 there was the inevitable reaction from the unreal prices of 1954 and the year might be described as poor but not disastrous. Gardens producing quality teas made substantial profits, though the results were not as spectacular as in 1954, but common tea producers did not fare well and dividends were much lower in the Dooars, Cachar, and Darjeeling than in 1953 and 1954.

The following year, 1956, must be described as freakish. The available statistics at the beginning of the year showed that there was a considerable surplus of tea in the world and it was expected that prices would be poor. Sales in the early part of the season justified this expectation. In August 1956, Nasser's nationalization of the Suez Canal, followed shortly by the Anglo-French intervention in the Israel attack on Egypt, led to the closure of the Suez Canal and completely changed the state of the tea market. London stocks were not high at the time – they amounted only to about eleven weeks' supply of UK requirements – and apprehension of long delay in obtaining fresh shipments from India gave rise to strongly competitive buying. Prices rose rapidly as will be seen from the following table:

London average price	s	d
end July 1956	3	11·78
„ August 1956	4	6·31
„ September 1956	6	0·21
„ October 1956	5	10·45
„ November 1956	6	3·43
„ December 1956	6	1·63

By January 1957 shipments round the Cape had begun to arrive and London prices again began to be governed by the world statistical position. By the second week in February, the London average price had fallen to 4s 9d.

In Calcutta, too, the Suez incident temporarily stimulated prices, presumably because buyers were apprehensive of a deterioration in the situation and were anxious to ship teas home while shipping was still available. The following table illustrates the effects of the stimulus:

Calcutta average export price	Rs	a	p
end June 1956	1	15	7
„ July 1956	2	12	4
„ August 1956	2	9	10
„ September 1956	2	9	1
„ October 1956	2	6	8
„ November 1956	2	9	7
„ December 1956	2	9	8

A reaction set in as soon as it became clear that a general conflagration was not about to break out. The results of any particular Indian tea company thus to some extent depended on the proportion of its teas sold before or after the period of the Suez crisis. That crisis, in fact, enabled many tea producers to make a reasonable profit.

At the beginning of 1957, the world statistical position was unhappy from the point of view of producers. The committee of the Indian Tea Association (London) studies the available statistics at frequent intervals

during the year and early in 1957 the writer, in his capacity as Adviser to the Association, prepared a note on the tea situation which suggested that in that year world supply would exceed consumption by 82,000,000 lb.

The responsibility for this appreciation rested with the writer and not with the committee and some authorities perhaps considered that it was somewhat on the pessimistic side. All, however, were agreed that there was a world surplus of plain tea and that price prospects for such tea were poor. Moreover, costs of production had continued to increase and the following comparative figures for 1951 and 1957 for a few companies show the heavy burden now carried by the tea industry in North-east India.

Costs per lb

	1951		*1957*	
	s	d	s	d
Aibhee Tea Co. Ltd	2	3·47	3	1·22
Assam Co. Ltd	2	6·76	3	9·90
Assam Dooars Holdings Ltd	2	3·32	3	0·24
Assam Frontier Tea Co. Ltd	2	7·75	3	$1\frac{3}{8}$
Badulipar Tea Co. Ltd	2	$9\frac{5}{8}$	3	11
Balajan Tea Co. Ltd	2	$9\frac{7}{8}$	–	–
Budla Beta Tea Co.	2	2·50	3	$5\frac{1}{4}$
Lebong Tea Co. Ltd	2	6·43	4	2·22
Jorehaut Tea Co.	2	9·20	4	6
Jokai (Assam) Tea Co. Ltd	2	4·37	3	4·18

Costs of production were almost wholly out of the control of the industry and the necessity for maintaining high quality made it impossible to resort to the expedient used in other industries, of increasing output to lower costs. The situation at the end of the post-war decade was thus much less satisfactory than at the beginning. 'Quality' gardens faced the future with fair confidence, but plain tea producers had every ground for apprehension – a situation which remained unchanged throughout the rest of our period.

CHAPTER NINETEEN

TEA PRODUCTION IN PAKISTAN

The history of tea production in the first fourteen years of Pakistan has been a record of struggles against three factors, namely, the difficulties inherent in the Partition of India; the scarcity of foreign exchange and the resulting shortage of some of the essential instruments of production; and the lack of any knowledge in government circles of the problems and economics of the industry. The picture has, however, been relieved by the fact that over the period as a whole, profits have been reasonable.

In undivided India, the Surma Valley was of much less importance in the tea world than the Assam Valley. Total production in the Surma Valley in 1939 was about 70,000,000 lb from 140,000 acres of tea. This included Cachar which on Partition became part of India. Pakistan began with about 75,000 acres of land under tea and a production of 41,500,000 lb or about seven per cent of the production of India.

The history of tea in Pakistan since Partition can conveniently be divided into five phases.

FIRST PHASE: ADJUSTMENT TO PARTITION, 1947–50

Even if Partition had been effected in a friendly atmosphere it would have created considerable difficulties for the industry, but accompanied as it was by hostility between India and Pakistan, it completely disrupted the pattern of tea trade in what had now become East Pakistan. In the first place many of the Calcutta agency houses which controlled about seventy-five per cent of the Sylhet and Chittagong tea gardens were to a great extent cut off from them. Not only were communications difficult, but the mere existence of the Calcutta connexion was resented by Pakistani Ministers and officials and a similar disability affected the Indian Tea Association. The implications of Partition were not immediately clear to tea companies, and even when the necessity for establishing agency houses in Pakistan had been realized, office premises and houses for their staff were virtually non-existent in Chittagong or Dacca. It was

not until 1949 that those agency houses which did not previously have branches in Chittagong were able to establish themselves there, and until that process was well advanced there clearly could be no body corresponding to the Indian Tea Association. As a temporary measure, a Calcutta Committee of Pakistan tea interests was established and in 1948 it transformed itself notionally into the Pakistan Tea Association, Chittagong, though remaining located in Calcutta. The Adviser to the Indian Tea Association, Calcutta, also became Adviser to the Pakistan Tea Association of Chittagong in Calcutta and maintained contact with the Pakistan authorities as well as with the gardens. The political position soon made this arrangement impracticable and in March 1949 the Pakistan gardens formed a districts committee of the Pakistan Tea Association. In the meantime, in July 1948 a Pakistan Tea Association, London, had been formed by sterling interests and for a time it corresponded with the districts committee through the rather unreal Pakistan Tea Association, Calcutta.

In March 1951 it was possible to set up an *ad hoc* Central Committee in Chittagong, to carry on the business of the Pakistan Tea Association, Chittagong, until that Association could be legally constituted in Pakistan – an operation which was not completed until 1952. The fact that the districts body, whose committee was composed of planters, came into existence before the Central Committee whose members were their employers, gave rise at first to occasional conflicts of jurisdiction, but it was not long before the relations between the Pakistan Tea Association, Chittagong, and the districts committee were assimilated to those existing between the Indian Tea Association, Calcutta, and its branches.

More serious even than these organizational problems were the physical difficulties arising from Partition. Tea which had been formerly despatched to Calcutta for sale or export now had to be sent to Chittagong. This was difficult enough in itself, since communications between Sylhet and Chittagong had been designed for a much smaller volume of traffic than that which was now offered, but even when those teas reached Chittagong, warehousing facilities were limited, arrangements for broking and auction had to be made, and above all the port itself had to be expanded.

In January 1949 a conference of tea producers was called by the Commerce Minister of the Government of Pakistan to consider these matters – an earlier conference had proved abortive as the East Pakistan Government had omitted to send out the notices. Fortunately, tea for the United Kingdom was still being purchased by the Ministry of Food and this gave Pakistan a breathing space of which good use was made. Messrs Balmer Lawrie & Company, Ltd, who had considerable experience of tea warehousing in Calcutta, agreed to construct and administer a new warehouse. For this purpose a company with the title of Pakistan

Warehouses Ltd and with a capital of Rs 12 *lakhs* was formed, the subscribers being agency houses with interests in East Pakistan. The operation was handled most efficiently and the new warehouse was opened at Fauzdarhat, just outside Chittagong, in January 1950. Six months before its opening, tea auctions had been established in Chittagong, under the aegis of Pakistan Brokers Ltd – an organization formed by four broking firms, namely, W. F. Cresswell & Company, J. Thomas & Company, A. W. Figgis & Company, and Carritt Moran & Company.

The next problem of organization to receive attention was related to the efficient use of the limited transport facilities available to Chittagong In January 1950 the Pakistan Tea Association set up a Chittagong Call-Down Committee, to regulate the despatch of teas from the districts and to co-ordinate their arrival with the ability of the warehouses and the port to deal with them. The committee was conspicuously successful and indeed it can be said that by the end of 1950, the industry had adapted itself remarkably well to the new situation. There remained, however, the difficulty that the port of Chittagong was situated on the narrow and troublesome Karnafuli river, with its ever-shifting shoals and channels and with a pre-war capacity of less than half a million tons. Satisfactory dredgers to improve the channels were not available. Matters were made worse for a time by the absence of any authority empowered to co-ordinate the activities of the railways, the port authorities and other bodies concerned. Nevertheless, in spite of endless muddle and a good deal of inefficiency, a miracle was achieved. The capacity of the port gradually increased, and by 1950 had reached two million tons.

A third Tea Conference called by the Government of Pakistan in December 1949 was in the main concerned with progress reports, but it dealt also with problems connected with the United Kingdom tea contract. For 1948 that contract had covered 28,000,000 lb of tea, with a cost increase allowance of 1s 1d per lb for the first third of the amount and 1s 2d per lb for the balance. The 1949 contract provided for the purchase of 35,000,000 lb with a cost allowance of 1s 2d. When the pound sterling was devalued in September 1949, a serious dispute arose between the United Kingdom Ministry of Food and the industry as to the interpretation of the contract. The Ministry, quite unwarrantably, claimed that the contract would be treated as being a sterling contract and that where payment was required in rupees, conversion would be at the new rate of just under 2s 2d per rupee. This was clearly contrary to the plain wording of the contract and after the Association had presented the Ministry with an authoritative legal opinion, the Ministry gave way and paid what was due. The moral of the incident is obvious. For 1950, the Ministry bought 15,500,000 lb of tea from Pakistan at a price which included an increased cost allowance of 1s 10¼d. Transport was still difficult and the contract would not

have been fulfilled but for the work of the Chittagong Call-Down and Shipping Committee. This was the last of the bulk contracts.

The suspension of coal exports from India and the shortage of goods traffic during the trade war between the two countries, added to the difficulties of the industry. Nevertheless, by the end of this phase the crop had increased from 41,000,000 lb to 52,000,000 lb, profits were not unsatisfactory, and above all the industry had completely adapted its organization and outlook to the new circumstances.

SECOND PHASE: ECONOMIC INSTABILITY, 1951–2

Pakistan had not yet fallen into serious exchange difficulties and had, therefore, not fully realized the importance of maintaining her exports. On the other hand the demand inside Pakistan for consumption goods of all kinds was rising. Pakistan was indeed so little export-minded that the attention of the conference of tea producers called by the Commerce Minister in March 1951, seems to have been directed, not to the possibility of increasing exports, but to the desirability of compelling all export teas to be auctioned in Chittagong. The leading Pakistan buyers strongly urged the adoption of this course and although no statutory orders were passed at this time, the Minister, Fazlur Rahman, treated the producers' arguments against this change with scant courtesy. His dogmatic statement that it would not in any way result in a decline in the export of Pakistan tea was belied by subsequent events. Altogether there was an air of unreality about this conference and certainly none of the official members had any realization that serious economic difficulties for Pakistan were round the corner. The Tea Board, which had been established by the Government of Pakistan in 1950, at this stage considered a scheme for increasing the sale and consumption of tea in Pakistan, but nothing came of their deliberations.

Exports of Pakistan tea decreased from 48,000,000 lb in 1951 to under 25,000,0000 lb in 1952 – a fall from which they never recovered. In the meantime, the devaluation of the pound, without any corresponding change in the value of the Pakistan rupee, created serious difficulties for Pakistan producers. A crisis appeared to be at hand and as a result of representations by the Pakistan Tea Association, Chittagong, the export duty was reduced by one anna per lb in February 1952 and the balance of the duty was suspended for three months from 12 September 1952.

At the end of 1952 there were no signs that the situation would improve and the industry itself adopted drastic measures of economy. The variable dearness allowance to labour was reduced, the sale of foodstuffs at concession rates was discontinued and managerial and clerical staff salaries and agency commissions were cut. Prices recovered to some extent at the end of the year, but the average price of Pakistan tea in the

London auctions over the year was less than 2s 4d per lb compared with 3s 5d in 1951. Pakistan in fact suffered more severely from the world fall in prices than did India, though Pakistan producers were to some extent cushioned against the decline by the fact that labour wages were lower than in India.

Pakistan was also seriously handicapped by the shortage of tea seed. In 1950–1 the Pakistan Government applied for a permit to import from India 536 maunds of seed, but was told that this commodity was not covered by any trade agreement. In the following year the Government of India stated categorically that India needed all her seed for her own requirements and this difficulty of shortage of seed continued to bedevil the efforts of planters, though at the 1951 Conference, the Commerce Minister somewhat airily advised the industry not to depend on supplies from abroad.

It was during this phase that Pakistanis first began to shew interest in employment on tea estates. At the time of Partition nearly all managers and assistant managers were Europeans, and for the first two or three years a government job was the goal of almost every educated Pakistani. By about 1950 it had been realized that there were more candidates than official posts, and in the 1951 Conference the Minister specifically asked the Pakistan Tea Association to embark on the training of suitable Pakistani assistants. The Association was sympathetic to this request, but it was not until a year or two later that really suitable men began to offer themselves.

By the end of this period, the resources of many tea companies had been severely strained, but small dividends had been paid by nearly all of them and what was of greater long term importance, tea production in Pakistan had risen from 41,000,000 lb in 1947 to 52,000,000 lb in 1952.

THIRD PHASE: PROSPERITY UNDER DIFFICULTIES, 1953–6

London tea prices quickly recovered after the debacle of 1952, while the rapidly growing internal demand exercised a healthy upward pressure on prices in Chittagong. The following figures, taken from the annual bulletin of the International Tea Committee are of interest.

	1951		*1952*		*1953*		*1954*		*1955*		*1956*	
	s	d	s	d	s	d	s	d	s	d	s	d
Annual average prices of Pakistan tea at London auctions	3	5	2	4	3	3	5	4	4	7	4	0

Chittagong auction prices showed corresponding fluctuations. The period was in fact one of prosperity for producers and good dividends were paid. In August 1953, therefore, the wage cuts which had been made in the time of financial stress were restored.

From the point of view of Pakistan, however, the situation was un-

sound. She was about to experience grave difficulties over her balance of payments, yet her tea exports were permitted to decline. This was in no way the fault of producers. They had been pressed by the Government of Pakistan to sell as much as possible in the Chittagong auctions and the quantities so sold rose from 18,500,000 lb in 1952 to 26,000,000 lb in 1954 and 32,000,000 lb in 1956. The big buyers then found it more profitable to dispose of these teas in Pakistan than to ship them abroad and Pakistan's exports continued to fall. Strangely enough at the beginning of this phase the Tea Board, inspired by the Commerce Ministry, drew up elaborate plans for the expansion of consumption inside Pakistan. The plain fact is that while the Government of Pakistan was quite unable to make up its mind as to the relative importance of exports and supplying the local demand, it had in fact tilted the scales against exports.

One difficulty was that the Government had wholly unrealistic ideas as to the rapidity with which outturn could be increased, and at times seemed to believe that, if only the industry would try, it could supply all Pakistan's own needs and still maintain a high level of exports. Unfortunately, Pakistan was now entering on a period of serious shortage of foreign exchange, and for that and other reasons, producers were denied their proper supplies of fertilizers, insecticides, and other essentials of production. It was therefore difficult enough to maintain production at its existing level. In 1954 the Commerce Minister suggested 80,000,000 lb as a production target to be obtained rapidly, but in that very year the supply of fertilizers by the Government to the industry was inadequate and arrived too late. A year or two later when larger supplies of fertilizers were available, shortage of wagons resulted in late delivery. Nevertheless, the Government continued the pressure and issued a questionnaire on the subject of the expansion of crop in October 1955. The Pakistan Tea Association submitted a memorandum explaining the difficulties. The Association pointed out that in view of the world supply and demand position, it would be unrealistic to think that new capital would be forthcoming. Moreover, a long-term view, factory capacity might well be a limiting factor and in the meantime, however, the shortage of fertilizers, insecticides, and spare parts for machinery from which the industry had suffered year after year, together with the lack of an adequate supply of tea seed, set definite limits to the possibility of expansion. In other correspondence at this time the Association explained that there was a good deal of old tea which must be replanted *in situ*. This necessarily involved some loss of yield for the time being.

The memorandum was cogent, but it made little impact on Pakistani officials, some of whom had a curious suspicion that tea companies wanted to hold back production for the sake of Indian companies in their

groups – though the pace at which Pakistan consumption was growing should have been sufficient to show the absurdity of such a suspicion.

The struggle for the essential requirements of the industry was unceasing. Tea chests were a particular cause of anxiety. As indigenous chests became available, the Pakistan Tea Association took them up in spite of their inferior quality, but they were never sufficient to fill the gap between producers' needs and the quantity initially allowed to be imported, and year after year the Pakistan Tea Association had to make urgent representations for additional import licences. In some periods, stocks had to be run down to levels which in view of the uncertainties of transport were dangerously low. Similar difficulties were experienced with regard to insecticides, fungicides, machinery, and spare parts, and it was not until 1956 that any real improvement took place. The success in maintaining production at its new level of about 52 to 54,000,000 lb in spite of these difficulties, reflects great credit on the planters of East Pakistan. In 1956 when it seemed that the industry was perhaps moving into smoother waters, foodstuffs became a cause of great anxiety. Prices rose rapidly and though the Association was able to deal with this situation by means of an increased dearness allowance, it was obvious that before long physical shortages of foodstuffs would be felt in the tea districts.

While the planters were coping with all these problems, the Association and the agency houses were involved in discussions with the Government of Pakistan and the Government of East Pakistan on several important matters of policy, the first of which related to the employment of Pakistanis in covenanted posts. In 1951–2 an agreement was made with the East Pakistan Government under which members of the Pakistan Tea Association undertook to engage ten Pakistani assistants during the next three years. The desirability of employing Pakistanis in superior posts was fully realized by agency houses, but in the early days suitable men were not easily found and those who presented themselves often had nothing to recommend them except their relationship to some important person. In spite of this difficulty, the industry fulfilled its agreement, but by about 1954 pressure for accelerated recruitment of Pakistanis was brought to bear on the Association. The Central Government took a hand in the matter and a clause compelling progression to fifty per cent Pakistanization was included in the Registration (Importers and Exporters) Order 1955. It was not clear whether or not this Act was intended to apply to those who, like tea producers, were only incidentally importers, but before the Central Government had resolved this doubt, the East Pakistan Government returned to the charge. Discussions between the writer and the Secretary to the Commerce, Labour and Industries Department of the East Pakistan Government in 1956 led to what came to be known as the Griffiths-Kadri agreement. At this

time there were 136 managers and assistant managers, of whom 108 were European, 27 were Pakistani and one was an Indian. The agreement provided that the number of Pakistanis would be increased to 68 by the beginning of 1960 – though as the intake would be greater than the anticipated wastage, this would involve the creation of some additional and perhaps unnecessary posts.

This agreement remained in force throughout the period with which this book is concerned and was more than honoured – so much so that at the end of 1960 there were 76 Pakistanis in covenanted posts, as against 74 non-Pakistanis.

From the time of the agreement onward, Pakistanis of good family and education began to offer themselves for employment and the industry itself learned the technique of recruitment. Today, tea companies in general are well pleased with their Pakistani assistants and it is satisfactory to note that a general spirit of *camaraderie* has grown up between British and Pakistani young men on tea estates.

Another main problem related to the remittance to the United Kingdom of the profits of sterling tea companies. When Pakistan began to run into foreign exchange difficulties, the State Bank naturally exercised a tight control over all remittances abroad and although in theory profits were remittable the absence of any common form of accounting often made it difficult to satisfy the authorities as to the sums which should be remitted. Long delays were the rule rather than the exception. In September 1955, a delegation led by the writer and consisting of J. V. F. Crowther, I. A. Brewster, and H. P. Carse, held discussions with the State Bank and arrived at an agreement as to the form of account and the permissible remittances. This worked fairly well for a short time, but as we shall see later the whole matter soon required a more definite settlement.

FOURTH PHASE: ACUTE SHORTAGES, 1957–8

In this phase, the Government of Pakistan began to put greater emphasis on the export of tea, but still failed to realize that tea sold in the Chittagong auctions for export might not in fact be exported. In the 1957 season, they decided to restrict the export of teas to London on consignment account to a maximum of 4,500,000 lb and also laid it down that no such exports at all would be permitted unless the London price of Pakistan teas exceeded the price obtainable in the Chittagong auctions. On the twenty-seventh of every month the Controller of Imports and Exports was to compare London and Chittagong prices and to determine whether the quota of 500,000 lb for the following month would be permissible or not. The scheme was quite unworkable, and up to September 1957 there were no exports on consignment. In October, the Government of Pakistan

abandoned the criterion of comparable prices and allowed 4,500,000 lb to be exported on consignment in the current year. It was too late for this figure to be reached and about 3,500,000 lb were in fact shipped to the London auctions.

For 1958, 10,000,000 lb was fixed as the permissible quota for export on consignment. Prices in Chittagong were higher than in London at this time and producers stood to lose by this arrangement. They nevertheless complied with the Government's wishes and exported 9·8 million lb. Practically none of the tea sold in Chittagong was exported. The Government of Pakistan had completely failed to understand the economics of the tea industry and yet could not resist the temptation to interfere with it.

In some respects this was an anxious period for the industry. An unusually severe drought resulted in a decrease in the 1957 crop to 46,000,000 lb as against 55,000,000 lb in the previous year. Fortunately, little permanent damage seems to have been done and the crop rose again to a record figure in 1958. Except for fertilizers – of which the industry received an adequate supply in 1957–8 – there continued to be shortages of many of the essential requirements for production. The position in respect of tea seed was made worse by the drought and efforts to obtain supplies from abroad were in the main unsuccessful. Import licences for machinery and spare parts were not available on anything like an adequate scale, while shortage of cement held up important construction work in the factories. Food supplies continued to be a cause of anxiety. Fortunately, rising consumption in Pakistan maintained prices at a fair level and companies continued to make reasonable profits.

At this time the remittance of the profits of sterling companies again began to be difficult and it was clear that the arrangement made in 1955 was not working. In April 1958, a delegation consisting of the writer and Crowther discussed the whole problem afresh with the Governor of the State Bank, Abdul Qadir. The delegation represented not only the tea industry, but also the wider interests connected with the India, Pakistan & Burma Association and its discussions resulted in the establishment of certain principles applicable to all sterling industrial and commercial interests in Pakistan. Those principles were then applied to the particular case of the tea industry. In general, the purport of the agreement was that sterling tea companies could remit to the United Kingdom their head office expenses and whatever was required to pay their dividends, while of the balance of undistributed profits, ninety per cent was to be retained in Pakistan. The retained profits were to be automatically available for the purchase of essential imports, and at a time when it was extremely difficult to secure foreign exchange facilities, this clause was of great value. Many minor points of interpretation were the

subject of later argument, but the Government of Pakistan has honoured its agreement and on the whole the arrangement worked satisfactorily during the period covered by this book. It is only right here to pay tribute to Crowther for his part in these transactions and for his constant help to the Pakistan tea industry over a long period.

Another problem of interest in this period related to the attempts of the East Pakistan revenue authorities to assess to agricultural income tax certain items which had hitherto been excluded. In Pakistan as in India business income is taxed by the Central Government and agricultural income by the Provinces, and in the case of the tea industry it is established that forty per cent of the profits shall be treated as business income and sixty per cent as agricultural income. In 1957 the provincial agricultural income tax authorities sought to assess tea companies to tax on the produce of lands cultivated by labourers for their own benefit, and also claimed that the value placed on bamboos and forest produce used by the estate for its own operations was agricultural income. Moreover, they demanded payment of the taxes so assessed back to 1949. The Central Government authorities, on the other hand, took a different view and refused to accept the value placed on the bamboos and similar produce as a charge for purposes of central tax. The estate was thus between the upper and nether millstones.

The companies so assessed appealed to the reconstituted Agricultural Income Tax Appellate Tribunal, but in accordance with the law had to pay the tax assessed before they could do so. In a test case that tribunal found in favour of the assessee in respect of *khet** produce on the very rational ground that the company had not in fact received any income from it. As regards the notional income arising from the use of forest produce the tribunal referred the assessment back to the Agricultural Income Tax Officer for recomputation. At the same time the Central Income Tax Appellate Tribunal held that if the notional income was in fact agricultural income, it must be allowed as a charge for central income tax purposes, and referred the case back to the Central Income Tax Office for a report on this point.

At this stage the Agricultural Income Tax Officer appealed to the High Court against the finding of the Agricultural Income Tax Appellate Tribunal. The High Court reaffirmed the Appellate Tribunal's decision that the value of *khet** produce was not income in the hands of the company and also ruled that the notional income concerned with forest produce was not liable to agricultural income tax, since the operation performed by the company in respect of that produce did not amount to agricultural operation. The Provincial taxing authorities were asked to treat this as a test case and accept the principle laid down. They did so and the matter was closed.

* *Khet*=land cultivated by tea garden labourers themselves.

FIFTH PHASE: THE PERIOD OF RIGID CONTROL, 1959–60

The military revolution at the end of 1958 resulted in a general toning up of the administration, which was welcome to all business men, British or Pakistani. Unfortunately, it also led to the imposition of many rigid controls on various aspects of commerce and industry and as these controls were often based on an inadequate knowledge of commercial conditions and practice, they often proved unworkable and had to be reversed. This was particularly so in the case of the tea industry, where the Government of Pakistan still found it difficult to make up its mind as to whether increasing exports or satisfying local demand should have priority. Whereas in 1958 producers had been required to send 10,000,000 lb to the London auctions, no consignment at all was allowed for the 1959 season. On the other hand, excise duty was increased to encourage exports – since a rebate of excise duty on exported tea was allowed – and exports for that year amounted to 13,000,000 lb. Internal demand was still rising and even though the 1959 crop reached 57,000,000 lb, at the end of the year there were signs that Pakistan might be short of tea. In the meantime, by the Tea Ordinance 1959, the Government of Pakistan had reconstituted the Tea Board and *inter alia* had taken powers to require all tea for export to be sold in the Chittagong export auctions, and to make it obligatory for every estate to sell the full amount of its export quota in those auctions. Purchasers in the auctions were also to be required to export, within three months, all tea bought by them. This was the first time that provision had been made for any control over tea after it had left the hands of the producers, and it is typical of the vacillations of Pakistan policy at this time that, as early as 1 January 1960, all further exports of tea were banned.

Nevertheless, for the 1960 season the Government of Pakistan announced that out of 17,000,000 lb export quota, 3,000,000 lb might be sent to London on consignment, the balance being placed on Chittagong export auctions. In April 1960 the excise duty was still further increased in order to encourage exports. Partly as a result of an unusually severe drought, the internal shortage soon became even more serious and after the first export sale of the 1960 season, the Government reversed its policy and again banned all exports, including teas already committed in the first auction but not shipped. This order led to a fall in the average price of tea in Pakistan, but that price still stood well above world level.

One cause of the hesitation of the Government of Pakistan in the matter of the export of tea was the anxiety caused to it for some years by the violent fluctuations in the internal price. In November 1958 the price of tea in packets had been controlled and in June 1959 the price of loose tea was also regulated. This soon proved unworkable and the control over loose tea was removed after twelve days. Seven days later

it was reimposed, but after three months, in November 1959, control of prices of both loose and packet tea was abandoned and internal prices rose rapidly.

In desperation the Government of Pakistan now began to interfere drastically with the entire mechanism of sale, and for this purpose, on the 6 July 1960, the Tea (Control of Prices, Distribution & Movement) Ordinance was promulgated. Maximum retail selling prices of packet and loose tea were again fixed. On 12 August 1960 the Tea (Registration of Dealers) Rules came into force, and immediately thereafter the Controller-General of Prices fixed the maximum quantity of tea which might be possessed at any one time by blenders and approved dealers. No direct limit was imposed on auction prices, but in September 1960 the Controller-General fixed maximum selling prices for sale to wholesalers who sold to retailers or for direct sale to retailers. An effective limit was thus, in practice, placed on the prices which bidders could bid in the internal auctions. A still more drastic interference with the ordinary processes of marketing was the prescription by the Government of the maximum quantity for which individual buyers might bid in auctions. The only possible defence which producers could offer against attempts to force down auction prices unreasonably consisted in withdrawing their teas if bids were inadequate. In November 1960 even this right was severely curtailed, five per cent of offerings being the maximum quantity allowed to be withdrawn. In December 1960 withdrawal was banned altogether. In January 1961 withdrawal up to five per cent was again allowed, and in February 1961 the percentage was increased to ten per cent. Developments thereafter lie outside our period.

Government controls were not by any means confined to the selling operations of the industry. The Government still seems to have believed that Pakistan tea companies were not anxious to increase outturn, and in 1959 they urged all tea companies to carry out extensions to the extent of three per cent of planted area and suggested that where suitable land was not available on one estate, the shortfall should be made good by other estates in the same agency. The fact that in many cases extension might be neither practicable nor economically sound, and that one company could not assume financial obligations on behalf of another company, was pressed on the Government in vain. The development programmes of all estates for the periods 1959–65 were submitted to the Government, but though they provided for considerable expansion of acreage and yield, they fell short of the unrealistic 80,000,000 lb figure at which the Government aimed. In January 1960 the Tea (Amendment) Order was promulgated which *inter alia* empowered the Government to direct estates to plant specific acreages, under penalty of heavy fines, and though these powers were not used during the period

with which this book is concerned, in practice compulsion was already operating.

In the sphere of organization, too, the Government thought fit to intervene. For reasons with which we are not concerned, in 1959 the Government of Pakistan decided to reduce drastically the number of bodies claiming to represent commercial and industrial interests. In general, only one chamber of commerce was to be allowed to exist in each region of Pakistan – an exception being made in favour of a foreign chamber of commerce in Karachi – and no industry was to be represented by more than one association. After prolonged negotiations, the Government of Pakistan agreed to recognize the Pakistan Tea Association, Chittagong, and the Pakistan Tea Traders Association. The Pakistan Tea Association was, however, required to amend its rules to meet the Government's requirements and an unfortunate provision was made to the effect that after two years of service, a member of the committee should be ineligible for re-election for a period of two years. Power was taken by the Government to compel all tea companies and proprietors to join the Association. The position at the end of 1960 was that 115 out of 129 estates in East Pakistan had joined the Association. Agency house membership and proprietary garden membership covered 54,810 acres and 23,821 acres respectively.

Throughout this period Pakistan suffered from a serious shortage of foreign exchange, and the industry continued to experience great difficulty in obtaining adequate import licences. In 1959 the position was more than usually difficult, particularly in regard to the import of cement, iron and steel. Fertilizers were eventually forthcoming, but in some cases they did not reach the gardens until May the following year. In 1960 there was a distinct improvement in the availability of all supplies except tea seed. No tea seed could be had from abroad, and matters were made worse by the severe drought in the early part of the year.

In April 1960, the Pakistan Tea Association, Chittagong, received a licence for Rs 25 *lakhs* for spare parts and machinery. The Association was told that, since the necessary foreign exchange was being provided out of a loan by the United Kingdom to Pakistan, recipients of the licences would have to pay a surcharge of 13½ per cent and would, moreover, be responsible for the exchange risk until the UK loan was fully paid. The Pakistan Tea Association urged that no business man could accept a risk of such an indefinite nature, and that this was not a reasonable condition since tea companies were not in fact asking for a loan. Eventually the risk clause was withdrawn, but the surcharge had to be paid.

It will be clear from this account that the fifth phase, including the years 1959 and 1960, was a harassing and frustrating time for tea producers. Physical shortages, continual changes in the policy of the

Government, and a considerable degree of official regulation, based on suspicion and ignorance, rendered this the most difficult period since the transfer of power. The industry faced up to these difficulties with resolution and if the thirteen years of independence are taken as a whole, enjoyed a reasonable degree of prosperity.

Section 3

LABOUR

CHAPTER TWENTY

RECRUITMENT OF LABOUR IN NORTH EAST INDIA

1 ASSAM

In the first half of the nineteenth century, the lands now occupied by the Assam tea plantations were mainly dense and uninhabitable jungles. In the clearings here and there the villagers enjoyed an economy which was almost self-sufficient and were therefore not much interested in the employment offered by the early tea planters, while the population of the more developed parts of Assam were, as a rule, neither inclined, nor compelled by circumstances, to leave home in search of work. In 1839, Bruce complained bitterly of the shortage and unsatisfactory character of local labour and in 1841 the Assam Company attempted to import labour from Chota Nagpur. An outbreak of cholera proved disastrous and none of the recruits reached the company's gardens. Further attempts to obtain local labour were made, but the difficulties of doing so were well described by the Assistant Commissioner of North Lakhimpur a few years later.

It is a very rare thing indeed for an Assamese living at a distance to leave his home for the mere inducement of getting work in a tea garden. Their taking such work at all is generally attributable to temporary necessity, as for instance inability to pay their revenue, wanting to get married and not having the necessary means, being in debt to a *Kyah* and wanting if possible to escape payment of his exorbitant interest, or, as more commonly happens, pawning their freedom, being in want of a yoke of bullocks for cultivating purposes, etc., etc.

The problem was very clearly stated, many years later, by the Royal Commission on Labour –

From the point of view of the employer, the outstanding problem during the whole history of tea planting in Assam has been the scarcity of labour. Where the bulk of the tea gardens stand today was, seventy years ago, un-

cultivated and nearly uninhabited jungle, and for the expansion of the industry it has been necessary continuously to import fresh labour. The Surma valley was able to secure a certain amount of labour either locally or from adjoining districts in Bengal. But in the Assam valley the supply of local labour was negligible, and it was found impossible to obtain supplies from areas nearer than Chota Nagpur and Bihar. When it is remembered that, for many years, the only way of reaching the tea districts of this valley was by a steamer journey of several days up the Brahmaputra and an emigrant had to undertake a long railway journey in addition, the difficulties confronting the early planters will be realized . . . This factor of distance and inaccessibility has made recruiting expensive, and it is this expense that has been responsible for many of the troubles associated with the supply of labour to Assam . . . The efforts of the planters were therefore directed, almost from the first, towards ensuring that, if a man was recruited to work on a particular garden, he actually worked there and not elsewhere.

In 1859, Colonel Jenkins, the Commissioner of Assam, gave an emphatic warning as to the unwisdom of expanding cultivation faster than the supply of labour could justify, and it was perhaps this warning which led planters to systematize their attempts at importing labour. Those attempts had gone on sporadically ever since 1841, but in 1859 the Tea Planters Association was formed for this purpose and about the same time the Lieutenant-Governor of Bengal* advised the planters to adopt the same organized system of recruitment that was pursued by the planters of Mauritius. They should, he said, offer the same attraction in the way of high wages and good feeding and should take similar pains in the selection and transport of the labour engaged. The planters pointed out that a man working on contract could earn considerably more than his basic monthly wage and could hold from the garden as much rent-free land as he chose. Nevertheless, in order to stimulate recruiting, the planters appear to have fixed Rs 5 per month as the wage of an imported labourer in comparison with the figure of Rs 2/8 which had prevailed a few years earlier. By this time the practice of importing labour was growing and in 1858 and 1859, four hundred labourers were imported into Cachar from Benares, Ghazipore, Chota Nagpur, and Bihar.

Unfortunately, both before and after the formation of the Tea Planters Association the actual recruitment was in the main left to Calcutta contractors, some of whom were completely unscrupulous.

> Contractors collected coolies by the hundred on false promises of high pay and light work and despatched them to the tea districts without taking any sanitary precautions for their welfare on the journey; the result was shocking mortality on the voyage up, while many of the immigrants were of caste or constitution which precluded all hope of their surviving many months in the jungles of Assam.†

* At this time Assam was included in Bengal.

† *Vide* report of Assam Labour Enquiry Committee, 1906.

The only legislation in force at this time regulating relations between managers and labourers on tea estates was that comprised in Section 492 of the Indian Penal Code and Act XIII of 1859 (The Workmen's Breach of Contract Act). Act XIII was passed at the instance of the Master Wardens and members of the Calcutta Trades Association and was at first intended to apply only to the presidency towns. It was, however, almost at once extended to the tea districts (except Sylhet, to which district it was extended later) since it was considered that the civil law did not give employers sufficient protection with regard to labour imported over long distances at considerable expense. The Act rendered the labourer liable to prosecution for any breach of contract, but gave him no protection against the employer and laid down no conditions with regard to the arrangements for his transit to the tea districts.

The unsatisfactory state of affairs which was soon seen to exist led in 1861 to the appointment by the Government of Bengal of a Committee of Enquiry into the emigration of labourers to Assam and Cachar. The committee found matters even worse than expected. Mortality on the voyage to Assam commonly reached ten or twelve per cent, while on one occasion it had been as high as fifty per cent, and as the contractors seem to have been paid in full even when the coolies died on the way, most of them made no attempt to secure cleanliness or provide satisfactory food. It is interesting to note that the one contractor excepted by the committee from the general condemnation was a European.

As a result of this inquiry, the first Inland Emigration Act, Bengal Act III of 1863, was passed to control emigration to Assam. This Act provided that all recruiters should be licensed; that every intending emigrant should be produced before the magistrate of his own district; that he should be medically examined as to his fitness to work in the tea districts; and that the contract of service, which should not exceed four years, should be explained to him and executed in front of the Superintendent of Emigration. The steamers and boats conveying coolies* to the labour districts were also licensed. The Act did not apply to a labourer who went to Assam without the intervention of a recruiter or contractor, but this exception meant little in practice.

The Act did not protect the labourer after his arrival on the garden, not did it give the employer any remedy – other than recourse to Act XIII of 1859, or Section 492 of the Indian Penal Code, or the ordinary civil law – against a coolie who, having been recruited at considerable expense, refused to work, or left the garden. The Act was, in fact, soon seen to be inadequate, particularly when the tea mania of the early sixties temporarily attracted to the tea industry a low and often un-

* The word 'coolie' is now considered derogatory and has been replaced in official documents, but not in common parlance, by 'labourer'. It is used in this book where appropriate to the period described.

scrupulous type of European, against whom the labourer clearly needed protection. Coolies were often recruited by contractors on false representations and after a short experience of garden life, wished to leave. The planter, however, was bound by his grant to clear one-eighth of his land within five years and could ill afford to lose labour. Compulsion was therefore applied to unwilling coolies. Short work was punished with flogging and absconders, when recovered, were also flogged. 'Hill men were rewarded for arresting absconders – the reward deducted from the absconders' pay'.

The mortality on tea estates at this time was appalling and according to the Committee of Enquiry in 1906 out of 84,915 labourers landed in the tea district between 1 May 1863 and 1 May 1866 over 30,000 had died by 30 January 1866. The fact that there were many gardens where the coolies were properly looked after and where the death-rate was not abnormally high, only emphasizes the significance of these figures and brings out more clearly the evils which prevailed on the worst gardens. There is, indeed, abundant evidence of the contrast between the attitude towards labour of the genuine planters and that of the speculators who came in with the boom and went out with the collapse.

Bengal Act III of 1863 was amended in 1865. The statement of objects and reasons of Bengal Act VI of 1865 sets forth that:

> In consequence of the unfortunate state of the relations existing between employers and labourers in the eastern districts, it is now proposed, as in the case of Colonial Emigration, to continue the interference of Government so long as the contract is current. Such interference appears to be necessary in the interests of the employer as of the labourer. For the planter declares that he imports labourers into the Province at a very great expense and that as soon as they arrive they refuse to work or leave service; that the punishment for desertion is slight and carries with it the release from all engagements and that therefore the labourer willingly incurs the liability to punishment in the hope of being set free from his contract. The labourer on the other hand declares that he is not paid at the rate which he expected to receive when he entered into the contract; that he is ill-used and neglected and therefore considers himself free from all liability under the contract; and there have been charges brought home to some of the planters in the Cachar district which show that the interests of labour really call for the immediate interference of Government.

The new Act prescribed minimum wages, limited hours of work to nine per day and six days per week, and laid down that contracts with immigrant labour must not extend beyond three years. Every estate was required to maintain a hospital. A protector and an inspector of labourers were appointed and empowered to visit gardens. Managers were bound, on pain of a fine of 500 rupees, to notify to the protector the

fact that any coolie wished to make a complaint and if it was found that the coolie had been ill-used, his contract could be cancelled by the protector. On the other hand, imprisonment was provided as the penalty for continued refusal by an immigrant labourer to work or for absence exceeding seven days, and employers were empowered to arrest absconding labourers without warrant. The term 'absconder' came into regular use on tea gardens and to an outsider it sometimes seemed to denote an unduly proprietary attitude to labour. On the other hand, provided the terms and conditions of service were properly understood by the coolie before his recruitment, it was not unreasonable that the employer should be protected against losing the money spent on the importation of labour.

Although this Act was well conceived, it did not work satisfactorily, and in 1868 a Commission of Enquiry was appointed by the Government of Bengal to examine the state and prospects of tea cultivation in Assam, Cachar, and Sylhet. It reported most unfavourably on the condition of labour. It found that coolies were still induced to emigrate by misrepresentation; that mortality in transit to the gardens was very high; that many coolies were sent up who were totally unfit for work; and that though many gardens were healthy and their coolies well treated, cases were not infrequent where the garden was unhealthy and the coolies overworked and ill-fed and not properly attended in sickness. Cases of gross cruelty were becoming rare, but the death rate on many gardens as a result of bad housing, overcrowding, impure water, and insufficient or unsuitable food was appalling. The minimum wage provisions of the Act had been ignored and generally speaking, the clauses intended to protect the labourer had broken down. The Commissioners took a well balanced view and set against their scathing comments on conditions in some gardens, the fact that in many gardens nothing could exceed the consideration and kindness with which the coolies were treated. This applied particularly to Cachar, which they found ahead of Assam in this respect and where they reported, 'we found conditions in many gardens all that could be desired. Happy and contented, surrounded by their families, earning good wages and possessing numbers of cows and goats; their daily task was light and when they were sick they were treated with the greatest care.' Unfortunately, the unsatisfactory minority gave the industry an undeservedly bad name, and a generation later, Indians who had never been to the tea districts were apt to regard the planter, most unjustly, as an inhuman slave driver.

The Commissioners made a most important, constructive, proposal. They considered that recruiting contractors had proved unsatisfactory and they advocated recruiting by gardens themselves, through the agency of garden *sardars** sent to the recruiting districts. The system of

* *Sardars* = headmen.

sardari recruiting was already in vogue in Cachar – though it amounted to a contravention of Bengal Act III of 1863 – and had proved reasonably efficient. The Commissioners were so convinced of its soundness that they would have removed practically all statutory protection from coolies so recruited. Their views were thus set forth:

> The advantages of private recruiting appear to us to be very great. The labourer is engaged for a particular employer; he is induced to emigrate by a man of whom he has some knowledge, who knows what the work on a tea garden really is and the treatment to be expected from the manager. He goes of his own free will in a comparatively small batch, under circumstances which, we believe, are much more conducive to health than if he were passed up through a depot. He can travel in many instances by land in a way very much more suited to his ordinary habits. He arrives a free agent, bound by no contract; and if he dislikes the work of his master, he has no difficulty in finding employment elsewhere. This fact is the best guarantee that he will be kindly and considerately treated; and yet, while enjoying all the freedom which the Act withholds, he would, under the scheme we have elsewhere recommended, have the benefit of all the protection which proper medical and sanitary supervision can confer. He may, we admit, occasionally be deceived, but the chances of deception are infinitely less than if he had been recruited by an ordinary licensed agent. There would indeed be little object in deception; for unless the *sardar* brings up contented, able-bodied recruits, he loses his reward. On every ground we strongly advocate the adoption of what we have proposed. In Cachar we believe that a healthy system of private recruiting would soon supplant the present objectionable mode of obtaining labour, and in Assam also great benefit would in time accrue both to the planter and the coolie. Under any circumstances, we trust it may have a fair trial. The more the labourers are obtained by private means, the more satisfactory will the results be. Under the proposed arrangements, an employer may recruit without being subject to any check beyond the obligation to supply information of what is going on. He need employ no depot if he avoids Calcutta, which every intelligent employer will strive for his own sake to do; while if he requires assistance, as we fear will generally be the case as regards Assam, he will have every assistance afforded him in the Government depot.

The complete freedom recommended by the Commission for *sardari* recruiting was not accepted by the Government of Bengal. Bengal Act II of 1870 indeed recognized *sardari* recruiting, but continued the provisions of the Acts of 1863 and 1865 regarding medical examination, the signing of the contract before the coolie was despatched to the tea districts, and supervision of conditions of transit to the tea gardens. The minimum wage provisions of the Act of 1865 were abolished, but the arrangement for inspection of labour conditions on tea gardens was continued. From the passing of this Act up to 1915, there were thus two methods of recruiting amongst labour, namely, through licensed contractors who themselves employed licensed recruiters known as *ar-*

kattis,* or through garden *sardars*. Although in the beginning there was some division of opinion as to the respective merits of those two systems, enlightened planters soon came to favour *sardari* recruitment, and a typical progressive view was that expressed in 1873 by W. A. Stoddard, manager of the Naphook Tea Estate in the Sibsagar District of Assam:

> Recruiting through garden *sardars* would in my opinion be ultimately the best and cheapest way of importing. By this means, as it was very truly suggested to me the other day by a fellow planter, we should get batches of friends together; when one of such coolies falling seriously ill, he would have either a very near relation or dear friend to attend him; and I would say that nursing is half the battle with a sick cooly, for the want of which very many more deaths occur than would. No matter what arrangements the manager may make, no matter what the number of nurses, be that affectionate care wanting in the nurse, and that confidence that the sick man would feel during the presence of one who more than cared for him, such patient will have a hard struggle for life.

Stoddard nevertheless went on to say that the risks of *sardars* defaulting were so great that he would continue to recruit through contractors! Sinclair of Borholla, on the other hand, came down wholeheartedly in favour of *sardari* recruitment:

> We have all along recruited our laborers through our own garden *sardars*, and have found that to be the best and cheapest mode of securing good and serviceable men, for they bring away whole families, who have never been known to abscond, and who tend one another in cases of illness; whereas those recruited through contractors, being invariably single men and women, when they fall ill have no one to attend to them, and die off. The pay of laborers is that laid down by Government; but the women and children, by plucking excess leaf, more than double their pay, while the men, if so disposed, can do likewise.

Progressive views were gradually gaining ground and the distrust of contractors was growing. The 'coolie-catcher' began to be despised. Nevertheless, diehard views continued strong in some quarters and in 1873 when the Government of India called for a report from Bengal regarding tea cultivation, many planters still seemed to regard flogging as the best way of dealing with labourers who regretted having come to the tea districts. Unfortunately, those who took a more liberal view found no satisfactory way of dealing with cases where they had spent considerable sums of money in importing labourers who did not like the life, or would not work.

While these developments were taking place, attempts to recruit local labour continued. Both in Assam proper and in Cachar this was in many cases found difficult, but recruits began to be available in

* *Arkattis* – literally, pilots.

increasing numbers from immigrants who had decided not to return home at the expiration of their contract and had settled down permanently in the tea districts. The surprisingly large number of such settlers suggests that good treatment must have been the rule rather than the exception. When recruiting locally, the planter was naturally anxious to ensure reasonable continuity of service and it therefore became customary to give the recruits advances and place them under an agreement for one, two, or three years. The infringement of any such agreement was within the scope of the Workmen's Breach of Contract Act (Act XIII of 1859) though there was some doubt at first as to the legality of this procedure in the case of labourers who had originally emigrated to Assam under the provisions of the Acts of 1863 or 1865. The form of indenture provided by Act XIII of 1859 was evidently popular with labour and in Cachar in 1873, besides 14,076 labourers still under the Emigrant Labour Act, there were about 15,000 time-expired labourers who had freely re-engaged. For Sylhet the available information is rather scanty, but in 1873 the Collector of Sylhet reported that, while the vast majority of tea-garden labourers were emigrants, 'the planters are in a position to command local labour to any extent and they not infrequently seem to do so when they require any extra work to be done'. These local labourers were in fact, what are now known in Assam as *faltus* – casual outside, labourers, employed when required.

In the Darjeeling hills, no recruitment problem existed. Population in Nepal was rising rapidly, and economic pressure compelled it to find an outlet. Nepalis flocked to Darjeeling in considerable numbers and gardens had all the labour they wanted without formalities and without the cost of importing it. In the Terai – the unhealthy tract of plains country just below the Darjeeling hills – tea cultivation was extending rapidly, and, though up to the time of the 1873 Report there had been no importation of labour, the demand for labour was just beginning to exceed supply.

At this time, recruiting through garden *sardars* was growing in popularity and in Sylhet a practice had grown up under which *sardars* brought recruits to the tea districts under no contract. After they arrived on the garden, a contract enforceable under Act XIII of 1859 was executed. Although this practice was illegal, the authorities did not consider it unsound and Bengal Act VII of 1873 therefore permitted free recruitment outside the provisions of the Act, provided the relevant contract did not extend over a term of more than one year. In other words, a labourer could be persuaded by a garden *sardar* to go to Assam and could there, if he liked the look of things, be engaged on a contract for one year. This provision did not impose on the labourers thus engaged the penal clauses of the Act and was therefore unattractive to planters and was not used. A more important effect of this Act was that it

made clear the right of employers and time-expired emigrant labourers to enter into contracts under the Workmen's Breach of Contract Act (Act XIII of 1859), as they had in fact been doing for some years.

As regards labourers recruited in the recruiting districts under the new Act no wages were prescribed by law – though planters were long convinced that they were still required to pay Rs 5 per month for a man, and Rs 4 for a woman, and all contracts were in fact at those rates. There was, however, a real difficulty over short work or absence from work, and on this subject the secretary to the Chief Commissioner of Assam wrote thus in 1880:

> Under the existing form of contract, the planter binds himself to pay the labourer a fixed sum, whether he absents himself, malingers, or is incapacitated from work. The law allows no deductions to be made from such wages, save under Section 121, which provides that only on conviction before a Magistrate can the wages of labourers be subjected to deductions on account of absence.
>
> It is almost unnecessary to say that the law on this point is a dead letter. For permission to deduct a day's wages, equivalent to three annas, an employer would have to send prosecutor, witnesses, and defendant to a Magistrate's court some fifty or sixty miles off, and lose their services for a week. In fact, the remedy would be fifty times worse than the evil, and under such a system it would be impossible to enforce regular or systematic labour. The alternative universally adopted, and I may add universally accepted by the Magistrates, is to have a fixed scale of *hazris* or tasks, and payment is made, not by the day or hour, but by the tasks. Inspectors are practically able to see that these tasks conform to the intention of the law in bringing the full rate of wages within easy reach of every one who does an ordinary day's labour; and, as a matter of fact, the tasks and remuneration for the tasks on gardens similarly situated vary only within narrow limits, as labourers not under the Act have the same scale of tasks as those under Act VII, and here competition comes in, so that a planter who made his scale of tasks unremunerative would soon find himself deserted by his non-Act labourers.

A Commission was appointed by the Government of India to examine the working of Bengal Act VII of 1873 and to consider methods of fostering emigration to Assam. It reported in January 1881. The Commission was much impressed with the desirability of freer recruiting now that Assam was no longer *terra incognita* and they thus expressed this view:

> Those employers who can draw a sufficient supply of labour to their tea gardens, without incurring the expense of employing a regular agency to recruit and to execute contracts in the recruiting districts, may be left to make their own arrangements. When free emigrants arrive ready to work for such employers, or where local labourers or others are willing to enter into contracts with them under the Act, they should be allowed to do so, it being provided that every labourer placing himself under the penal provisions of the

Act shall be entitled also to benefit by its protective clauses. If any employer objects to this, he should be at full liberty to make with his labourers any contract which the ordinary laws of the country recognize and enforce.

The Commissioners' Report led to the passing of Bengal Act I 1882. It is necessary here to explain why Bengal Acts applied to Assam. In 1874 Assam was separated from Bengal and made into a Chief Commissionership, but the legislative powers of the local government were transferred to the Central Government, which generally delegated them to the Chief Commissioner. In the case of certain matters, however, particularly if they affected other areas besides Assam, the Central Government itself passed the legislation and the Acts referred to in this chapter as Bengal Acts were in fact Acts of the Government of India.

Few Acts have worked in a manner more contrary to the intention of those who framed them. The aim of the authors of this Act was to make it possible for free emigrants to find their way to Assam in small bodies, see the gardens and the conditions of work, and then enter into local contracts if they so wished. Unfortunately, the Act made Goalpara a labour district – that is a district in which local contracts might be made – and contractors therefore sent labour to Dhubri, in Goalpara, before recruiting them. Contracts were then executed in Dhubri, which was a very long way from the garden to which they were going and the contracts might, for all practical purposes, just as well have been made in the labourer's own district. The contractors were thus relieved from all the obligations of the Act and there was no corresponding gain to the coolie. Contractors were quick to see the possibilities of this new scheme and for the next few years, the great bulk of recruiting was carried on outside the salutary control of the earlier Acts. The 1882 Act nevertheless introduced three useful changes in the law. In the first place it reintroduced a statutory minimum wage, subject to completion of the daily task; secondly, it gave inspectors power to reduce scheduled tasks; and thirdly, it provided for payment of subsistence allowance in cases of sickness.

Bengal Act I of 1889 and Bengal Act VII of 1893 unfortunately continued the 'Dhubri system', since the Government at that time was most anxious to encourage free emigration at all costs. Except for extending the recruiting areas to which the Emigration Act should apply, these two Acts made little change in the law. The hope of the authors of the 1882 Act, that contractors would disappear and be wholly replaced by garden *sardars*, had proved illusory.

In 1895 yet another Commission of Enquiry was appointed by the Government of Bengal. This Commission, which was concerned with coal as well as with tea, reported in 1896 and its report led, at length of days, to the passing of Act VI of 1901. This Act made little substantial change in the law, but left wide powers to the Government to prohibit

unlicensed recruiting in any area, whether by a contractor or by a *sardar*. Unfortunately, this meant in practice that many areas were left unlicensed and so uncontrolled. The minimum wage was raised.

In view of the complicated nature of the changes in the law governing recruitment for Assam in the second half of the nineteenth century, it will be convenient to summarize the Acts concerned:

(1) Bengal Act III of 1863 required that all recruiters for Assam, Cachar, and Sylhet should be licensed and that contracts should be executed before the labourers left the depot for the tea districts.

(2) Bengal Act VI of 1865 fixed minimum wages for emigrants, limited the period of contract to three years, gave the coolie various kinds of protection on the estate and at the same time introduced the penal clause and empowered the employer to arrest an absconder.

(3) Bengal Act II of 1870 permitting *sardari* recruiting, but still required the contracts to be executed before the coolie left the depot. It also removed the minimum wage but continued regulation of the conveyance of the coolie to the gardens.

(4) Bengal Act VII of 1873 permitted free recruitment outside the provisions of the Act, provided that the relevant contract did not extend to a period of more than one year. The penal clause of the Act did not apply to such contracts and planters therefore made no use of the Act. The Act also made clear the rights of employers and time-expired emigrant labourers to enter into contracts under Act XIII of 1859 – as they had in fact been doing.

(5) Bengal Act I of 1882 introduced what came to be known as the 'Dhubri system' under which contractors could escape from all the obligations of the Act by sending their coolies to Dhubri and recruiting them there. The minimum wage, which had been dropped in the 1870 Act, was reintroduced and at the same time the powers of inspectors were increased.

(6) Bengal Act I of 1889 and Bengal Act VII of 1893 made little change.

(7) Act VI of 1901 provided that in notified areas recruiters must be licensed – though recruiting might be carried on by garden *sardars* in those areas – and contracts must be entered into before the emigrant proceeded to the tea district. Government were empowered to authorize *sardars* to recruit free labour in such districts. The minimum wage was raised and the period of contract was maintained at four years.

At the beginning of the twentieth century, the five systems of recruiting in force were thus:

(a) recruitment through free and unlicensed contractors in areas in which unlicensed recruiting had not been prohibited;

(b) recruitment through licensed recruiters or garden *sardars* in the

licensed recruiting districts, labour being placed under contract before despatch to the tea district;

(c) recruitment at Dhubri, or on the tea garden, of 'free labour' – i.e. labour which, whether brought up by contractors or not, had executed no contract previous to arrival in Dhubri or the tea districts, and could in theory change its mind after seeing the country and the garden;

(d) recruitment of time-expired emigrant labourers under contracts covered by the ordinary law – i.e. Act XIII of 1859, reinforced by Section 492 of the Indian Penal Code;

(e) recruitment of indigenous labour.

In the last two of these cases it was customary to give the recruit an advance in order to bind him under Act XIII for one, two, or three years, and in 1886 the Indian Tea Association bonus rules limited the advance to Rs 6 for a man and Rs 4 for a woman, recovery to be made in the last six months of the agreement. These rules were intended to discourage enticement of labour from one estate to another, and to prevent unhealthy competition for time-expired labourers. They were frequently ignored and managers often waived recovery of cash advances or gave advances in excess of the agreed amount. 'Pimping' of labour became a phrase frequently heard in tea gardens and we shall return to this subject later.

Soon after the passing of Act VI of 1901, Sir Henry Cotton, the Chief Commissioner of Assam, whose heart was always apt to overrule his head, made some sweeping allegations as to the treatment of tea-garden labourers and spoke strongly against what was known as the 'penal contract'. The Government of India did not agree with Cotton and held that 'more than half a million emigrants drawn from the very poorest classes of India are indebted to the industry for a much more liberal supply of food and clothing than they could have expected to enjoy in their own homes'. There were, nevertheless, signs that all was not well in Assam and J. C. Arbuthnot, CIE, ICS, was deputed to report on conditions prevailing in the tea districts of the Dooars, Madras, and Ceylon, and to compare them with those in Assam. His report gave rise to a good deal of controversy and led to the appointment in 1906 of yet another Committee of Enquiry into the measures necessary for a full supply of labour in Assam.

That committee made an exhaustive study of the factors affecting recruitment and its report is a mine of information. It pointed out that the labour shortage in Assam was greater than the statistics might suggest, since the proportion of the mature tea areas to the total acreage under tea had recently increased, while at the same time the growing practice of allotting land to labour for rice cultivation naturally reduced working hours on the garden. The committee concluded that the Assam Valley labour force was short by about 50,000 and that the annual intake was

about three thousand less than was required – both calculations being made on the assumption that one and a half coolies per acre were required for the average garden. The committee's second conclusion was that good harvests in the recruiting areas, and a growing demand for industrial labour had increased the difficulties of recruitment in the last few years, but that the difficulty had been accelerated by the bad reputation of Assam. They recognized that ignorance as to the improvement during recent years in health and general conditions in Assam was one of the obstacles to recruitment, but they had no doubt that the penal contract, together with the old abuses that had reappeared as a result of the free recruitment allowed in some districts, were important factors. They also considered that Assam wages were too low to be attractive.

The committee emphasized the superiority of *sardari* to contractors' recruitment, and regarded the abolition of the contractor as the ultimate aim which was not, however, capable of immediate realization. The report contains an admirable description of *sardari* recruiting, which is worthy of extensive quotation:

> It must be premised that the *sardar* is only known by that name during the time he is employed in the recruiting districts; he is in fact nothing more than a garden coolie, he is ignorant and illiterate, and on his return to his garden reverts to his work as a coolie, and beyond being paid a commission on the persons he recruits he has no further interest in them. A judicious selection of the people who are to be sent recruiting has to be made by the garden manager. The newly imported coolie is as a rule the most successful person, for having recently left his village he is in close touch with his relatives and friends who are living there. On the other hand, the employment of such people is not unattended with risk, as some of them may not return, and as they leave no security on the garden, advances made to them for recruiting purposes are lost. Sometimes old coolies who have been many years on a garden and who have lost touch with their country are sent down. The manager knows that they may not be very successful and he merely lets them go as a matter of policy in order to give them a holiday and let them revisit their country. Most *sardars* leave security of some sort on the garden; it may be cash or cattle, or a man leaves his family behind when he goes to recruit . . . He now receives from the Local Agent a first advance, generally amounting to Rs 10. As a rule no account is given of how this is expended, as it is considered a necessary preliminary to enable the *sardar* to show some hospitality in his village, although in some districts, particularly in the Central Provinces, coolies are brought in on the first advance. Generally speaking the *sardar* returns to headquarters in ten or fifteen days and reports having arranged for coolies. . . . On returning to the garden with his coolies, the *sardar* receives a bonus which may vary from Rs 5 to Rs 40 according to the custom of the garden and the class of coolie recruited. . . . The average length of time spent in the recruiting districts is about four months. A certain percentage of *sardars* do not return.

Warrants for the arrest of absconders are taken out under Section 170 of the Act, but very few are recovered, and in many cases Local Agents have practically abandoned trying to recover absconders. The defaulters are as a rule single men without property or connections on the garden. Sometimes the attractions of their old homes prove too much for them; sometimes they fall under the temptation of the *arkati* and sell their coolies, and cases have been known in which the *sardar* has sold himself to a recruiter, and on arrival in Assam has absconded and returned to his own garden with a plausible story of having been drugged by the *arkati* . . . But it is safe to say that the gardens which are most successful in *sardari* recruitment are those which treat their labour best.

The committee were so impressed with this system that they recommended that *sardari* recruitment should be freed from practically all restrictions, provided the labourer was not placed on contract. They went further than this – and made a recommendation – which runs quite contrary to all recent thought on this subject – that estates should work through headmen or gangers, who would recruit and form settlements of their own coolies and be responsible for their workers. The manager would run the garden entirely through these *sardars*.

The committee further recommended the abolition of the power of managers to arrest 'absconders', but considered that since a voluntary agreement in Assam regarding enticement of labour from one garden to another seemed impossible to achieve, there should be legislation on this subject.

The committee expressed the view that contracts under Act XIII of 1859 (Workmen's Breach of Contract Act) were more popular with labour than the severe penal provisions of Act VI of 1901, though they hoped that before long all labour would be free from any contract at all. 'If labour is to be attracted to Assam,' they stated, 'contracts and agreements must be shunned.' They advised planters to raise wages, to offer land liberally to all cultivators and to get away from barrack-line type of quarters. They were impressed with the evidence of Heron of Powai (in North-east Assam) who stated

> I allow the coolies to live anywhere outside the lines they like. They build their own houses and I supply all the materials and pay them for a reasonable time while doing it. They consider this a great privilege. They can make a small vegetable garden round their huts and this has been a great success.

They criticized some inspecting officers for their excessive zeal in forcing sick labourers into hospital and they recommended further developments in the policy of letting labourers go out to work and return whenever they pleased. Discipline must be reduced to a minimum and the labour force left as independent as possible.

No legislation was introduced as an immediate result of the 1906

Committee of Inquiry, but in 1915 a radical change was made by Act VIII of that year, which abolished the contractor and the *arkatti* and made garden *sardars* the only recruiting agents in the recruiting districts. No thoughtful man regretted the disappearance of the contractor and his evil ways, but the new Act introduced certain practical difficulties. The garden *sardar* had to hold a certificate from the manager of his own garden and could not recruit for any other garden. An estate wishing to obtain a connection with a recruiting district from which it had not previously drawn labour, had to send down one of its own *sardars*, who would be a complete stranger to the district and would thus be greatly hampered in recruiting. The system was in this sense uneconomic and could not last. The garden *sardars* worked under the local supervision of an agent, who was in the employ of one or other of the associations formed by tea producers for the purpose of their recruiting organization. These associations must not be confused with the old recruiting contractors. Act VIII of 1915 also set up the Assam Board under whom the local agents worked. These local agents were thus under the dual supervision of the board and district officers (in their capacity of Superintendents of Emigration). This dualism led to friction and in the first year of its work the board complained justifiably of cases where superintendents of emigration had granted licences to local agents against the recommendations of the board. Nevertheless, the board, which consisted of an official chairman, together with representatives of the tea industry, soon proved of value. It took up at once the question of the high cost of *sardari* recruiting and suggested action to limit advances and loans to garden *sardars* sent on recruiting duty. The board considered it important 'to place a limit on the funds at the disposal of the garden *sardar*, not only on the score of economy, but also as a safeguard against the purchase by him of coolies either from *arkattis* or from other garden *sardars*'.

The practice of placing free labour under long-term contracts under Act XIII of 1859 had to some extent deprived the labourer of such protection as was afforded by Act VI of 1901 and had largely nullified the effect of the withdrawal of the provisions of that Act relating to local contract and to the power to arrest absconders. The rigour of Act XIII was considerably mitigated by Act XII of 1920 which limited the period of local contract to a year. Nevertheless, the Assam Labour Inquiry Committee found in 1921–2 that in many gardens the amendment had been ignored and local contracts for a number of years were still being effected. In some cases substantial advances were given, which effectively tied the coolie for a long period. In general, however, the annual contract under the amended Act involved an annual advance or bonus, which was naturally regarded with favour by labour. In some cases the payments were recoverable advances, but frequently they were just

bonuses in consideration of renewal of agreement. They became known as *Girmit** *bonuses*.

The 1921–2 Committee was divided on the question as to whether Act XIII should be continued in force or not. Two of the planting members took the practical view that it worked well, that the number of cases on which action had to be taken against labour under the Act was few and that it was in fact popular. It is interesting to note that, at this time, 270,000 labourers were working in Assam under Act XIII contracts and in 1920 the number of cases instituted against labourers under the Act was less than one-half per cent of this number. The majority of the committee, however, agreed with Sir William Vincent, Home Member of the Government of India, who had admitted in the Legislative Assembly that 'the repeal of an act which included a penalty of imprisonment for breach of contract was in accordance with modern feeling' and they recommended that the Act should be repealed. No action was taken on this recommendation until 1923 when K. C. Neogy, a well-known Bengali member of the Central Legislative Assembly introduced a Bill to repeal Act XIII of 1859. He quoted the reports of the Assam Inquiry Committee,

> that contracts for longer periods than those permissible under the Act were often executed and the advances which were an essential element of such contracts were often inadequate. That the practice of arrest of defaulters, though now illegal had not been discontinued and that one large company was in fact paying commission on the contracts executed.

The Central Government recognized the validity of these arguments, but maintained that in certain cases employers still needed protection. They mentioned particularly cases 'where large works are in progress and labourers have to be imported from long distances and such labour is absolutely impossible to obtain without the grant of larger advances', and they went on in particular to refer to the experience of the Government of Bombay with regard to the Sukkur Barrage. The Central Government recognized, therefore, that local governments might feel the need of local legislation to protect employers in such cases and they therefore wanted longer time to be given. Neogy's Bill was dropped, but a Government Bill was introduced and passed in 1924. It abolished Act XIII of 1859 with effect from 1926.

In 1926 the Government of India suggested to the local governments mainly concerned that the time might have come for the abolition of all control over recruitment of tea-garden labour and generally sought views as to what amendment of the law was desirable. A Bill was drafted on the basis of the replies, but at this time the Royal Commission on

* Agreement.

Labour was appointed and it was decided to suspend further action until the receipt of the Commission's report.

The foundation of the Royal Commission's recommendations on this subject was the belief that migration to Assam should be encouraged, since 'for the great majority of the immigrants the change is for the better'. The Commission recognized that the system of recruiting families rather than individuals and the practice of granting land for spare-time cultivation meant that the life of a tea-garden labourer resembled that of the villager and avoided the worst features of town life. The Commission were impressed, too, with the fact that over 600,000 ex-tea-garden labourers had been able to settle on government land and in spite of frank criticism of the less satisfactory features of tea-garden life, they regarded migration to Assam as in many cases 'an avenue of escape from destitution and even servitude'.

The Commission pointed out that, although the various governments had for long regarded free emigration to Assam as the ultimate ideal, the 1915 Act, by restricting recruitment to garden *sardars*, had in fact made movement less free than before. They pointed out, for example, that if a local agent sent up to Assam labourers who had come voluntarily to him without the intervention of a *sardar*, he would be breaking the law. They accepted the view of the Indian Tea Association that the industry should have the maximum freedom in recruiting and should itself control forwarding arrangements, subject to government inspection and supervision. They also directed attention to the expensiveness of the recruiting system and to the fact that on an average only one recruit per year was brought in by each *sardar*.

The Commission therefore recommended that while the Government should retain power to reimpose control where necessary, the actual process of recruiting should normally be unrestricted and carried out by any agency that the manager might choose. In the case of assisted emigrants – i.e. emigrants encouraged to migrate by a cash payment or some concession having monetary value – it should be obligatory to forward recruits through depots maintained by the industry and supervised by government officials. Collective arrangements for forwarding were, in the Commission's opinion, essential, and if some estates were not willing to join the Tea Districts Labour Association, there would be no objection to the formation of other similar associations. In some areas they considered that even restrictions on forwarding could be removed and they recommended that the Government of India should consider this possibility in areas not inhabited by aborigenes.

Another important recommendation of the Commission was that every future assisted emigrant to Assam tea gardens, whether coming from a free recruiting area or not, should be entitled to repatriation at his employers' expense after three years' work. Their hope was that on

many gardens labourers would be sent back not just with the single fare, but with a promise of a return fare also, so that they would in fact go on short leave and not abandon Assam. It should be remembered that no penal contracts now existed and immigrant labourers were free to leave the garden whenever they chose. It was therefore necessary to provide that in cases where an immigrant labourer moved from one garden to another, the cost of repatriation should fall on the employer by whom the labourer was last employed before the expiry of the three years. The Commission considered that this would minimize the likelihood of what the planters called enticement. The repatriation proposals were welcomed by the Indian Tea Association and by managers generally, since it was thought that they might make employment in Assam much more popular than it had been.

The Commission also proposed that the Assam Labour Board – whose functions were confined to recruiting and forwarding – should be replaced by a Controller of Emigrant Labour, who would be concerned not only with these matters, but also with the welfare of the immigrants in Assam.

Act XXII of 1932 followed the general scheme of the Commission's recommendations and need not therefore be discussed in detail. It provided for three types of recruiting areas – controlled, restricted, and uncontrolled. In 'controlled areas', although recruiting would be free from restrictions, the forwarding of assisted emigrants would be controlled. In 'restricted' recruiting areas, both recruiting and forwarding would be controlled. Nearly all recruiting areas were put in the first category, whilst Bombay and the Punjab came into the completely uncontrolled class.

The rules under the Act were published in July 1933 and though there have been minor changes in them from time to time, the Act itself has required no amendment. It has, as can be seen from the annual reports of the Controller of Immigration, worked well. The labourer is completely free; the employer takes the risk of losing his money on a labourer who does not stay; and the labourer has the right of repatriation at the end of his term. A considerable proportion of labourers do not, in fact, return home when they have earned repatriation.

2 THE DOOARS

So far we have been concerned only with recruiting for Assam, but we must now deal with the position in the Dooars. Labour in the Dooars was always 'free' in the sense that the labourer was not placed under any kind of contract and could leave whenever he pleased. The reasons for the difference between the Dooars and the Assam system are nowhere explicitly stated, but it was perhaps mainly due to the fact that the Dooars was much nearer than Assam to its principal recruiting ground.

The coolie who went from Central India to Assam was indeed going to foreign parts and might well feel himself to be a homesick exile, only too anxious to run back home if he could. A second factor may have been – though this is pure guesswork – the experience of the disadvantages of the penal contract which had been gained by planters in Assam by the time that tea cultivation in the Dooars developed on any considerable scale.

Individual Dooars gardens sent *sardars* annually to recruit unindentured labour from Chota Nagpur, the Santal Parganas, and Chaibasa and for many years little difficulty was experienced in finding an adequate number of recruits. The Dooars permanent labour force grew from nearly 103,000 in 1913 to 150,000 in 1919.

At the end of the First World War, difficulties began to arise. In the first place, the severe famine of 1918–19 in Bihar and Orissa, together with the disastrous influenza epidemic of the same years, eliminated the surplus population which would otherwise have emigrated from the usual recruiting districts to the Dooars, while from the same causes many tea-garden labourers inherited their ancestral land and returned home to cultivate it. The acreage under tea in the Dooars had risen by eleven per cent during the war, while industry in general had expanded considerably and new industries were now competing with tea for the diminished supply of potential recruits. Moreover, with the termination of the Assam penal contract and the growing mobility of the poorer classes in India, Assam had lost some of its terrors, and the more generous terms offered to labour there tended to attract labour which might otherwise have gone to the Dooars. Gardens in the Dooars therefore found themselves compelled to widen their recruiting field. A few Dooars gardens belonged to the Tea Districts Labour Association – which recruited very efficiently on behalf of Assam gardens – but the great majority who recruited individually, soon found widespread recruitment a very expensive operation. Some central organization of Dooars recruiting was obviously necessary, and the only question was as to whether this work should be entrusted to the Tea Districts Labour Association or to a separate organization. Assam interests, not unnaturally, objected to the use of what was virtually their Association, unless Dooars recruiting came under the same kind of control that was provided by the Assam Labour Board. It was ultimately agreed in 1924 that the Dooars should recruit through the Tea Districts Labour Association, but that control should be provided by a voluntary board, consisting of four representatives from Calcutta, two from the Dooars Planters Association, and one from Assam. Although recruiting for the Dooars was not controlled by statute, it was a condition of the use of the Tea Districts Labour Association as a recruiting organization that Dooars recruitment should be confined to the type permitted for Assam by

Act VI of 1901. This limitation continued until Act VI was repealed by Act XXII of 1932. Thereafter, the Tea Districts Labour Association rules in respect of the Dooars were also modified to permit three types of recruiting thus described by the secretary to the Association:

(1) Ordinary *Sirdari*.
(2) By 'Resident *Sirdars*' who are recruiters who have no intention of returning to the garden, but recruit locally and take recruits to the Local Agent.
(3) By Paid Recruiters. These are to be managed by Local Agents and are intended to recruit labour for gardens which have no connections with the district. This type is similar to the Madras Pool recruiter in the existing Dooars Rules.

Broadly speaking, the intention was that Dooars recruitment in the Santal Parganas, Ranchi, and certain other traditional Dooars recruiting districts should only be carried out through garden *sardars* and resident *sardars*, but that local recruiters should be employed elsewhere.

The system of Dooars recruiting through the Tea Districts Labour Association worked well. The Dooars Branch of the organization was self-supporting, the rules were strictly observed and the necessary recruits were obtained. In the season 1927–8 for example, 26,038 adults were recruited while in 1928–9 the figure rose to 27,616.

3 THE LABOUR RULES AGREEMENTS

However much Assam and the Dooars might differ in methods of recruitment, they both had the problem of enticement of labour, or as the planter has always called it, less elegantly, 'pimping'. It could be taken for granted that in a young and expanding industry, generally short of labour, the less scrupulous employers would seek to entice labour from their neighbours who had spent considerable sums in importing it. When a coolie finished his agreement he was a skilled employee and employers were prepared to offer inducements to him to remain and enter in their service. Managers therefore paid bonuses for the renewal of agreements or for a fresh engagement under Act XIII of 1859 and as far back as 1886 labour bonus rules fixing a maximum bonus were adopted by the Indian Tea Association. Unfortunately these rules were only too frequently ignored as the competition for time-expired labour became serious.*

Although enticement was the subject of much recrimination in the early days of the tea industry, it was not until the end of the nineteenth century that any concerted action to deal with it was taken. The first move was made in the Dooars. In 1889 a somewhat elaborate set of rules provided *inter alia* that coolies leaving one estate for another without permission must, on the request of the manager of the first estate, be

* The rules are printed in the Report of the Indian Tea Association, Calcutta, for 1886.

turned out or sent back – subject to the important exception that during November and December of each year, coolies not indebted to their estates should be entitled to receive a discharge certificate and to seek employment on any other estate. Various other provisions regarding enticement were also suggested, but the draft was considered too complicated and was ultimately replaced by a much simplified set of rules which came into force on 1 May 1900. The most interesting provision of the rules was that if an indebted coolie left one estate for another, the receiving estate should, on demand, either turn the coolie out, or pay to the original estate the money due by the coolie. A second provision laid down that if a recruiter sent to a recruiting district by one estate proceeded on his return, either alone or with other recruits, to a different estate, the second estate must turn out the recruiter and the accompanying coolies, or recoup the original estate for the recruiting expenditure incurred and for any advance given. The remaining clauses of the rules* provided for arbitration by managers of Dooars tea estates in any case of dispute. Sixty-five per cent of gardens in the membership of the Dooars Planters Association signed the agreement.

The rules remained in this form until they were revised in 1908. The new rules in the main reproduced the older rules, but also provided that compensation at the rate of Rs 6 should be paid for every newly recruited coolie employed by an estate other than that which sent down the recruiter who recruited him.† Amendments made in 1916 – effective from 1 January 1918 – and further amendments in 1923, related only to matters of detail and the rules in substantially their original form, continued to gain an increasing measure of support.

In 1920 a reciprocal arrangement was made with the Terai, which had had its own rules since 1908.

In spite of these rules, the mischief of enticement in the Dooars was not at an end and references to it are frequent in the Association's correspondence in the early twenties. The simple fact was that labour in the Dooars at this time was in short supply and managers felt that they must get labour at all costs. In 1922 one manager wrote as follows:

> By means of large bonuses for local recruiting, the gift of concessions secretly, and the *beegah* system there is a good deal of enticement taking place now in the Dooars. Concessions up to a certain standard are necessary and required as an inducement to aid recruiting in the recruiting districts. Beyond that standard they not only bring loss but assist the coolies to move round more and more in a vicious circle. The coolie speedily takes advantage of these methods and understands that he is master of the position.

* The rules will be found printed at page 370 of the Annual Report of the Indian Tea Association for 1900.

† *Vide* pages 256–7 of the Indian Tea Association's Report for 1908.

Reference was also made at this time to a practice which had grown up some years earlier and which had been discussed at some length at a conference of planters and agency house representatives in Jalpaiguri as far back as 1915. At that conference it was reported that

> besides the ordinary labour force living on an estate, many gardens obtained the service of ex-garden coolies now resident in the *bustees** adjoining the gardens. In some places, these coolies were numerous and of great value to the estates who employed them. Consequently it happened that where there was competition for obtaining this labour, inducement had been given in the shape of tasks lower than those in operation for the coolies who were resident in the estate. Where this had occurred, coolies living on neighbouring estates to those who were attracting *bustee* people, seized the opportunity of earning more wages or of doing a smaller task . . . Coolies housed and living on one garden, which had perhaps imported them at considerable expense, were actually working in another garden.

There was no obvious remedy for this situation except to say that, when a manager employed casual or *bustee* labour, he must satisfy himself that the coolies really were *bustee* labour and not coolies belonging to another garden. It would obviously be difficult to enforce any such obligation on an unscrupulous manager.

In 1926 an attempt was made to deal with this problem by an addition to the labour rules as follows:

> No subscriber shall directly or indirectly entice or endeavour to induce coolies living and housed on another estate to leave such estate. Should 'A' find that coolies living in a house on his garden are undertaking any work within the boundaries of 'B''s estate, he should have the right to notify 'B' and 'B' . . . shall immediately stop the work of these coolies. If the coolies were still allowed to work on 'B''s garden, 'B' was to be liable to a penalty not exceeding Rs 150 - per coolie.

In 1929 The Indian Tea Planters Association* which previously had no labour rules in force, agreed to adopt rules similar to the Dooars Labour Rules and at the same time reciprocal agreements between the Indian Tea Planters Association and the Dooars Planters Association were executed.

The rules and agreements presumably worked well since from this time onwards there were very few references to them in the annual reports of the Dooars Planters Association.

In the Assam and Surma Valleys, although there had been various arrangements between planters for the purpose of minimizing competition for labour and maintaining more or less uniform conditions of employment, no agreement corresponding to the Dooars Labour Rules was executed until 1908. Act VI of 1901 had provided a penalty for the

* *Bustee* = small village.

† An Association of Indian Planters in the Dooars.

enticement by an employer of labour under contract, but in practice it was found difficult to implement this provision.

In 1906 the problem was considered by the Assam Labour Inquiry Committee, which found that although feeling amongst Assam planters against enticement of labour was strong, the prospects of securing a voluntary agreement similar to that in the Dooars were very remote. They therefore suggested legislation providing that if within four years of first importation into Assam, a tea-garden labourer worked for a new tea-garden employer, that new employer should be liable to pay the actual expenses of importation up to a limit of Rs 80 if the labourer were taken on by the new employer within one year of his arrival, Rs 60 if within two years, and so on. The committee's proposals would have left the labourer free to return to his country at any time or to take up employment outside the tea industry.

The proposal was not adopted by the Government and in 1908 the Indian Tea Association (London) suggested the framing of rules similar to those in operation in the Dooars. They considered that the matter had become particularly urgent in view of certain notifications providing for recruitment without any agreement between the estate and the labourer.

The Assam Branch prepared draft rules but observed that the real need was for a 'code of honour', respected equally by proprietors, directors, agents and planters. The branch chairman's remarks in this connexion are interesting:

> . . . the Chairman pointed out that the question had come under consideration by this Association on many occasions, and that the difficulty in coming to any satisfactory solution had always been the inability to enforce rules made. He pressed the point that the first essential to all such rules lay in a 'Code of Honour' by Proprietors, Boards of Directors, Agents and Planters equally and he quoted a recent speech by Mr Loudon Shand in Ceylon who, in referring to such a Code, said, 'When I was a Planter a neighbour would have as soon thought of running away with his neighbour's wife as with his coolie, if not sooner,' while as a corollary to the above referring to the orders Managers sometimes get, he said; 'I know well that orders come forth that such and such an area has to be planted out, and you have to get coolies – honestly if you can but get coolies – and they do it,' hence rules framed on this Code of Honour, where broken, must be enforceable by the only Court competent to bring pressure, namely the body responsible for the working of the property.

The Surma Valley Branch also took the line that in many cases proprietors and agents were more to blame for the enticement of coolies than the manager.

The rules were not finalized until 1910 and were somewhat different in detail for the two valleys, though both were generally similar to those in the Dooars. The Brahmaputra Valley rules were signed by the proprietors representing ninety per cent of the acreage under tea, while in

the Surma Valley, the corresponding percentage was eighty-seven per cent. These percentages had risen to 94½ per cent and 96½ per cent by 1912. It should be noted that each valley agreement contained provisions for dealing with enticement from one valley to another, and at a later stage reciprocal agreements were made between Assam and Bengal.

The Indian Tea Association continued to press the Government for the enactment of an Enticement Bill and emphasized the fact that enticement was not a hypothetical danger, but a real and continuing problem. In 1912 a memorandum to the Secretary of State put the case cogently and provided concrete illustrations of how enticement worked:

> In one case, it was stated that arrangements had been made to entice upwards of fifty coolies from a garden; thirty of them were actually enticed away, but the remainder were stopped by the manager, who had learned of the intention. The information was that these fifty were a portion of a party of two hundred who were to be enticed from gardens in the same district by a contractor, against whom, of course, no proceedings could be instituted. In another case a member of the Committee of the Assam Branch was offered two hundred coolies by a native, who stated on enquiry that he could make arrangements to obtain them from another district which he named, and from gardens in which coolies had shortly before been enticed . . . A particularly flagrant case was that in which a Government *mauzadar* was concerned. He prosecuted the European Manager and European Assistant of a garden for rioting and criminal trespass arising out of a visit paid by them to his estate for the purpose of reclaiming some of their collies who had been enticed away. The accused were acquitted by the Judge, who made the following comments regarding the complaint: – 'A word requires to be added about the complainant. The evidence I have heard leaves little doubt in my mind that the complainant has knowingly been employing coolies belonging to Meleng Tea Estate. The fact that their names were changed is alone powerful evidence that he knew them to be persons whose services he had no right to employ. Besides being a manager or owner of a tea estate he is also a *mauzadar* and a man of considerable influence. It is true that his tea estate is not situated within his *mauzah*, but it is not far off, and I think it should be considered whether he is a proper person to be retained in the post he holds.'

In spite of the support given to the Association's demand by the Assam Administration and by the Government of India, the Secretary of State, after prolonged correspondence, rejected the proposal as not being in line with modern thought regarding the freedom of labour.

About this time a new problem was presented by the opening up of land for tea in the west of the Tezpur District. The new proprietors were not signatories to the labour rules and the result of their operations was a serious loss of labour from existing gardens in Tezpur. The Association protested against this development and the Government of Assam decided that all new leases for tea cultivation should include a clause

requiring the lessee to be bound by such rules regarding enticement as might be approved by Government.

In 1918 enticement was still only too common and a conference was called by the Indian Tea Association to consider remedies. It was, however, realized at the end of the conference that nothing could be done beyond an appeal to all tea-garden proprietors, whether signatories or not, to discourage the practice.

The whole subject of enticement was constantly before the Calcutta and branch committees during this period and after prolonged consideration, further amendments, of a somewhat technical character, were made in the Brahmaputra and Surma Valley rules in 1920, and the relative agreements were then signed by proprietors covering ninety-three per cent of the acreage of each valley.

In 1926 enticement of tea-garden labourers by *arkattis* had become a serious trouble and was thus described in the Annual Report of the Indian Tea Association for that year.

> Petty Contractors in Assam are openly offering to supply first-class coolies to tea garden Managers. The labour offered, chiefly consists of absconders from distant tea gardens, enticed away by *arkatties* employed by the petty contractors.
>
> These *arkatties* reside in the neighbourhood of liquor and opium shops, railway stations, tea garden bazaars and occasionally within the tea gardens. A very remunerative business, as proved by records in a recent case before the Labour Board. Also very liable to lead to a breach of the peace when an *arkatti* is caught in the act.
>
> Owing to the fear of discovery, no Manager would be likely to accept labour which had been enticed away from a neighbouring garden and accordingly the contractor's market would cease to exist, if a licence was necessary to export his ill-gotten gains to another Sub-Division.

It was therefore suggested that the Government of Assam should issue a notification prohibiting the recruiting of labour from any subdivision of Assam for work in another sub-division. The proposal was left in abeyance because of the appointment of the Royal Commission on Labour. In 1932 the Tea Districts Emigrant Labour Act fixed on the last employer the responsibility for the cost of repatriating an emigrant labourer. This considerably reduced the incentive to entice labour and in 1938 it was agreed that the Brahmaputra and Surma Valley labour rules were no longer necessary. They were, therefore, abandoned.

4 LABOUR RECRUITING ORGANIZATIONS

The winding up of the Tea Districts Labour Association and the discontinuance of recruiting from outside Assam may be said to symbolize the end of an era and it would be fitting to chronicle here in detail the history of the recruiting organization of the industry. Unfortunately, in

spite of wide research, adequate material for such a history has not been found. All that exist are a few sketchy details.* It is clear that in 1859 a Planters Association was formed and that in the next few decades various recruiting organizations – including the Longai Valley Employers Association, the General Coolie Recruiting Association, the Assam Labour Association (founded at an indeterminate date by eight tea companies), and a number of private recruiting firms came into being. In 1892 a meeting called by the Bengal Chamber of Commerce led to the formation of the Tea Districts Labour Supply Association which took over some of the existing agencies, though the Assam Labour Association still continued to work independently. In 1899 Logan and Leslie – who ran a recruiting business which had not been absorbed by the Tea Districts Labour Supply Association – made over their business to John Taylor, Superintendent of the River Steam Navigation Company at Goalundo. In due course it was taken over by Macneill & Company.

In 1917, the Assam Labour Association and the Tea Districts Labour Supply Association were amalgamated to form the Tea Districts Labour Association. Three years later Macneill & Company assigned to that Association the business which they had taken over from John Taylor, and from 1920 onwards the Tea Districts Labour Association was the only organization concerned with the supervision of recruiting. The liquidation of that Association in 1960 was the end of a chapter. In the early days, recruiters for Assam had acquired a bad reputation and the term 'coolie-catcher' had become a byword. According to a gentleman who was once concerned with recruiting and is still alive today, it was at Purulia that this term was first coined and he tells us an amusing story.

> In point of fact Purulia was once famous for persons engaged in supplying 'coolies' to tea gardens, and names such as Saboulle, 'Diamond' Myers, Massyck, and the Whyte brothers come to my mind. It was indeed Saboulle who owned and drove the first motor-car in those parts. The vehicle was a Daimler and the petrol for its propulsion used to be sent up from Calcutta by rail in sealed cans at a cost of Rs 10 per gallon! During a cold weather visit to Purulia by the Lieutenant-Governor, Saboulle drove H.E. on his arrival from the railway station to the Circuit House in his Daimler – it was a great affair. After Saboulle had been profusely thanked and drove away amid much puff-puffing, H.E. turned to the DC and asked . . . 'Who is that chap Saboulle?' 'Oh,' came the prompt reply, 'he is one of the local coolie-catchers, Your Excellency.'

Our informant adds that when he was a small boy at the beginning of

* An interesting account of the earlier organizations written in 1920, by a recuiting agent is appended to this chapter.

the twentieth century, his *ayah* used to threaten that if he were naughty she would hand him over to the *depoo wallah* to be sent to Assam!

It is, however, important to remember that the iniquities connected with recruitment in the nineteenth century were in the main perpetrated by contractors rather than by individuals belonging to the tea industry itself, and that it was to put an end to these abuses that the industry established responsible, well-run recruiting organizations the excellence of whose work was generally acknowledged.

5 RECRUITMENT OF LABOUR WITHIN ASSAM

In 1953 the question of recruitment of labour in Assam was raised from a wholly different angle. The Government of Assam, seriously perturbed at the growth of unemployment and at the shortage of foodstuffs, suggested that recruitment of labour from outside the State of Assam should be curtailed or discontinued and that attempts should be made to induce labour from over-laboured estates to transfer to estates requiring additional labour. The Indian Tea Association, while not sanguine as to the results of such a scheme, shared the Government's wishes and offered to co-operate in it. The Association's attempts are thus described in the Annual Report for 1953.

> For some time the Association had been in consultation with the Government of Assam and the Tea Districts Labour Association on the need to assist in relieving the unemployment problem in the State by inducing surplus labour from estates in Cachar and the Assam Valley to transfer to other estates requiring additional labour, and by the industry curtailing as far as possible recruitment of labour from outside the State. As a result, the Tea Districts Labour Association opened new depots at Silchar and Rowriah and obtained full details of labour surpluses and requirements on member gardens. For the most part surplus labour proved reluctant to accept the idea of permanent transfer which entailed the uprooting of families from estates which they regarded as their homes; and an additional scheme was therefore introduced under which labour would go for periods not exceeding six months to estates requiring extra labour. Towards the end of the year the Association agreed to a proposal whereby labour, for either permanent or short term transfer, should receive certain settling allowances as an additional inducement to them to make the move and the efforts of the Tea Districts Labour Association to bring about transfers were intensified.

It was soon clear that there was little chance of achieving Government's object – which was to transfer fifteen thousand workers within Assam – and only five thousand workers were in fact recruited by this method during the whole of 1954. In June 1954 the Indian Tea Association estimated its additional labour requirements for 1955 at twenty-three thousand. Government replied by proposing that the settlement allowance for transfers inside Assam should be raised from Rs 50 to

Rs 60 for a family of two or more, and Rs 30 for a single person, and at the same time agreed to permit the recruitment of five thousand labourers from outside the State of Assam in 1955. In February 1955 the Government of Assam raised this permissible figure to eleven thousand. This number was in fact exceeded early in the year and the Association therefore asked the Tea Districts Labour Association to cease recruiting and advised members who still needed labour to recruit through the depots in Silchar and Rowriah.

Unfortunately labourers were still unwilling to move from one estate to another and the depots served so little purpose that in 1957 they were closed down. The problem presented by surplus labour was nevertheless urgent. The industry was unable to follow its traditional practice of offering work to the children of workers when they became adolescent – and at the same time it was expected to assume economic responsibility for increasing numbers of dependants. In 1959 the Assam Government set up a Central Committee on Unemployment in Tea Gardens. In that committee representatives of the Indian Tea Association pressed the Government to obtain their requirements of unskilled labour from tea gardens and also to establish new industries and arrange vocational training for them. The Association also urged Government to undertake propaganda to persuade labour to move more readily. Nothing effective was done by Government, but in 1960 the Association decided to make fresh attempts to recruit labour for those estates which needed it from estates which had surplus labour. The new scheme only came into operation in 1961 and is therefore outside the scope of this book.

In the meantime, the Association, at the request of the Government, decided to tackle the long-term problem by making available to labour knowledge of the technique of family planning. The main implementation of this policy took place after the period with which we are concerned in this book.

By about 1959 recruitment from outside Assam had been reduced to almost negligible proportions and at a meeting of the Industrial Committee on Plantations in August 1960 it was agreed that such recruitment should be discontinued and that stringent penalties should be imposed for the illicit recruitment which the Government of Assam alleged was taking place on a small scale. The Tea Districts Labour Association had no further functions to perform and on 1 December 1960 it was put into liquidation, though some of that Association's centres were to be maintained by the Indian Tea Association for a period in order to assist in the repatriation of time-expired labourers.

Appendix to Chapter 20

Logan & Leslie. Asansol, 28 April, 1920.

B. Smith Esq.,
CALCUTTA

Sir,

As verbally instructed I am giving below a short history of the forwarding agents which I hope will serve the purpose.

At the beginning of the Assam emigration there was neither sirdari nor forwarding depot. The system of free contractors' work was introduced first and the contractors used to supply coolies from Calcutta and send them by the direct steamers. Then the free sirdari system was introduced by the Assam Company and the Assam Railways and Trading Co Ltd also followed the same. Two more firms by the name of Labour Transport Co and H. L. Mukherjee & Co started coolie supplying business through the garden sirdars. Mr D. M. Logan was Agent of the Labour Transport Co at Dhubri, while the E. B. Railway Co extended their line from Poradah to Kaunia. The railway terminated at Kaunia so the coolies used to go to Dhubri from Kaunia by walk. The firm of the Labour Transport Co was winded up in the year 1882 while Mr Logan purchased a Tea garden by the name of Lalkura Tea Estate and went there. After the firm of Labour Transport Co was winded up, there remained three coolie supplying firms of Assam Co, Assam Railways and Trading Co Ltd and H. L. Mukherjee & Co with their various recruiting agencies even at Dhubri. In the year 1882 Emigration Act (Act 1 of 1882) was first enforced and the above firms were compelled to establish halting rest houses at Kanchapara, Saraghat, Joypurhat, Parbatipur and Dhubri according to the Emigration rules. As soon as the Emigration Act was enforced the Assam Railways and Trading Co Ltd winded up the coolie recruiting business. In the year 1883 a daily mail steamer service between Dhubri and Dibrughur was started by the R. S. N. Co Ltd, while Messrs Macneill & Co, Messrs Williamson Magor & Co and Messrs Begg Dunlop & Co, formed an Association by the name of Tea Districts Labour Supply Association and started recruiting depots in various recruiting districts. The Association made recruiting and forwarding staff quite separate. The Association appointed Mr R. Sanbolle as Forwarding Agent for Assam coolies with headquarters at Dhubri, and appointed Mr J. Mackertich Sr as Forwarding Agent for Cachar and Sylhet coolies with headquarters at Goalundo. After the Emigration Act was enforced, there remained three Forwarding Agents at Dhubri for forwarding Assam coolies viz: Mr R. Sanbolle (Association's Forwarding Agent), Assam Co, and H. L. Mukherjee & Co and two Forwarding Agents at Goalundo for forwarding Cachar and Sylhet coolies viz: Mr J. Mackertich (Association's Forwarding Agent) and H. L. Mukherjee & Co. While the Emigration Act was enforced the Government made halting rest houses for Contractors' coolies. As the Contractors began to send their coolies by direct steamers from Calcutta to the respective destinations the Government have abolished the rest houses. Babu P. N. Bose the proprietor of Messrs Medland,

Bose & Co was Agent of Mr R. Sanbolle at Ranugunge. He left the service in the year 1886 and formed an Association by the name of General Coolie Recruiting Association with the help of Mr Blamy of Messrs Balmer Lawrie & Co. After a year or so the above Association was amalgamated with the Tea Districts Labour Supply Association and Babu P.N.Bose was appointed as Forwarding Agent of Messrs Balmer Lawrie & Co and arranged rest houses in each prescribed halting station. After a year or two Messrs Shaw Wallace & Co also appointed Babu P.N.Bose as their Forwarding Agent. While Babu P.N.Bose became invalid he took Mr Medland as his partner in the year 1904 or 1905 and changed the name of the firm to Medland, Bose & Co. Babu R.D.Mukherjee had no concern with the coolie business. He lived at Kushtea and used to look after the zamindari work there of Messrs Octavius Steel & Co without salary, so the firm was pleased to give him their coolie forwarding business, hence he became a Forwarding Agent from the year 1892. The RSN Co Ltd had daily mail steamer service between Dhubri and Dibrughur since 1883 but the IGSN Co Ltd in order to compete with the above Company started a triweekly steamer service between Goalundo and Dibrughur and influenced some firms to ship their coolies on board the IGSN Cos' steamers when available. Mr R.Sanbolle was instructed by the above firms to give their coolies to the IGSN Cos' steamers but Mr Sangolle did not obey the instructions of the firms, so they were dissatisfied with Mr Sanbolle and recommended the Association to take out the forwarding business from his hands, while Mr Logan took the forwarding business from the Association for Assam as well as Cachar and Sylhet in 1887, as Mr Mackertich was too old to carry on the business. Mr Logan made his headquarters at Dhubri and retired in 1897 taking Mr Leslie as his partner changing the name of the firm as Logan & Leslie. In the year 1899 Mr Leslie retired making over the business to Mr Taylor. Mr Taylor took the forwarding business as well as contract of supply of provision on board the steamers as the firm of the late contractors H.L.Mukherjee & Co was winded up in that year. Babu G.C. Chatterjee was agent of H.L.Mukherjee & Co at Goalundo and while the above firm was winded up he purchased their Goalundo depot and became forwarding agent of some native contractors. As your goodself is aware all about the forwarding agents hereafter it is needless to mention here all other things about the forwarding agents.

I remain to be Sir
your most obdt servant,
GOPAL CHANDRA ACHARYYA.

CHAPTER TWENTY-ONE

REMUNERATION OF TEA-GARDEN LABOUR IN NORTH-EAST INDIA : I. UP TO 1939

There are four important respects in which conditions of employment on tea estates differ from those which obtain in most other industries. In the first place, gardens tend to employ families rather than individuals. In the words of the Royal Commission on Labour:

> The migration to Assam is one of families rather than of individuals, since the gardens offer employment to women and children as well as to men. In most other industries the scope for the employment of women and children is limited, and in consequence the worker usually leaves his family behind in his village, remitting money for its maintenance. On the plantations nearly all the members of the worker's family are wage earners, and even children of tender age come out with their parents to increase the family earnings. There are thus comparatively few non-working dependants in a working class family. The effect of this on the standard of living is important for, even with low individual earnings, the total family income is sufficiently high to prevent the worker from feeling the pinch of poverty.

Secondly, cash wages do not represent the whole remuneration of labour and are in many cases supplemented by grants of cultivated land, free or for nominal payments, while in certain periods rice has also been supplied to labour at considerably less than market rates.

Thirdly, the tea industry has in the main been very closely knit and employers have to a great extent standardized wages. The Royal Commission thus commented on this practice:

> The tea industry in Assam is perhaps the most highly organised industry in the country, and the Indian Tea Association, with a branch in each of the two valleys, represents about ninety per cent of the total area under tea cultivation in Assam. The object of this Association is 'to promote the common interests of all persons concerned in the cultivation of tea in India'. We have already seen that problems connected with the recruitment of labour have been of primary importance for the development of the industry and that

action has been taken through the Association to prevent the enticement of labour from one garden to another. But efforts to regulate the relations between employers and employed go further than this. In addition to the 'labour rules', the Association has been able to enforce what are known as 'wage agreements' among its members in order to secure, as far as practicable, uniformity in the matter of wages and to prevent one employer from paying substantially higher wages than his neighbour. The 'wage agreements' are effected through district or circle committees which fix the level of wages for each area or district. Owing to differences in the character of the soil and in the nature of the work from garden to garden, it is not feasible to fix standard piece rates, but it has generally been possible for the district committees to ensure that the amount which can be earned in an hour by the worker of average capacity for each class of work is more or less uniform throughout the district. Each planter fixes his own piece rates but, in so doing, regard is paid to the agreement arrived at by the Committee in order that the wages of his employees may not be appreciably higher than the agreed level. There is thus none of the attraction of higher wages to tempt the worker to transfer his services from one garden to another. On principle there can be no more objection to the 'wage agreements' than to the 'labour rules' of the Indian Tea Association, but we would again point out that the workers suffer owing to the absence of any organisation on their side to counteract the powerful combination of their employers.

The fourth characteristic differentiating the tea industry from some other organized industries is the unwillingness of labour to work every day of the working week, and the resulting high percentage of absenteeism. Figures supplied by the Assam Branch of the Indian Tea Association to the Royal Commission showed an average attendance of about seventy-four per cent in the Surma Valley and sixty-nine per cent in the Assam Valley in 1929. On these features the Royal Commission thus commented:

> In considering the extent of absenteeism in the Assam tea gardens, it is important to bear in mind the subsidiary occupations of the garden worker. The most important is private cultivation, but household duties in agricultural surroundings, such as the purchase of weekly supplies from the market, the collection of firewood, the grazing of cattle, the threshing of corn, etc. make a considerable demand on the workers' time and particularly on that of the women. Absenteeism is, therefore, to some extent inevitable.

These four factors, which operated in greater or less degree right from the early days of the industry, must be borne in mind throughout our study of the fluctuations in the remuneration of labour.

METHODS OF CALCULATING EARNINGS

Before we embark on that study, it is necessary to understand the system of fixing the sums due to the individual labourer and the procedure of payment. The *hazri* system, which grew up as a sensible misinterpreta-

tion of the minimum wage section of the 1865 Act, soon became the basis of wage fixation in Assam. The *hazri* represented a specific task which might be expected to take the field worker, according to his or her diligence, about four to five hours to perform and for this task the standard daily wage was paid. After the completion of the *hazri*, provided the manager was able to make more work available, the labourer was allowed to perform a further task, known as *ticca*, usually at a higher rate of payment. Whether the manager could offer labour the opportunity of doing this extra task or not naturally depended on the labour strength of the estate and the manager's garden policy. It would obviously be unsound to do more hoeing or pruning than was necessary. In theory the labourer had a corresponding liberty to undertake or decline a *ticca* offered to him, but in practice, on short laboured gardens a good deal of pressure was often brought on him to undertake it. In the plucking season the manager would generally be concerned to get as much work done as possible and after a plucker had completed the *hazri* of so many pounds of leaf, he or she would be encouraged to continue plucking and would be paid *leaf pice* at so much a pound for the additional quantity plucked.

A few years before the Second World War this system began to be replaced on many gardens by the unit system, in which payment was made for every unit of work done. The unit was generally one anna's worth of work, except in the case of plucking, for which one-pice units were found more convenient. The system was intended 'to give the worker greater latitude in the matter of attendance and to leave it to him to earn as much or as little as he pleased', but it would be a mistake to think that an unlimited degree of freedom was allowed. The unit system and the old *hazri* and *ticca* system were both based on piece rates and the only difference between them was in the degree of flexibility as to the amount of work to be done. Those immigrant labourers who intended to return to their homes as soon as they had earned the right of repatriation were often willing to work extremely hard in order to save money. It was reported in the thirties that 'it was common for the male workers in Upper Assam to go out hoeing before dawn with lanterns so that they could finish their *hazri* work and go back for food in time to join the women when they went out plucking'.

In the Dooars, the unit system is not much used even now and wages are based on a principle not very different from that of the older system in Assam. A certain task is laid down for field workers which should be performed by the average labourer in about three hours. Having completed this task, the labourer is at liberty – if the manager needs more work from him – to do a further and reduced task known as a *doubli*, and in busy periods the labourer might even do two or three *doublis*. The Indian Tea Association has more than once recommended the

substitution of the unit system for that existing in the Dooars, but planters are by nature conservative and the change has not been generally made.

Although a fair degree of uniformity in wage rates was maintained in each local area, the tasks constituting a *hazri* or a unit naturally varied from garden to garden or from day to day. In the case of hoeing, for example, the stiffness or lightness of the soil necessarily determined the task, while in plucking, the fineness or coarseness demanded had to be considered in fixing the rate of payment – allowance also had to be made for the weight of the moisture content of the leaf on wet and fine days. Some of the methods adopted to allow for deduction of moisture content, as well as for the weight of the basket, involved the use of 'distorted scales' in which the unit shown as a *seer* or a pound was in fact somewhat more than the statutory weight. To an outsider some of these methods might have seemed fraudulent, but in practice the test was the earning capacity of a diligent labourer and the labour force on any garden knew quite well if it was receiving a square deal or not. The 1921 Assam Inquiry Committee wrote lucidly on this subject:

> It is fair that a certain deduction should be made on wet days when the weight of the basket and of the leaf is increased. No hard-and-fast rule is observed in regard to deductions. Deductions for any particular day may be excessive or insufficient. It largely depends on the weather which makes exact calculation impossible. Deductions for the weight of the basket must often be rough and ready. In some gardens, especially in the Surma Valley, deductions varying from twenty-five to fifty per cent are made. For example, if a woman brings in twenty-four pounds of leaf, she would only get credit for twelve pounds in a garden where a fifty per cent deduction is customary. Managers have been asked to explain the origin of the system of such large deductions and the Committee have failed to elicit any intelligible answer. The real test of the fairness of any task or measurement is that afforded by the wages paid. In framing his annual budget the Manager estimates how much his leaf will cost to pluck per maund. Throughout the year he has to bear this in mind and to adjust the task and the deductions accordingly. Sometimes he may find at the end of a year that he has been able to to work cheaper than his estimate. This would particularly be the case when the season was favourable for the growth of leaf. On the other hand, where climatic conditions have been adverse and the coolie has not found it possible to pluck a normal quantity in a given time, the task has to be lowered so as to enable him to earn a living wage. In cases where Managers in 1921 resorted to fine plucking, estimates were exceeded. The task was, of course, reduced, but in many cases the plucker was not able to earn so much in a given time as when coarse plucking was the practice. Only experience can show how the task should be properly adjusted. The cost of fine plucking is much greater; it is true that the tea made fetches better prices, but the total crop manufactured is much less. As a rule, at the beginning of the season there is no fixed plucking task. A woman goes out in the morning and returns in the late afternoon and receives

the full day's wage for whatever she brings in unless it is obvious that she has been idling. Owing to the scarcity of leaf, it is often impossible at that season to impose a fixed task and it is necessary to avoid the risk of damage to the bushes which might result from over-plucking when they were being 'formed'. Similarly, frequently, at the end of the season when leaf is again scarce, no fixed task is imposed. In most gardens in the height of the season there is a fixed task; in others, however, it is the practice at the end of the day to weigh the total amount of leaf brought in and to divide the weight by the number of pluckers. The resultant is taken as the daily task and any weight in excess is paid for at a proportionate rate. One objection to this average system is that the good plucker is penalised. Another objection is that the plucker does not know when she goes out in the morning, how much she has to pluck for her daily wage. Still, if coolies in a particular garden are accustomed to this system there might be some hesitation in changing it as the coolie is suspicious of any new *dastur*.* The Committee find it difficult to understand the principle on which deductions are made in some estates. They admit that where conditions differ so much, uniformity in the system of deductions is perhaps impossible, but they think it would be desirable to have a system which is not so open to criticism. It might be possible, as a result of experiment, to ascertain the average loss throughout the year due to wet leaf or wastage in manufacture, and on this basis, to make a standard deduction throughout the year.

Old customs, nevertheless, die hard, particularly when they are felt by those most concerned to be fair and it was not until 1939, after an intensive study of the subject by the present writer, that the industry as a whole accepted the view expressed by the 1921 Committee and abolished what was called the 'distorted scale'.

METHODS OF PAYMENT

The actual methods of paying labourers varied considerably from garden to garden. In early days, labourers were often paid by the *sardars* under whom they worked, and who had in many cases recruited them, but in North India this practice almost disappeared early in the twentieth century. Some gardens paid monthly, others weekly, and yet others daily, and until the third decade of the present century many gardens issued daily tokens.

The 1906 Labour Enquiry Committee wrote interestingly on this subject.

> Many gardens in Sylhet pay their labourers daily; each morning tin tickets are issued for the work of the day before; the shape of the ticket varies for a whole *hazri*, a three-quarter *hazri* and a half *hazri*. These tickets are cashed once a week, but naturally have always a money value on the garden. The system is very popular on most gardens. But there are some where it has been introduced and subsequently discontinued at the request of the coolies on the ground that it tempts them to extravagance. These were probably gardens where there was a settled well-to-do force. On the Sonarupa Tea Estate the

* *Dastur* = custom.

coolies even asked to have their *ticca pice*, which are usually paid daily, paid monthly. In the opinion of the Committee the system of daily payments has many advantages especially in the case of newly imported coolies. The Committee would recommend the more general adoption of the system, particularly in the Assam Valley. It would probably tend to make work on tea gardens more popular, and it should at any rate be given an extended trial for coolies during their first year of residence, who have no capital laid by with which to support themselves from month's end to month's end. The coolie knows day by day exactly what he is earning; disputes are settled on the spot, and he is encouraged to turn out and work by the feeling that his reward will be immediate.

The Enquiry Committee of 1921 also dealt with this matter.

In many gardens in the Surma Valley, it is the practice, at morning muster to pay for the previous day's work with brass tokens of different face values; once a week the gardens cash the tokens or pay commission to a shop-keeper. These tokens to a large extent take the place of current coin in the neighbouring shops and bazaar. The Committee have heard of cases where the tokens were not honoured at their full face value by shop-keepers. There is this advantage in the system that a coolie knows exactly what he has earned for a given piece of work, as he gets a cash equivalent at once. If care is taken to check abuses such as discount being charged by shop-keepers, there seems to be no objection to this old-established system. It might be inconvenient for gardens to keep a stock of small coin for daily payments. Under this system *ticca* is usually paid in a lump sum weekly. A Manager in Sylhet informed Members of the Committee who inspected his garden that the only merit of the ticket system was that it ensured a good muster every morning and in this way conduced to better discipline.

On gardens where monthly payments were the rule, they were generally made within ten days of the completion of the month for which the wages were due.

SETTLEMENT ON GARDEN LANDS

We have already referred to the fact that a considerable proportion of labourers are allowed to cultivate land within the garden grant at nominal or concession rates. In the early days of the industry, particularly in the Assam Valley 'some reluctance was displayed in employing this powerful means of securing a settled and contented labour force, owing to the feeling that the time spent in the coolies' own cultivation was lost to the garden in the busiest season of the year'. As recruitment became less difficult, the force of this objection diminished and at times when depression made it difficult for planters to offer adequate work, the advantage of private cultivation by the labourer was obvious. The Government consistently favoured the settlement of labourers on garden rice lands and when, in 1889, doubts were raised as to the legality of this practice on land held under a thirty years lease, the Government directed that gardens land might be so employed without special

permission up to a limit of ten per cent of a grant, or two hundred acres. They laid it down at the same time that if the garden authorities realized from such land higher rents than they themselves paid to the Government, their assessments would be raised. Managers gradually came to recognize the advantages of this practice and the 1906 Committee reported thus:

> The aim now is to keep the labourer on the garden by making the life attractive to him and not by force of law. Managers are everywhere asking for a fuller labour force in order that they may give leave with the utmost freedom; they are giving out rice land to their coolies even though this means irregular work in the busy season; and in all directions there is a general movement towards greater freedom of the labourer.

In the Surma Valley, where conditions were much freer and labour relations better than in the Assam Valley, the practice of settling coolies on garden rice lands grew up comparatively early. The 1906 Committee reported that "in Sylhet gardens that have rice land give it out to their coolies and this forms a substantial addition to the latter's income. The Langla garden for instance has given out five hundred acres amongst a garden population of three thousand. Labourers tend to move to gardens with rice lands."

There was much controversy in the latter years of the nineteenth century and the early part of the present century as to the desirability or otherwise of encouraging time-expired labourers to settle on government land. The 1906 Committee considered this course most desirable, but understood the planters' fear that it would discourage labour from accepting fresh engagements and they therefore hesitated to recommend its adoption in a time of depression. The industry should perhaps have looked more favourably on a government proposal that managers should be permitted to take up blocks of government land near their estates with a view to settling coolies on them. Unfortunately, the Assam Branch of the Indian Tea Association disapproved of this proposal, though the Surma Valley planters took a more liberal view.

By the time of the 1921 Committee of Enquiry, the practice of granting garden land for cultivation by coolies had grown still further and the committee thus reported:

> As a rule, there is an understanding that when a coolie holds land some members of his family must work for the garden, and the obligation is usually fulfilled. Coolies are rarely ejected from the land except as a disciplinary measure. In some gardens the distribution of land is uneven and there is always a risk that if a manger tries to remedy this, his action will be resented as an attempt to interfere with vested interests. It is natural that those who hold more than what appears to be a fair share should object to a redistribution, especially if they have had the trouble of originally clearing the land, or if it has been sold, or mortgaged to them. In some gardens the land in possession of coolies is regularly surveyed and mapped and leases are issued. Land is of

little use to the coolie unless he gets sufficient leave to cultivate it and to reap the crops. Of late years the tendency in most estates has been to grant more liberal leave for this purpose. On gardens where it was necessary owing to the depression in the industry to restrict opportunities for overtime earnings, coolies were encouraged to open out land for rice and sugarcane cultivation. As is inevitable, new coolies have no land for cultivation. It takes a coolie three or four years at least to save sufficient money to set up a holding with the necessary livestock. The available land is often already in possession of the older residents, and some time may elapse before a holding falls vacant.

It appears from the committee's report that 126,951 acres of cultivated land were held by labourers still on the garden, an average of perhaps two-fifths of an acre per family. The committee also pointed out that the area of government land cultivated by ex-garden coolies had risen from 112,000 acres in 1906 to 262,000 acres in 1921. By the time of the Royal Commission on Labour, the area cultivated by labourers on garden (as distinct from government) land had risen to 150,000 acres.

EARNINGS IN ASSAM

We are now in a position to study the fluctuations in the remuneration of labour.

Exact figures for the first two decades of the existence of the industry are not available, but it appears that whereas in the fifties a normal monthly wage had been Rs 2/8 per month, by 1860 the rate had risen to Rs 4 or Rs 5, and on piece-work rates it was said that a good worker could earn Rs 8 per month. To bring this wage into perspective it is necessary to remember that the price of rice in Assam in 1860 was Rs 2 per maund. Supply of rice at concession rates had already become customary, and in 1865 and 1866, when prices were extremely high, the normal rate charged to the coolie was Rs 1 per maund.

Act VI of 1865 in theory established a minimum monthly wage of Rs 5 for a man, Rs 4 for a woman, and Rs 3 for a child under twelve years of age, but the minimum only applied to immigrant labourers. The intention of the Act was that unless a magistrate had sanctioned short payment on account of absence, wilful negligence, or indolence, the employer was bound to pay the minimum wage, whatever might be the quantity of work done. Nine hours was fixed as a day's work, though on many gardens labour was employed for shorter hours. The use of the word 'rate' in the Act gave rise to ambiguity and on many gardens the statutory figures were interpreted as fixing the payment to be made for the quantity of work which could be done in a month. It was assumed that the actual amount paid was to be determined by the work done. This development was perhaps natural in view of the trouble and loss of time involved in producing a labourer before a magistrate whenever his work fell so far short of a reasonable standard as to be capable

of being regarded as indolence. In practice, payment soon began to be made according to a task or *hazri*. In 1868 the Commissioners found that this system worked fairly, that labourers liked the resulting freedom to take a holiday when they felt so inclined, or to do extra work when they were so disposed. They noted that:

> the scale of labour demanded we believe to be generally fair and such as a man of ordinary robustness and in good health can easily perform . . . It is common for a coolie to earn much by task work; much more than the monthly wages for which they have agreed to serve; especially during the leaf plucking season. They frequently receive a double wage for the day's work.

Nevertheless, conditions must have deteriorated since 1860, for the Commission noted during their inspection that 'in most gardens, especially in Assam, the labourer earns very much below the minimum wage'. The Commissioners stated:

> In one garden which we visited, the pay of twelve men during the month of September had averaged less than Rupees 3 each, and out of this rice had to be bought at Rupees 2 a maund. Sixteen women had in the same month earned an average of only Rupee 1–8 each. Among the women in another garden, the highest pay earned in one particular month was Rupee 1–13–9, and one had earned as little as 11–9 annas. In another garden thirteen men earned only Rupees 30–13 in the month of November, 1867, or less than Rupees 3 each; the women in October earning from a maximum of Rupess 3–9–6 to Rupee 1–9. Instances of this nature might be multiplied indefinitely.

A weekly holiday was allowed on most gardens as provided by law, but in some cases the coolies received no pay for Sunday unless they actually worked on that day and thus they could not normally earn the full month's wage.

The minimum wage clause was dropped in Act II (BC) of 1870, though not all managers realized that the change had been made and the previous rates continued generally in force.

During this period, contracts with labour provided for the supply of rice at fixed rates and the 1868 Commissioners pointed out that if this had not been the case, coolies would have been wholly unable to support themselves at the famine prices which prevailed in 1866 or thereabouts. The Commissioners went on to observe that on many gardens labourers were insufficiently nourished, either because of an actual shortage of rice resulting from the famine, or because the rice available was unfit for consumption, or because, in the absence of markets in which the coolies could buy *dal*, *ghee*, oil, or fish and animal foods, their diet was in fact limited to rice. The Commission strongly recommended that managers should, where necessary, establish and stock their own markets. The 1868 Commissioners considered that the amount of livestock

owned by labourers provided an excellent test of their prosperity, and in this as in many other respects they compared Cachar very favourably with the Assam Valley.

Act I of 1882 made it obligatory on managers to supply immigrant labourers with foodgrain at reasonable rates whenever it was not available in the market at such rates, and the local government was empowered to declare what rates should be regarded as reasonable. Rs 3 per maund seems to have been notified in 1882 as the price at which rice must be supplied to labour if not available at the price locally. The obligation continued until 1915 and the figure of Rs 3 was maintained throughout the period.

Act I of 1882 also restored the principle of the statutory minimum wage for immigrant labour, the rates being fixed at Rs 5 for a man and Rs 4 for a woman for the first three years of the contract, and Rs 6 and Rs 5 respectively for the last two years. The obscurity of the earlier minimum wage requirements was avoided and it was made clear that payment was to be conditional on the completion of a daily task fixed by the manager, subject to revision by the Inspector of Immigrants. Labourers absent on account of sickness were to receive a subsistence allowance of one and a half annas a day, but if the absence exceeded thirty days in a year, the excess days were to be added to the term of the contract. These statutory *minima* continued unchanged until 1901, when by Act VI they were raised to Rs 5/8 for a man and Rs 4/8 for a woman, in the second and third years of the contract. No change was made in the rates for the first, fourth, and fifth years. It must be realised that these *minima* applied only to immigrant labourers to Assam, Cachar, and the Surma Valley. They did not directly affect the considerable proportion of labourers governed by Act XIII of 1859, nor did they apply in the Dooars and Darjeeling.

The economic condition of the Assam tea-garden labourer was studied by the Assam Labour Enquiry Committee in 1906. According to the figures quoted in their report, a family consisting of one working man, one working woman, and one working child, apart from non-workers, would on an average have earned Rs 14 in September 1905 and under Rs 12 in March 1906, March and September being the lowest and highest earning months respectively. Potential earnings were greater than this and the figures show that if the same average family had worked on every day when work was offered, they would have earned Rs 18 in September 1905 and Rs 15/10 in March 1906. To these figures must be added the annual bonuses paid on many gardens for renewal of agreement. As we have seen, that bonus was commonly Rs 12 per year in the Assam Valley. Many gardens at this time supplied labourers with rice at a price of Rs 3 though the cost of imported rice was considerably higher than that figure.

It seemed to the Committee that as a rule tea-garden labourers were well clad and well nourished and they recorded that:

on the whole the wages paid to labourers are sufficient to keep them in comfort, and even to enable them with the practice of a little thrift to save money. There is an impression in the recruiting districts that the statutory minimum wage represents the total of the labourer's possible earnings. But this is by no means the case. On some gardens the rate of pay is above that prescribed by law, and on almost all the labourers can earn at least double their pay for a considerable part of the year by working overtime. Many of them do so, but on the other hand many prefer to rest in the afternoon, or spend their leisure on their private cultivation or amuse themselves by hunting or fishing.

All observers have noted the difference between the temporary immigrant, who works hard and saves all he can ready for the return to his own country and the immigrant who decides to settle down in Assam. With regard to the latter, the 1906 Committee stated that:

His object is not as a rule to save money, but rather to lead a pleasant life, and this is more particularly true of the aboriginal coolie. He works enough to provide himself with food and clothing and a few luxuries, and if he has any surplus cash he spends a good deal of it in drinking, gambling, and cock-fighting. The standard of living of the ordinary coolie is certainly much in advance of what it would be in his own country. One has only to visit a weekly market and see the purchases made by the coolies to understand this. In addition to the ordinary supplies, fowls, ducks, and fish are largely bought, and there is a general air of prosperity about the holiday making crowd which is convincing proof that the coolie is fairly well off in his new home.

To a modern western reader, this conclusion seems somewhat unreal – a little reminiscent, perhaps, of the recitative which Kipling puts into the mouth of the Government of India (with white satin wings and electro-plated harp) –

> 'How beautiful upon the mountains – in peace reclining,
> Thus to be assured that our people are unanimously dining.'

It is indeed not easy today to understand how a committee could report with satisfaction on the condition of a body of men and women, whose diet was by any reasonable standards insufficiently varied, amongst whom disease still took a toll that in western Europe would have been considered appalling, and who were contented merely because their minds had not been expanded by even a rudimentary education to the point where their wants could extend beyond food and drink. It must, however, be remembered that the standards of 1906 were not those of today and that the economic condition of India was very backward. All the report really means is that, judging by the low standards of the poorer agricultural classes in India, the tea-garden labourer in Assam was reasonably well off.

When the economic condition of the labourer in Assam was next examined by an official committee in 1921 it was found that considerable deterioration had taken place. Prices had risen considerably during the war and wage increases had not been commensurate with that rise. It is true that on many gardens the coolie was partially shielded from the effect of rising prices by the supply of rice and sometimes cloth at concession rates, but the quantities supplied did not cover the whole of his needs. Moreover in 1920, important sections of the industry found themselves unable to bear the mounting losses on rice and in some areas the price of concession rice was raised. At the same time the cost of clothing and other necessaries rose still further. The depression in the tea industry had also seriously diminished overtime earnings.

In Dibrugarh the Deputy Commissioner reported that the average earnings of the labourer in 1918–19 were Rs 10/8 per month as against Rs 10/10 in 1911–12. In 1920 the depression led to further curtailment of expenditure and in the Darrang District, according to the 1921 Committee of Inquiry, the average earnings of men dropped from Rs 9/11 in September 1919, to Rs 7/11/6 in September 1920. Accurate cost of living figures do not exist for this period, but managers who reported to the 1921 committee estimated the rise in the cost of living between 1913 and 1920 at figures which generally varied between thirty-three per cent and fifty per cent. The committee framed standard budgets for Assam tea-garden labourers and found that the cost of living in 1922 had risen to approximately one hundred and forty per cent of what it was in 1914. They nevertheless concluded that, generally speaking, the remuneration of the tea-garden labourer was adequate in the sense that he had sufficient food to maintain him in health, but that his standard of living had been lowered and he had less money than formerly to spend on clothing and petty luxuries. They recognized that this was the inevitable result of the difficult economic situation of the industry. The important point for the purpose of this chapter* is that the tea-garden labourer in Assam was badly off in 1921 compared with his position ten years earlier.

The committee had asked managers for estimates of the wages necessary to keep the labourer in reasonable comfort and they observed that, whereas in Assam, actual wages approximated to this standard, they fell considerably below it in the Surma Valley. This was the first time that the Surma Valley had received adverse comment in comparison with the Assam Valley, and it is interesting to note that the Commissioner of the Surma Valley stated in 1922 that to live in comfort a man would require to earn Rs 10, a woman Rs 7 or Rs 8, and a child Rs 4. Actual earnings of a man at this time were Rs 6/3/4 in Cachar,

* The labour troubles of 1921 resulting partly from these economic causes will be discussed in a later chapter.

Rs 5/11 in North Sylhet and Rs 5/10 in Haliganj. The following table shows the average earnings of a male labourer on a tea garden in the province of Assam from 1905 onwards. It will be seen that the increases in the Surma Valley were considerably less than in the Assam Valley, and there can be little doubt that they had not kept pace with the cost of living. It must, however, be remembered that labour in the Surma Valley was much better off than labour in Upper Assam in respect of land for cultivation and facilities for fishing and hunting. On many gardens only a relatively small area of the total grant was under tea and in some ways the Surma Valley tea-garden coolie's life approximated to that of an ordinary villager, with the advantage that he had paid employment available when he wanted it.

Earnings of men	*Lakhimpur Sadar*			*Mangaldai*			*Jorhat*			*Nowgong*			*Cachar*			*North Sylhet*		
	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p	Rs	a	p
1905	6	9	0	5	5	10	5	2	2	5	3	1	5	4	0	5	0	4
1906	6	14	9	5	4	6	5	4	8	5	4	9	2	15	8	4	12	6
1907	7	0	0	5	7	0	5	5	5	5	12	10	3	0	7	4	14	5
1908	6	15	7	5	13	3	5	4	2	5	12	6	2	13	5	5	2	4
1909	6	11	2	5	2	7	4	12	6	5	3	7	4	7	1	5	1	9
1910	6	13	6	5	11	10	5	4	2	5	11	7	5	3	1	4	14	6
1911	6	14	6	6	3	5	5	4	1	5	12	8	4	15	0	5	4	2
1912	7	14	7	6	1	9	5	6	0	6	0	5	5	4	5	5	2	2
1913	7	4	4	6	1	8	5	7	7	5	11	8	5	6	0	5	2	11
1914	7	7	5	6	9	6	5	8	8	5	15	1	5	7	11	5	6	8
1915	7	4	5	6	0	9	5	12	10	5	10	8	5	6	3	5	2	4
1916	7	4	2	6	4	11	6	1	0	5	8	11	5	9	10	5	11	2
1917	5	11	1	6	3	5	6	7	3	5	12	4	5	11	1	5	8	11
1918	7	9	4	6	1	9	6	7	6	6	1	9	5	11	5	5	8	1
1919	7	12	0	6	8	10	6	3	11	6	1	3	5	8	10	5	13	4
1920	7	12	7	7	5	4	6	10	1	6	4	3	6	4	7	6	5	4
1921	8	7	9	6	5	9	6	12	0	6	7	3	5	14	10	5	12	11
1922	8	4	8	7	10	11	7	8	4	6	12	3	6	3	4	5	11	0

Any inclination to criticize the tea industry for not adjusting wages to the cost of living must be qualified by the reflections that the loss on rice sold to labourers at concession rates was considerable, and that in 1920 forty-seven of the one hundred and two companies listed in the Report of the Indian Tea Association paid no dividends. It must, nevertheless be admitted that in the reasonably prosperous years of the First World War, the wages of labour were not adequately increased.

The 1921 Committee suggested that when the financial position of the industry improved, district sub-committees should work out 'what they

considered to be a decent monthly or daily rate of wage, not a mere subsistence allowance, but a wage that would suffice to keep the labourer in health and reasonable comfort, with the possibility of saving a little'. They rejected the view that any appreciable rise in wages would result in labour doing less work and justified their opinion by figures which showed that, where wage rates had been increased in 1921, actual earnings had also increased.

In 1921 the tea industry in North-east India moved into a period of prosperity which was to last for a decade and it is important to see how far the hopes of the 1921 committee as to an increase in wages were realized. Fortunately, the Royal Commission on Labour examined this matter in 1930 and found that in 1929–30, the average monthly earnings for Assam garden labourers were Rs 13/8/7 for men, Rs 11/1/7 for women and Rs 7/8/6 for children. In the Surma Valley the corresponding figures were Rs 10/11/–, Rs 8/6/1, Rs 5/6/2 respectively. The committee observed that these averages showed a substantial increase over the figures for 1921, and as the cost of living had fallen in the intervening period they concluded that the economic condition of the Assam tea-garden labourer had improved considerably.

No substantial changes took place between 1930 and the outbreak of the Second World War.

EARNINGS IN THE DOOARS

Conditions obtaining in the Dooars in this period were not very different from those in Assam. As explained earlier, it is customary to fix a *hazri* for the daily task and then to provide an overtime task known as a *doubli*. According to the Royal Commission on Labour 'with the rapid increase in the cost of living, the planter preferred not to increase the rate of wages, but to decrease the task by introducing a system of a second and even a third *hazri*. In 1931 the general rate of payment for a *hazri* was 4 annas for a man and 3 annas for women and children. It was stated to the Commission that the average worker took about six hours to complete the first and second *hazri*. Three *hazris*, it was said, would normally take about eight hours, but that there were instances when workers completed four and five *hazris* in a day.

At this time labourers in a number of Dooars gardens worked under a *sardar*, who in addition to a monthly wage received a commission of one pice for each *hazri* worked by his men. 'In a number of gardens', according to the Royal Commission, 'the wages are paid in a lump sum to the *sardar* who in turn pays the individual labourer'. The Commission disapproved of this system, since it often led to abuses particularly when the labourer was in debt to the *sardar*.

The representatives of the Dooars Planters Association reported that

the average monthly earnings in 1929 were Rs 14/4/1 for men, Rs 10/5/8 for women, and Rs 2/1/5 for children. Concessions in the Dooars were roughly the same as in Assam.

Little change took place in the remuneration of labour from this period to the end of the war.

CHAPTER TWENTY-TWO

REMUNERATION OF TEA-GARDEN LABOUR IN NORTH-EAST INDIA: II. THE SECOND WORLD WAR

One of the major preoccupations of the industry during the Second World War was the protection of labour against the rising cost of living. It soon became apparent that this problem had two aspects, the first of which was concerned with violent local fluctuations of grain prices as a result of unscrupulous profiteering and hoarding, which the governments concerned were unable to check. Towards the end of 1939 the General Committee of the Indian Tea Association came to the conclusion that in Assam, where this evil was particularly serious, the best remedy lay in the importation by agency houses of rice and paddy from outside the province. The stocks so imported could either be sold to labour or held in reserve as a price-stabilizing factor. The process of procurement and replacement will be discussed in a later chapter.

The second aspect of the problem was concerned with the inevitable and long-term all-India rise in prices, and it was clear that if this reached a certain level, labour would have to be compensated. At a conference in Calcutta in January 1940 the Indian Tea Association and the district associations and branches recognized that there were three possible methods of dealing with the situation, namely, the provision of more work, the sale of rice at concession rates, or the grant of a cash subsistence allowance. It was agreed that individual gardens should be at liberty at any time to adopt the first or second of these methods, or both together, but that subsistence allowances should only be granted in any area after a recommendation by the branch or district committee had been accepted by the General Committee of the Indian Tea Association. Any such recommendation would apply uniformly to a whole circle or district, but uniformity between different circles or districts was not essential. In deciding whether to recommend subsistence allowances or not, branches and district committees were advised to consider:

(a) the actual earnings of the labour force compared with previous years;
(b) the position, in the area concerned, with regard to the cultivation of paddy land and other amenities enjoyed by the labour forces;
(c) the extent to which tea-garden labourers in the areas in question were entirely dependent on tea-garden income; and
(d) local conditions generally.

As regards the payment of compensation to the Indian subordinate staff on gardens, the Calcutta Committee agreed to accept the recommendations of the branch and district associations on this point.

In practice, it was not found necessary during 1940, or the first half of 1941, to grant subsistence allowances, but many gardens issued rice or paddy at concession rates.

By the second half of 1941 the rise in the price of rice and cloth had become so pronounced that more radical measures were required. These measures can most easily be discussed district by district.

DARJEELING

Darjeeling was the first district where action was necessary and it should be explained that conditions there during the war years differed in two important respects from those in the Assam and Surma Valleys. In the first place Nepali labourers eat maize as well as rice, and any non-availability of rice could thus, to some extent, be offset by payment of cash, with which locally grown maize could be purchased. Secondly, a considerable proportion of the normal grain supply for Darjeeling comes from Nepal and in the middle of the war the Nepal Government found it necessary to restrict the export of grain in view of food shortages in their own country. In 1941, although this latter factor was not fully operative, the shortage of rice was already significant and Darjeeling was the first district where serious hardship was felt by labour. In August 1941 it was agreed that cash compensation should be fixed separately for each circle in that District, subject to a maximum of two pice per full *hazri* worked for an adult, and half that amount for a child. Payment of this cash compensation was to be made quite separately from the ordinary wage and it was to be explained to the labourer that it was a temporary allowance, which would be modified or withdrawn when circumstances required.

By 1942 the economic situation in Darjeeling had worsened and an increased cash allowance, in the form of a lump sum payment of Rs 3 for men and Rs 1/8 for women and children to meet the increased price of cloth was granted.

In January 1943 further help to labour in Darjeeling was required and the cash subsistence allowance – as distinct from the new cloth allowance – was doubled, as a temporary measure until concession rice could

again be made available. In the latter part of the year it was also agreed to double the cloth allowance. Towards the end of the year the rice supply position in Darjeeling improved and it was recommended that rice should be issued at the concession price of five *seers* to the rupee on a scale of six *seers* weekly for men, four *seers* for women, and three *seers* for children. It was not found practicable everywhere to adhere to this recommendation, but where it could be carried out the cash allowance was reduced to the former level of half an anna for an adult and one-quarter of an anna for a child.

In 1944 Darjeeling gardens again experienced serious difficulty in obtaining rice for their labour. Early in the year the weekly rice ration was, therefore, reduced to four *seers* for adults and two *seers* for children and the cash dearness allowance was again increased to one anna per *hazri* for an adult and half that amount for a child.

THE SURMA VALLEY

Simultaneously with the onset of food difficulties in Darjeeling, the Surma Valley Branch of the Indian Tea Association reported that the possibilities of giving extra work were exhausted and that either the issue of concession rice should be greatly extended or a cash allowance given. As a compromise between these two views, the General Committee of the Indian Tea Association recommended the grant in the Surma Valley of a free issue of rice, but this suggestion was not acceptable to the branch. At a special conference held shortly thereafter, the branch representatives reported that there were great divergences between the rates at which concession rice was sold by different gardens, and that contrary to its previous policy the Indian Tea Association should now make specific recommendations on this subject. This was agreed, and it was recommended by the Indian Tea Association as regards the Surma Valley that, with effect from 1 January 1942

(a) rice should be sold at a concession rate of eight *seers* to the rupee to the extent of 5 *seers* weekly for an adult and 2 *seers* for a child;
(b) in any circle where special conditions so required a larger issue of concession rice might be made uniform throughout a circle.
(c) a cloth allowance of Rs 3 for men and Rs 2/4 for women should be paid immediately before the *Durga Puja** in 1941.

In 1942 the problem of obtaining adequate supplies of rice became much more difficult as a result of the Japanese invasion in Burma. The measures taken by the industry to obtain rice will be discussed in another chapter and here we are only concerned with the impact of the shortage on the economic position of the labourer. Early in 1942 a scheme of cash allowances in addition to the supply of concession rice was therefore adopted for the Surma Valley. The alternatives permitted by the new recommendation of the Indian Tea Association were:

* *Durga Puja* = an important Hindu festival.

(i) the payment of a cash allowance of 6 pies, 4½ pies, and 3 pies on the daily *hazri* of men women, and children respectively; or
(ii) the payment of a monthly allowance at the above rate; or
(iii) the payment of a commodity or cloth allowance amounting to Rs 5 for men, Rs 4 for women, and Rs 2 for children at each of the two *Pujahs*; or
(iv) the payment in one or two instalments of a bonus similar to that already being paid on a number of Sylhet gardens.

In 1943 the need for conserving food supplies led to a modification in the scales of concession foodstuffs in the Surma Valley and the following scales were fixed:

Rice – for an adult male 4 *seers* weekly, at Rs 5 per maund maximum.
For an adult woman 3 *seers* weekly, at Rs 5 per maund maximum.
For a child 2 *seers* weekly, at Rs 5 per maund maximum,
or Paddy in lieu thereof.
Other commodities:

Dhal	2 *seers* per month at 3 annas per *seer*
Salt	½ *seer* per month at one anna 6 pies per *seer*
Mustard Oil	½ *seer* per month at 8 annas per *seer*
Gur	1 *seer* per month at 3 annas 9 pies per *seer*
	(children receiving half quantities)

In 1944 the rice position improved and in June of that year the scale of concession issues was increased to the former level.

THE ASSAM VALLEY

In the early years of the war the food situation in the Assam Valley was easier than in Darjeeling and Cachar, but in November 1941 the Assam Valley Branch of the Indian Tea Association considered that greater uniformity in the measures for meeting the high cost of living was desirable. The Indian Tea Association, after consultation with the branch, therefore recommended that

(a) estates in the Assam Valley should make work available throughout the year for six days in each week and if this did not meet the situation, should give additional *ticca*;
(b) rice should be sold at the concession rate of eight *seers* to the rupee – the maximum weekly issue being five *seers* per adult and two *seers* per child;
(c) a cloth allowance of Rs 3 for a man and Rs 2/4/– for a woman should be paid immediately before the *Durga Puja* in 1941.

At this stage two agency houses declared their intention of making a cash payment in the Assam Valley of 9 annas per *hazri*, but ultimately they did not carry out this intention.

In 1943 the need for conserving food supplies and the dangerous disparities which were beginning to appear between one area and another

led to a revision of the scales of concession foodstuffs in the Assam Valley, but Doom Dooma and certain other circles made it clear that their labour forces were accustomed to receive larger quantities of concession rice than those prescribed and must continue to do so. At a later stage the industry was taken to task for issuing grain in excess of the all-India scale and it should therefore be recorded that the decision to continue doing this at that time was taken in consultation with the Government of Assam, at a meeting which the writer attended on behalf of the Indian Tea Association.

In 1943 scales of concessions for the Assam Valley were as follows

Rice	four *seers* weekly for adults (40 per cent for children) at a maximum price of Rs 5 per maund – or the equivalent in paddy at Rs 3 per maund.
Dhal	3½ *seers* monthly at a maximum of Rs 10 per maund.
Salt	½ *seer* monthly at a maximum of 3 annas per *seer*
Mustard Oil	¾ *seer* monthly at 8 annas a *seer* maximum.
Gur	2 *seers* monthly at Rs 7/8 a maund maximum.
Sugar	If sugar were taken as an alternative to *gur*, the selling price to be 8 annas a *seer* maximum.

THE DOOARS

In 1941 recommendations similar to those already described in the case of the Assam Valley were adopted for the Dooars. In 1942, however, two factors compelled some reconsideration of the concession foodstuff policy for 1943. In the first place garden stocks were insufficient to meet the demand; secondly, it was felt that in 1942 labour in the Dooars had earned more than sufficient to compensate for the increased cost of living. The sale of rice at the price of eight *seers* to the rupee to a labour force whose earnings had increased, had merely resulted in a reduction in the average number of days worked per month. It was therefore suggested that the price of concession rice might be increased to six *seers* to the rupee.

This suggestion was not accepted, but the supply of concession rice was discontinued from March 1943 to the end of May, a cash allowance of two annas per *hazri* for adults and one anna for children being given as compensation. When supply was resumed from 1 June 1943, it was agreed that the additional cash allowance should be continued, but at the reduced rate of one anna per *hazri* for adults and half an anna for children, and that four *seers* of rice, or its equivalent, per week, should be issued to each adult and two *seers* to each child, at a price of Rs 5 per maund. When rice in sufficient quantities was not available, maize and some other food grains were to be issued at cost price to make up the shortfall.

In 1944 the weekly adult ration of concession foodgrains was in-

creased to five *seers*; the additional one seer being given in the form of some commodity other than rice, such as maize or *dhal*.

At this time there began to be indications that labour in the Dooars was suffering from malnutrition, chiefly on account of the scarcity and high price of foodstuffs other than rice. It was therefore agreed that in addition to concession rice, gardens in the Dooars should supply other foodstuffs at half cost price on the following scale:

Dhal	1 *seer* per labourer per week
Mustard Oil	4 *chittacks* per labourer per week
Salt	¼ *seer* per labourer per week
Ghur	¼ *seer* per labourer per week

The cash dearness allowance of one anna continued to be paid and at the same time, wherever possible, gardens attempted to grow vegetables for the benefit of their labourers.

ALL DISTRICTS

There can be no doubt that at this time in all the North India tea districts labourers were suffering badly from the shortage and high price of green vegetables, eggs, poultry, and the like. The trouble was particularly acute in Assam where the military demand for these commodities was great. In May 1944 the Indian Tea Association strongly recommended the provision in all districts of free, daily cooked meals for non-working children and malnourished adults, and where possible of cooked meals at concession prices in labourers' canteens. It also recommended the growing of vegetables on a wide scale and an increase in the rice ration of working children.

Unfortunately the intentions of the tea industry were to some extent thwarted by the serious shortage of foodgrains throughout India. The Government of India understandably took objection to the provision of foodgrains to tea-garden labourers on a scale higher than that which was available to workers in other parts of India and from 1 January 1945, Assam and Surma Valley gardens were required by the Government of Assam to reduce their issues of foodgrains to the following scale:

To every person above 8 years of age, 3½ *seers* of rice per week plus ½ *seer* of *atta*.*
To every child of 8 years and below, 1¾ *seers* of rice per week plus ¼ *seer* of *atta*.
To working men (whom the Government of India had agreed to treat in the category of heavy manual labourers), up to 1 *seer* a week extra in the form of *atta*.

Tea-garden labourers had not been in the habit of taking *atta* and planters were not hopeful of being able to introduce it. They nevertheless made energetic efforts to popularize this new article of food. Their

* *Atta* – coarse milled wheat.

efforts were remarkably successful, and when in May 1945, in view of the improved rice position, the Government of Assam removed the obligation to take part of the foodgrain ration in the form of *atta*, the industry nevertheless continued attempts to persuade labourers to include *atta* in their diet. Medical opinion was unanimous that the health of labourers who had begun to do this had improved.

No other changes were made during 1945 and the concessions or cash payments in force in 1944 continued. In 1946 it was realized that there was considerable variation in practice between district and district and even between garden and garden in the matter of the issue of concession foodstuffs. The position was thus set forth in the Report of the General Committee of the Indian Tea Association for 1946:

> So far as rice was concerned, at least three different scales of issue were in general use; dependants were treated differently on different estates; and there was a lack of uniformity in the treatment of absenteeism. In some cases, it was evident, deductions on account of absenteeism were unreasonably severe, and ignored the fact that, even though an absentee might not be entitled to concession rates, he was at least entitled to draw his proper ration from the garden authorities. This lack of uniformity had not only given rise to unfavourable comment both by the public and in the Legislature, but had already been the cause of trouble on certain estates . . . It seemed to the Committee that the remedy depended largely on an appreciation of the fact that the authorities of a garden have two distinct functions in regard to the issue of foodstuffs. In the first place, as employers, they issue foodstuffs to the workers at concession rates in order to offset the increased cost of living, while in the second place they act as rationing or distributing agents for the Government of Assam. In so far as concessions are concerned, it is reasonable that the individual who fails to do a normal day's work should not receive the full concession in the price of foodstuffs; but every individual on the books of a garden, and every dependant of such individual, whether working or non-working, must invariably be allowed to draw their full ration, either at the controlled or at the concession rates.

Detailed regulations to implement these principles were issued and are set forth in the committee's report.

Few objective observers would doubt that the Indian Tea Association and sister associations were right in meeting the difficulties arising from the shortages and rising prices of grain and cloth during the war by the sale of essential commodities at concession prices. The burden of procuring, storing, selling, and accounting for the inevitable loss on foodstuffs was nevertheless heavy, and planters were naturally weary of it by the end of the war. This must not, however, be allowed to obscure the fact that the system had served its purpose, and though most planters today might say 'never again', there can be little doubt that if circumstances similar to those of 1940 were to recur, concession foodstuffs

would again have to be introduced.* It would in theory have been possible to meet the rise in the cost of living wholly by an increase in cash wages. There were three reasons why the industry did not follow this course, but put the main emphasis on the issue of concession foodstuffs. In the first place, it seemed probable that under war-time conditions of supply the industry would in any case have to stock and sell rice to its labour force. It could not leave illiterate labourers to the tender mercies of rapacious merchants and shopkeepers. Secondly, experience had always shown that sudden increases of wages tended to have a serious inflationary effect in the local bazaars. Practical considerations as well as regard for the public interest made the industry most anxious to avoid such a result. Thirdly, there was the consideration that, if in due course grain prices fell again, there would be an automatic reduction in the cost of concessions, whereas a cash wage, given even temporarily, might in fact prove to be permanent.

Although the issue of concessions was intended as a war-time measure, the conditions of food shortage and price instability which had given rise to it, continued for some years, and it was not until 1954 that the industry was able to revert to its pre-war methods of remuneration. The process of conversion must therefore be discussed in the next chapter, which deals with the post-war era of governmental controls and tripartite conferences.

* This did to some extent happen in 1958.

CHAPTER TWENTY-THREE

REMUNERATION OF TEA-GARDEN LABOUR IN NORTH-EAST INDIA : III. 1947-60

A. THE GROWTH OF GOVERNMENTAL CONTROL

For some decades before the Transfer of Power, tea-garden proprietors had enjoyed a fair measure of freedom in their dealings with their employees and as labour at that time was unorganized the scales had been weighted in favour of the employers. In 1947 the tea industry moved into a new era, in which official intervention in labour relations and governmental control of the remuneration and conditions of service of labour would be the rule rather than the exception. The public had absorbed advanced western ideas of the rights of the workers; labourers themselves had become conscious of the power of the vote; and the governments concerned, with the next elections always in their minds, had abandoned the earlier idea of holding the balance between the employer and employee and begun to think of themselves almost as the representatives of labour.

In modern India the will of Government is enforced as much by executive pressure as by statutory powers, and in labour matters, soon after the Transfer of Power, the Central and Provincial Governments adopted this double approach. On the one hand they had powerful instruments in the Industrial Disputes Act and the Minimum Wages Act, while on the other hand they influenced decisions equally effectively through what came to be known as tripartite conferences on which the Government, employers, and workers were all represented. Before we sketch the history of the changes in labour remuneration in the new era it is necessary to understand how these alternative methods operated.

Under the Industrial Disputes Act 1947 the appropriate government may refer any industrial dispute which either exists or is apprehended, to a Tribunal, the decision of which is, in theory, binding on employer and employee alike. The powers of the tribunals are not limited by any directive principles, nor had they in the early days any settled law to ad-

minister. They had unfettered discretion to decide any dispute referred to them, in whatever manner they thought fit. They could, for example, direct the payment of a bonus to labour even though no statutory obligation to pay such a bonus existed; they could and sometimes did refuse to allow an employer to retrench surplus labour, even before any restrictions on retrenchment were laid down in any Act; and they could, in the course of the settlement of a dispute, fix wages, even when no orders under the Minimum Wages Act were in force. Under the guidance of the Appellate Tribunal, they thus built up a body of labour law which had no statutory foundation and many objective observers considered that tribunals were allowed, and indeed required, to usurp the functions of the legislature. It is true that only the appropriate government could refer a case to a tribunal, but some governments soon came to regard such references as the easiest way out and labour rapidly learned that any claim, however preposterous, had a reasonable chance of being sent to a tribunal.

The second statutory instrument in the hands of the Central and State Government is the Minimum Wages Act and it will be necessary here to sketch the historical background of this Act and to mention its most important provisions. As we have seen, statutory minimum wages had been fixed in the early days of the tea industry, but they related only to contract or recruited labour and even in that limited sphere they ceased to be in force after 1915. In 1931 the Royal Commission on Labour – in a report which is remarkable for its profundity and insight and is indeed one of the great classics of labour literature – strongly recommended the establishment of wage-fixing machinery in the tea industry. It recognized that, in view of the inevitable variation of tasks from season to season, from garden to garden and even from plot to plot, it would be impossible to lay down piece rates, or to specify tasks. Wage fixation as envisaged by the Royal Commission meant that:

> the employers themselves would fix the rate for the task after determining its capacity to yield a worker of ordinary skill and diligence at least the amount determined by the wage fixing body . . . In other words such a worker, as opposed to the slow or inexperienced worker, should be sure of a minimum amount for the performance of a given task.

This, in fact, is what always has been done on well-run gardens – the manager so fixes each task that the ordinary worker can earn a reasonable day's wage. The recommendations of the Royal Commission meant in effect that 'reasonable' should be defined by an outside body, which should include representatives of employers and workers as well as of Government. In the unorganized state of tea-garden labour at that time, this clearly presented difficulties and instead of putting forward a cut-and-dried scheme the Royal Commission advised the Government of

India to invite the industry to submit its own proposals for consideration.

This advice was not taken and nothing further was heard of the proposal until 1943 when the Government of India suggested that provision for the establishment of wage-fixing machinery might be made in the Tea Control (Amendment) Act. Such a provision would, however, have been quite out of place in that Act and the proposal was dropped.

In the following year the Labour Investigation Committee, under the chairmanship of D. V. Rege made a brief reference to the subject in the following terms: 'As the labourers are not likely to develop a spirit of collective bargaining for some time, the establishment of Wage Boards is essential on plantations.' The Rege Committee apparently gave no thought to the question as to what criteria the boards should apply, or how they should relate payments to the work done, and, indeed, the contrast between the thorough treatment of the subject by the Royal Commission and the somewhat perfunctory reference to it by the Rege Committee was surprising. Nor was this neglect remedied when the Rege Report was considered in a tripartite conference in January 1947. At that conference the representatives of the Indian Tea Association found it extremely difficult to persuade either the Government or the representatives of labour to think of anything at all beyond an immediate wage increase.

The Indian Tea Association had given a good deal of thought to the question of minimum wages and discussed it in some detail in its reply to the Rege Committee's questionnaire. The matter was, however, dealt with by the Central Government on a wider basis than that of the plantation industry and in April 1946 a Minimum Wages Bill was introduced into the Central Legislative Assembly. The Indian Tea Association did not object to the application of the principle of minimum wage fixation to plantation labour, but considered the Bill as introduced defective in certain important respects. The Association pointed out – as it had done in its reply to the Rege Committee – that minimum wage fixation could

> in theory take any of three forms, namely, (a) the fixing of piece rates, (b) the fixing of a daily wage for a standard working day or (c) a system under which each wage board will in its own turn lay down that rates and tasks must be so fixed by the garden authorities as to give a worker of ordinary skill and diligence x annas for y hours work.

The Association, agreeing with the Royal Commission on Labour, made it clear that it regarded the first two of these as wholly inapplicable to conditions on the tea estates, and that it considered the third method to be the only appropriate form of minimum wage fixation. In view of this and other differences between conditions on tea estates and

in other industries, the Association stated that it would prefer to see the subject dealt with in a separate Plantation Minumum Wages Bill, framed along somewhat different lines from the Bill under discussion and would be prepared to put up a draft bill for the consideration of the Government.

The Indian Tea Association also made three important, general observations. In the first place it stated that, if wage fixation were to be anything but dangerous guesswork, the appropriate governments must set up adequate labour statistical departments. Secondly, it urged that each wage board should deal with an area sufficiently small to ensure that economic conditions including the cost of living and the factors of tea production, should be reasonably homogeneous within it. Thirdly, the Association contended that in view of the lack of a satisfactory labour organization, labour should be represented on the boards by government officials. The Indian Tea Association in general envisaged a procedure rather like that which operates in Ceylon. It made the further observation that:

> although, if their view is adopted, wages will be varied according to the hours of work, the extra administrative difficulties involved in such variation will undoubtedly tend towards the greater regimentation of labour, and the approximation of conditions on the tea estates towards those in factories. The present happy-go-lucky system under which, on many estates, a man works as much or as little as he likes, will gradually give way to a regular six day week and to fixed hours of work. If labourers in due course change their habits, under the influence of minimum wage fixation, and do a full day's work on six days in the week, the industry will require a far smaller labour force than it at present employs. Government will then be faced with the problems of what to do with these surplus labourers and moreover the existence of unemployment on such a scale may well have serious effects, not only on the labour world, but also in the sphere of law and order. These probable consequences should, in the Association's view, be borne in mind in deciding whether or not to apply to plantation labour a system which is almost bound to lead, in the long run to greater regimentation.

Very little attention was paid by the Government to these thoughtful comments.

The Minimum Wages Act (Act XI of 1948) laid down that before 31 March 1952 provincial governments must either fix a minimum rate of wages for time work, or a minimum rate of wages for piece work, or a minimum rate of remuneration to apply in the case of employees employed on piece work for the purpose of securing to such employees a minimum rate of wages on a time-work basis. Provision was made for the continuance of a fluctuating dearness allowance as an element in the minimum wage fixed and also for partial payment in kind. Provincial governments were empowered to fix the number of hours' work that

should constitute a normal day for the purpose of payment of minimum wages, and the Act laid down that if the employee, through his own fault, failed to do the normal number of hours in a day, he would not be entitled to receive a day's wage. The Act differed from that in force in Ceylon in that it did not make local wage boards obligatory, though it required the Provincial Government to establish an Advisory Board 'to advise Government generally in the matter of fixing and revising minimum rates of wages'.

The third method of government intervention in these matters was by means of tripartite conferences. The Rege Committee raised the question as to the desirability of such tripartite machinery for dealing with the problems of plantation labour and the comments of the Indian Tea Association on this matter are of interest.

None of the three considerations which may justify the establishment of a Tripartite machinery, viz: (a) the labourer needed greater protection, (b) the labourer had begun to demand it, and (c) the labourer had reached the state at which his education could suitably be advanced by accustoming him to such machinery, applies in the case of the tea industry in North East India at the present time. If any tripartite machinery were to be set up now, the most difficult question would be as to the representation of labour. This at once raises the question as to how far 'outsiders' – non-officials not connected with the industry – could suitably represent tea garden labour. There can be no objection in principle to representation by 'outsiders'. In the nineteenth century, in Britain, the Trade Union movement owed much to the help given to it by educated 'outsiders', while both in this country and in Europe employers' associations are frequently represented by 'outsiders'. The question is then, not one of principle, but of practical difficulties. In the nineteenth century in Britain, there was a considerable leisured class, public spirit was highly developed and people ready to work for the good of the labourer, with no selfish ends in sight, were available in adequate numbers to provide the necessary leadership. In India conditions are in these respects very different and there is not in fact available a sufficient number of educated people with the right outlook and ready to take up this work. Moreover, the British worker in the nineteenth century had reached a higher stage of development and consciousness of his rights than the tea garden labourer in North East India today and the introduction of 'outsiders' was therefore not so likely to lead to his exploitation. Under Indian conditions, it may well be that the risks involved in bringing in 'outsiders' to represent the labourers' interests would be greater than the good likely to accrue. If any machinery of the kind contemplated is to be set up it would probably be desirable that labour should be represented by Government officials. Presumably the Labour Commissioner and his assistants would be the most suitable persons to do this.

The United Planters Association of Southern India took much the same line, when it contended that in view of the difficulty of finding suitable representation for labour, 'bipartite machinery', that is, the Govern-

ment and employers, would be more suitable. The Government did not accept this view and tripartite machinery became the order of the day.

The apprehensions of the Association have to some extent been justified by experience, but it may be that labour had to go through the awkward phase of adolescence and that tripartite discussions were an important element in that progress. Such discussions have taken several different forms. In the first place there have been tripartite conferences called by the Central Government. In December 1947 it was decided by the Central Government to give those tripartite conferences a permanent character and a body known as the Industrial Committee on Plantations was therefore set up and was composed of eight representatives of the Central and State Governments, eight representatives of employers and eight representatives of labour. When that Committee met at the end of March 1948 it was decided that a Standing Plantation Committee should be formed to advise the Central Government on matters which could not wait for the next sessions of the main committee. The Government subsequently decided that the new body should consist of four representatives of the governments concerned, four representatives of employers, and four representatives of workers. The Indian Tea Association urged that the Standing Committee should not become a substitute for the larger body and that its functions should be confined to considering points of difficulty encountered in implementing the decisions of the Industrial Committee on Plantations. This view was not in practice accepted by the Government and in 1949 the Standing Plantation Committee was summoned to discuss even such an important matter as the draft of the Plantation Code.

The special difficulties of Cachar led to still further development of the tripartite machinery and in April 1950 the Central Government set up a Cachar Plantation Committee, on which employers, labour and the Government of Assam were represented, while the chairman was a Central Government officer, namely the chairman of the Central Tea Board.

Before this, the Assam Government had entered the tripartite field by summoning a tripartite conference in July 1948, followed in October 1949 by a conference of employers and workers, presided over by the Assam Labour Commissioner. Another provincial tripartite conference was called by the Assam Government in July 1950 and before long it could be said that the tripartite machinery was as much State as Central. In Assam a permanent tripartite body has been established. As a rule, the State tripartite bodies have dealt with matters which have not been settled by the central tripartite conferences, though since labour is a concurrent subject, some overlapping is unavoidable.

Although all these bodies were tripartite in form, it would be incorrect to suppose that the Governments were there merely to act as

umpires between the conflicting interests of employers and labour. In most tripartite meetings the governments were determined to achieve a settlement and as a rule this could only be brought about by compelling the employers to concede some part of the labour claim, reasonable or unreasonable. This was particularly evident in the special tripartite sub-committee convened by the Labour Minister of the Government of India in January 1956 to consider the demand of labour in North East India for a bonus. The Minister had declared his determination to enforce payment of bonus long before the conference met and it could, indeed, more accurately be described as bipartite than tripartite. Some employers, in fact, began to wonder if they would not be wiser to avoid settlements at tripartite conferences and let disputed issues be referred to tribunals under the Industrial Disputes Act. This, however, could only have been achieved by a blunt refusal to take part in tripartite discussions, since by this time, on major matters such as the bonus claim the governments concerned had become unwilling to use the tribunal machinery, in view of the long delays involved. They preferred the quicker method of the tripartite conferences, where they could bring pressure on employers and thereby obtain credit from labour for any success achieved. In the Dooars and Darjeeling, where there are a number of unions of different political colours, tripartite negotiations have not become so much part of the normal procedure as in Assam. Bipartite discussions are more usual, though Government holds a watching brief.

Now that the machinery of government control has been described, we are in a position to study its application to the remuneration of labour between 1947 and 1960. The relevant problems can best be treated under four heads, namely, wages and concession foodstuffs, bonus to labour, provident funds, and compensation for retrenchment and lay-off.

B. WAGES AND CONCESSION FOODSTUFFS

(1) *Statistical Basis*

Towards the end of the Second World War, the writer put up to the Indian Tea Association a proposal for a scientific study of the needs and cost of living of tea-garden labour, which could form the basis for an examination of the adequacy or otherwise of wage rates. The proposal was dropped since it was understood that the Rege Committee, which was appointed in 1944 would naturally make such an investigation. Unfortunately, that committee did nothing of the kind. It contented itself with recording the earnings and concessions enjoyed by labour and with making the general, undocumented, statement that wages were inadequate. The report, in fact, did little to advance knowledge of the principal topic to which the committee should have applied itself. After

the interim wage increases given in the tripartite conference of January 1947, the Indian Tea Association therefore stated that no further wage increases would be granted until a proper investigation of the standard of living of tea-garden labourers had been carried out. The Association again contemplated undertaking such a study, but was relieved of the necessity of doing so by the Government's appointment of S. R. Deshpande to examine this matter. The Deshpande Report was not published until 1948 and no changes in wage rates were made in 1947, except that plucking earnings in Indian Tea Association gardens were increased by twenty-five per cent to bring them in line with the increase already given for other tasks.

The Deshpande Report was more thorough and analytical than that of the Rege Committee and did indeed provide a basis on which minimum wages could justly be calculated. The inquiry covered forty-three gardens in Assam and Bengal. Family budgets were drawn up, dietetic needs were studied, incomes were examined, and the composition of the average family was analysed. Deshpande took a more realistic view than Rege of the fact that on a tea garden the earning unit is not the individual, but the family, and his remarks on that subject deserve quotation:

> On page 192 of his report Mr Rege has quoted with approval the following observations made by Mr R. K. Das in his book *Plantation Labour in India*:
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> 'A system of wages which requires the worker to depend upon the earnings of his wife and children or upon a subsidiary industry just in order to earn the necessaries of life, not to talk of decencies, luxuries and savings, can scarcely justify its existence from the point of view of social welfare or national economy.'
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> It is possible that this view may not find complete agreement in the background of the economy of this country, because as is well-known, in the countryside, agricultural operations are carried out not merely by the head of the family but also by his wife and sometimes by the children, although the work of these is of a more intermittent character than work on the plantations. At the same time, one has to note that while a cultivator works on the field with his family for his own subsistence, the plantation industry is an organised industry with a profit motive behind it. On the other hand, it must be noted that in certain factory industries, notably in the cotton mill industry and in the coal mines, women's earnings do not form an insignificant proportion of the family income. In the present stage of our economic evolution, therefore, it may not be entirely unjustifiable to maintain that in determining the family wage the earnings of the other members of the family, including the wife and others, should be taken into consideration. The point, however, arises whether the wife can be expected to work throughout the year just as the head of the family may be required to do. In this connection it is important to remember that the wife cannot escape certain family responsibilities such as doing the cooking, looking after the children and also certain con-

tingencies, such as pregnancy and childbirth. Therefore, it would be necessary to make some allowance for her absence from work for at least a portion of the year.

Deshpande also took a balanced view of the gap between theoretical estimates of dietetic needs and the general practice in the country and arrived at a scale of workers' needs which must commend itself to reasonable men. He reached the conclusion that, exclusive of food concessions of 4 annas per day, the earnings of men, women, and children should be as follows:

	Earnings per day per								
	Man			*Woman*			*Child*		
	Rs	a	p	Rs	a	p	Rs	a	p
Assam Valley	0	15	5	0	14	6	0	10	0
Surma Valley	1	0	8	0	14	7	0	10	5
Bengal	1	7	1	1	1	7	0	10	4

These figures were based on the assumption that an adult male would work 295 days in the year, and to allow for the fact that a figure more closely related to actual practice would be five days a week, he then corrected his estimate of necessary wages as follows:

	Earnings per day per								
	Man			*Woman*			*Child*		
	Rs	a	p	Rs	a	p	Rs	a	p
Assam Valley	1	1	4	1	0	6	0	11	4
Surma Valley	1	3	0	1	0	8	0	12	1
Bengal	1	10	3	1	4	4	0	12	1

These figures at least provided a rational basis for wage fixation from time to time. For some years that fixation was inextricably bound up with what came to be known by the unhappy but convenient name of 'conversion', or replacement of concession foodstuffs by cash.

(2) *Conversion of Concession Foodstuffs to Cash*

Soon after the end of the war, the Indian Tea Association began to regard 'conversion' – i.e. the replacement of the right to buy foodstuffs at concessional rates by cash – as highly desirable, first, because it would restore the proper cash nexus between the employer and the worker; secondly, because the issue of rice below the market price in a time of food shortage was clearly anti-social; thirdly, because the burden of acting as shopkeepers was too heavy for managers to bear any longer, in view of the difficulties of post-war management; and fourthly, because the low cash element in the wage gave the outside world an inaccurate impression of tea-garden remuneration. There was a secondary consideration that the administration of concessions had led to many dis-

parities between garden and garden, and this was giving rise to discontent. On a purely financial view, conversion might have seemed to be against the employers' interests at a time when world grain prices might be expected to fall, but on balance the Indian Tea Association had no doubt that reversion to payment wholly in cash, at the earliest possible moment, must be achieved. Labour, on the other hand, had appreciated the protection afforded by the supply of rice at rates far below market prices and there was indeed a curious inversion of the usual rôles of employer and employed. Whereas in more advanced countries labour has for long regarded payment in kind with aversion, in the North India Tea districts it was the employer who pressed for the replacement of concessions by cash, while labour fought to retain payment in kind unless conversion could be effected at very favourable rates. The growing anxiety of tea-garden managers to bring about this change in a sense played into the hands of the unions, and it may be that conversion could have been brought about more cheaply if the employers had been less anxious to effect it.

The question of conversion was first given serious practical consideration by the Indian Tea Association towards the end of 1946. At this stage the industry still enjoyed a measure of freedom and it is perhaps unfortunate that this last opportunity of securing conversion on reasonable terms was neglected. The district and branch associations were nervous of the change and their views led the Indian Tea Association in June 1947 to make conversion at the end of the year conditional on 'food supplies being adequate and prices reasonably stable'. This was an unrealistic view, since there was never the slightest chance that these conditions would be fulfilled at the end of the year. It was agreed in December 1947 that food concessions must continue.

During the next two years, conversion seemed to be out of the question, although many planters, naturally anxious to be rid of the responsibility of acting as grocers, had developed almost a complex on the subject and were at times inclined to talk of 'conversion at any cost'. Nevertheless, in March 1949, a conference of the General Committee of the Indian Tea Association with representatives from all branch and district associations, again decided that food supplies were still too insecure and prices too unstable to make the time propitious for conversion.

(3) *Remuneration in the Assam Valley*

From this stage onwards it will be convenient to consider wages and conversion area by area and we shall begin with the Assam Valley. The Deshpande Report was considered in a meeting of the Industrial Committee on Plantations in March and April 1948, and after a prolonged discussion, an additional dearness allowance of 3½ annas a day for adults

and 2 annas a day for minors was fixed for the Assam Valley. This rate remained in force until action was taken under the Minimum Wages Act some three years later. Although the industry as a whole probably considered these increases to be wise and necessary, great exception was taken to the forcing tactics adopted by the Government at this meeting of the Industrial Committee. The Government of India therefore gave an assurance that specific wage rates would not be fixed at any future tripartite conference and that any discussion of wage fixation at such conferences would be confined to consideration of general proposals.

The next change occurred on 1 February 1950 when the first short practical step was taken towards conversion in the Assam Valley. On account of the difficult food situation at that time, rice issues were reduced on the instructions of the Government of Assam by half a *seer* per week per working adult and labour was compensated for the reduction by a dearness allowance of half an anna per day. The Indian Tea Association readily agreed to pay this compensation, but pointed out that on purely mathematical considerations the amount was excessive and must not be taken as a precedent.

For economic and historical reasons, the rice issue in certain areas was higher than in the rest of the Valley. In March 1950 the Assam Government suggested that the issue of concession rice in those areas should be further reduced and that the scale should be standardized everywhere throughout the Assam Valley at 4 *seers* per week for adults. The Indian Tea Association considered any such change unwise as long as the system of concession foodstuffs was maintained and countered with a request for a discussion of the whole problem of conversion. It was necessary to bring the Government into any such discussions, since wages had been fixed at tripartite conferences in 1947 and 1948 on the assumption of the continuance of concession foodstuffs.

A tripartite conference in Shillong in July 1950 failed to produce any agreement with regard to conversion in Assam, but, it was agreed that labour would not oppose a two months' experiment in conversion on the basis of total cash payments at the following rates:

*Zone I**	Men	8 annas	Women	6 annas
Zone II	Men	7 annas	Women	6 annas
Zone III	Men	6 annas	Women	5 annas

Soon after this time, the whole position became confused and when the great Assam earthquake of 15 August 1950 resulted in serious dislocation of communications, the Government of Assam directed the maintenance of food concessions in spite of the agreement to experiment with conversion which had been reached. The upshot was that experi-

* Zones were introduced in the Branch organization in 1950 – *vide* Chapter 34.

mental conversion was introduced, but quickly abandoned, in most of Zones I and II of the Assam Valley, though it continued in a number of circles in Zone III. The Government of Assam eventually agreed that gardens in the Mangaldai, Bishnauth, and Nowgong Circles of Zone III, and the Nazira Circle of Zone II, should be allowed to retain conversion provided it led to no labour trouble. The situation really was that those gardens in any part of Zone II or Zone III which were able to effect conversion without opposition from labour were allowed to do so. It was in fact a kind of *sauve qui peut.*

In September 1950 the Government of India insisted on the introduction of the all-India cereal ration scale, namely, $3\frac{1}{2}$ *seers* per adult worker with adjustments for minors and dependants. The reduction was made at dates which varied on different gardens, between September and December 1950. A dispute then arose as to the amount of compensation to be paid to labour and it was referred to a tribunal. The Indian Tea Association appealed against the tribunal's order and in April 1954 the Appellate Tribunal fixed the rate of compensation of 6 annas per *seer.*

Further attempts to secure conversion in the Assam Valley during 1951, 1952, and 1953 came to nothing in view of the labour demand for a higher rate of compensation than employers considered reasonable, but in the meantime the Assam Government had tackled the problem of fixing minimum wages under the Minimum Wages Act. The Advisory Committee set up in 1952 found it impossible to reach agreement and eventually it was left to the chairman of that Committee to make recommendations. The rates notified involved a considerable increase over existing rates, as may be illustrated by the case of an adult male labourer in the Assam Valley. After the increase of dearness allowance in 1948, such a labourer had been drawing a basic wage of 8 annas a day and a dearness allowance of $5\frac{1}{2}$ annas a day. Under the new order he was to draw a basic wage of 12 annas per day and a dearness allowance of 6 annas per day, except in certain circles of Zones I and III, where the dearness allowance was to be 5 annas only. Concessions were to continue as before.

In the opinion of the Indian Tea Association, the Assam Minimum Wage Order was seriously defective in as much as it did not specify what was to be considered a fair working day for which the minimum wage was to be paid. The Government of Assam declined to clarify the position and contented itself with issuing a notification to the effect that tasks and rates were to continue as before. The Indian Tea Association hesitated for a while as to whether it should itself lay down the standard working day, but eventually refrained from doing so. It advised managers that 'any current task rate which was too low to enable the ordinary worker to earn a minimum wage, must be raised to a level which would enable him to do so in a normal working day, dearness allowance being

(subject to the maximun laid down by Government) proportionate to basic earnings'.

By the end of 1952 it was obvious that owing to a serious fall in the world price of tea, the industry was entering into a phase of great economic difficulties and representations were made to the Government of Assam that the minimum wage should be modified. This view was accepted with regard to 'uneconomic gardens' in the Valley. A notification of 9 February 1953 laid down that on such gardens the issue of concession foodstuffs could be discontinued, but that partial cash compensation of 2 annas per day for adults and one anna per day for minors should be paid. The onus of proving that an estate was uneconomic lay on the management, and any company availing itself of this concession had to accept onerous conditions regarding dividends and managerial remuneration.

In the event, gardens did not avail themselves of this concession, but some gardens introduced a short working week for labour. This led to disputes which, together with certain other matters, were referred by the Government of Assam to J.R. Jarman, Revenue Commissioner for Assam, for arbitration. Jarman had been closely associated with the tea industry as District Commissioner, Lakhimpur, for many years, and was trusted by both parties to the dispute. He awarded compensation of fifty per cent of the wages lost by the short working week, subject to the exception that gardens which had made losses both in 1951 and 1952 would only be required to give the cash equivalent of food concessions for days when work had not been offered.

At long last the attempts of the Indian Tea Association to secure conversion in the Assam Valley bore fruit. At the meeting of the Government of India's Industrial Committee on Plantations in January 1954 it was agreed that in Assam Valley gardens in the membership of the Indian Tea Association, conversion should be effected at the rate of 9 annas per day in Zones I and II and 8 annas a day in Zone III. Even these rates, however, were conditional on the supply of cereals by gardens at Rs 20 per maund in Zones I and II and Rs 17/8 in Zone III. The new conversion allowances were to be merged into basic wages and in return for the acceptance of them by labour, five holidays with pay were allowed each year.*

It will be noted that employers were still required to supply rice at a fixed price and, if rice prices had risen above this, all that would have been effected by the decision would in fact have been partial conversion. It was, however, believed that rice prices would fall and it was regarded as certain that offtake from the garden *godown* would then decrease to

* These wage zones did not coincide with the zones into which the Assam Branch had been divided for purposes of organization.

such an extent that the obligation to supply rice at fixed prices would mean little. This is exactly what happened for a time. On many estates there was a decrease in rice offtake of over fifty per cent and on a number of estates offtake was negligible. This state of affairs continued until the middle of 1956 when bazaar prices began to rise. In the words of an official of the Indian Tea Association, labour then came back on the garden *godowns* from Doom Dooma to Darjeeling.

As we shall see later, conversion in the other tea districts had already been achieved and the industry heaved a sigh of relief at being free from this burden. Exact figures of the cost of concession foodstuffs depend on so many factors, varying from estate to estate, that it is impossible to generalize about the arithmetical aspects of the transaction. The writer is inclined to think that the industry bought relief somewhat dearly, but no planter and few managing agents would agree with this view.

In 1954 the most important development in the Assam Valley was the introduction of comprehensive plucking rates. There had been a great deal of confusion about the application of minimum wages to plucking, and, moreover, the system under which labour earned dearness allowance and qualified for concession foodstuffs after plucking a stipulated weight of leaf, reduced any incentive to pluck in excess of that quantity. The Indian Tea Association considered it essential to introduce a comprehensive flat rate system, and in May 1954 it proposed rates of Rs 2/8, Rs 2/12, and Rs 2/4 per maund of green leaf in Zones I, II, and III of the Assam Valley respectively. Dearness allowance was to be paid in addition and on many gardens there would continue to be the possibility of earning additional cash for plucking in excess of the task fixed for the day. The comprehensive rates would only apply to the peak of the plucking season, when ample leaf was available. Labour rejected the Association's proposals and the question was referred to a Tripartite Plucking Rates Committee. The Government of Assam were unwilling to take a definite line and discussions went on throughout 1954. The unions were not prepared to lose the chance of haggling and finality was not reached until November 1955, although a number of gardens had, as an experiment, introduced comprehensive rates. The arrangement ultimately accepted was (a) that the plucking rate should be one anna per *seer* throughout the Assam Valley, (b) that in Zones I and II men and women would receive a compensatory plucking allowance of 3 annas a day in addition to their dearness allowance of 6 annas a day, and (c) that in Zone III, except in North Lakhimpur, Nowgong, and Kamrup, the dearness allowance paid to women engaged in plucking should be increased by one anna per day. This scheme was to be subject to the understanding that on days when ninety per cent of the pluckers failed, through no fault of their own, to earn as much as they would have

done if the old rates had still been in operation, the compensatory plucking allowance would be enhanced to cover the shortfall.

After this settlement labour in Assam appeared satisfied with its remuneration until in the middle of 1959, when the fact that an increase of wages was imminent in the Dooars naturally started off demands in the Assam Valley. Eventually an increase of 20 nP* a day for adults and 10 nP for minors was accepted by employers and labour with effect from 1 December 1959. The agreement was embodied in a statutory order on 24 November 1959 and in return for it labour agreed that they would withdraw their claims for the continued payment of rice cut compensation and that there would be no further demand for a wage increase pending the completion of enquiries by the proposed wage board. Consequential increases in plucking rates – so fixed as to incorporate some incentive factors in the wage structure – were made at the beginning of the 1960 plucking season.

(4) *Remuneration in Cachar*

When the Deshpande Report was considered by the Industrial Committee on Plantations in 1948, an additional allowance of 3 annas a day for adults and 2 annas a day for minors was fixed for Cachar. That district was, however, moving into a period of grave financial difficulties and here as in Bengal the problem of conversion was therefore approached from a different angle from that of the Assam Valley. In that Valley, conversion was meant to be merely a change from part payment in kind to a strictly arithmetical cash equivalent, and there was no intention of either increasing or diminishing the real remuneration of labour in the process. In Cachar, Darjeeling, and to a lesser extent the Dooars, the economic condition of the industry made some downward adjustment in labour costs essential, and the Indian Tea Association aimed at increasing the price at which rice was sold to labour, without paying full equivalent compensation. On many Cachar gardens the poverty of the soil resulted in low yields, with no corresponding superiority of quality and even in years of normal prices it was difficult to make a profit. During 1949 a minor economy was effected by the decision that the issue of concession foodstuffs to dependants should be *pro rata* to the work done by the worker. This, however, only touched the fringe of the problem. No fewer than sixty-two Cachar gardens had made losses in 1948 and it was believed that 1949 results would be still worse. In 1949 six gardens in the membership of the Indian Tea Association announced their intention of making drastic economies in labour costs. The Indian Tea Association considered that the case for a general reduction of wages in Cachar was indisputable, but in view of the strong

* nP = naya paisa. Decimal coinage was introduced by the Government of India on 1 April 1957

opposition to such a proposal in a meeting of the Standing Plantation Committee in December 1949, agreed to confine immediate remedial measures to gardens working at a loss. On such gardens, foodstuffs would be sold to labour at cost price and a cash increase of 4½ annas a day for adults and 2½ annas for minors would be given in partial compensation. It was originally intended to apply these economies to twenty-three estates, but as a result of a conference of employers and labour with the Labour Commissioner of Assam in October 1949, the number of gardens qualifying for this treatment was reduced to sixteen. The change now made was not true conversion, but was frankly a reduction of remuneration. The agreement was for six months from 1 January 1950 and was only secured at the cost of agreeing to a reduction in the salaries of managerial and clerical staff and in the remuneration of agency houses. The reduction in managerial salaries was perhaps unfair since managers were paid partly on a commission basis and lost heavily as a result of the fact that the companies concerned made no profit. The unfairness, nevertheless, had to be accepted, since nothing else but the reduction of labour costs could have saved the gardens concerned from bankruptcy.

The Cachar Plantation Committee appointed by the Government of India examined the general Cachar position and recommended in February that the Government should supply all estates in Cachar with foodstuffs at controlled prices and that the garden authorities should sell at those prices, but should give a conversion allowance of 7 annas a day for adults and 3½ annas for minors. It further proposed that if the Government did not accept this recommendation, the uneconomic gardens (the number of which had now risen from sixteen to nineteen) should remain 'converted' but should raise their conversion rates to 5½ annas for adults and 3 annas for minors.

In May 1951, as no orders had been passed by the Government of Assam, the Indian Tea Association acted unilaterally and raised the conversion rates for the uneconomic gardens as proposed. The local union then demanded the restoration of concession foodstuffs. After another six months of argument, in a conciliation board held in September 1951, the conversion allowance for the uneconomic gardens was fixed at 6 annas a day for adults and 3½ annas a day for minors. The industry was at the same time forced to agree that for 1950 uneconomic gardens would pay no dividends. There is room for difference of opinion as to whether such a condition was justified or not and as to whether or not any board of directors, at least of a sterling company, is strictly entitled to give an undertaking of this kind – but there was no acceptable alternative. No further advance towards conversion in Cachar was made at this time, though the uneconomic gardens remained converted.

The next step was taken in February 1953 when food concessions

were abolished in Cachar, subject by way of partial compensation to the increase of cash dearness allowance by one anna a day for adults and half an anna for minors. In the second half of the year, as a result of the rise in world tea prices, the economic condition of the Cachar estates to some extent improved, and in September 1953 the Indian Tea Association agreed to increase the existing wage by 2 annas per day and to increase the *Puja* bonus from Rs 2/8 to Rs 5. The five per cent cut in the salaries of managerial staff was continued, in accordance with a directive issued by the Government of Assam, but it was agreed that the clerical staff might receive a special *Puja* bonus and that some similar payment might be made to managerial staff. By the beginning of 1954 further financial improvement led to a re-examination of the position and early in the year it was agreed that the general Cachar daily wage rates should be fixed at Rs 1/6 per adult worker, this being equivalent to the full restoration of concessions. It was also agreed that a distinction should be made between estates whose registered yield exceeded 7½ maunds per acre and those which fell below that level. For those with the lower yield, the daily wage of an adult male worker was fixed at Rs 1/4/– but estates which took advantage of this concession were prohibited from paying a dividend or manager commission so long as this lower rate of wages remained in force. The Indian Tea Association disapproved of the proposed restriction on dividends and advised all members not to claim the right to benefit by the lower rates unless financial stringency left them no option. A little later – although the economic improvement was entirely the result of an artificial world price situation and could not last – the Indian Tea Association recommended that the actual sums which had been lost by labour as a result of the reduction in minimum wages should be repaid by all Cachar estates whose profits in 1953 exceeded the loss in 1952 or which had paid a dividend in 1953. In April 1955 it was agreed to abolish the distinction between economic and uneconomic gardens and to require all estates to pay the full statutory minimum wage.

Demands for an increase were next made in 1959 and were referred by the Government of Assam to a special advisory committee. Labour demanded an increase of 22 nP per day, while in view of the thoroughly unsatisfactory economic position of Cachar gardens, employers were not able to agree to any increase at all. The advisory committee's secretary was ordered to prepare a report and in it he recommended an increase of 16 nP per day for adults and 8 nP per day for minors. The representatives of the employers were unable to agree to this proposal and no orders had been passed on it up to the end of 1960.

(5) *Remuneration in the Dooars*

In West Bengal as in Cachar, the Deshpande Report was the starting-

point of post-war wage fixation, and at the meeting of the Industrial Committee on Plantations in March and April, 1948, an additional dearness allowance of 3½ annas per day for adults in the Dooars and the Terai and 3 annas in Darjeeling was granted – the corresponding increase for minors being 2 annas.

The fixation of wages under the Minimum Wages Act next received attention. In West Bengal, the meetings of the Minimum Wages Advisory Committee were more harmonious than those in Assam, and thanks largely to the admirable handling of the proceedings by the chairman, S.N. Modak, a unanimous report of the committee led to the passing of a Minimum Wages Order in September 1951. The general effect of the change may be illustrated by reference to the position of a male adult worker in the Dooars. After the 1948 increases, such a worker had been paid 6 annas for a *hazri*, 6 annas for a *doubli*, and 5½ annas dearness allowance per day. The Minimum Wages Order of 1951 left the *hazri* and *doubli* rates unchanged, but raised the dearness allowance to 7 annas. From five to eight hours was fixed as the length of the working day and overtime at enhanced rates was to be paid for any work in excess of these hours. Details will be found in the Report of the Indian Tea Association for 1951.

In the following year the industry set itself to secure conversion, but in West Bengal the financial situation was serious and a purely arithmetical conversion would have availed little. The energies of the Association were therefore directed to increasing the price of rice to labour while at the same time securing supplies from Government at more reasonable rates.

In February 1953, on the recommendation of the Minimum Wages Advisory Committee, the price of concession cereals in the Dooars was raised from Rs 5 to Rs 15 per maund, but a partial compensation allowance of 2½ annas per day per adult worker on gardens over five hundred acres, and 2 annas on gardens under five hundred acres, with corresponding payment for minors, was to be paid. At the same time Government ordered a ten per cent cut in managerial salaries. For all practical purposes conversion, accompanied by what was really a wage cut, had been achieved.

By June 1953 the economic condition of the tea industry had considerably improved and the Indian Tea Association voluntarily increased the compensation for conversion in the Dooars to 3½ annas per day. At the same time a cash compensation allowance was given to the clerical staff and the cut in managerial salaries was reduced to five per cent. Shortly thereafter a further revision of minimum wages was proposed and in October 1953 the advisory committee recommended that the minimum cash wage in the Dooars should be fixed at Rs 1/8 per day per adult male, with corresponding rates for women and children, and

with the proviso that cereals should continue to be sold to labour at Rs 15 per maund. The Committee also requested all gardens comprising more than five hundred acres of tea to pay a minimum wage of Rs 1/8/6 instead of Rs 1/8. The Indian Tea Association acceded to this request, which at that time had no statutory force, and the practical effect of which was the same as if compensation for conversion of concession foodstuff had been increased to 5½ annas. The wage cut had in fact been restored. In April 1954 this settlement, including the differential between gardens according to area, was given statutory force.

In 1955 the Indian Tea Association recommended its members to reimburse labour for the earnings lost during the period of what had really been a wage cut. In other words, labour was now paid the balance necessary to bring conversion compensation up to 5½ annas per day from the date of conversion, February 1953. The writer has always doubted the wisdom of this step, but it was regarded by the Association as both just and prudent.

In February 1955 a demand from the Cha Sramik Union led to an agreed increase of the minimum wage in the Dooars by 3 annas per day to Rs 1/11/6 for men and to corresponding increases for women and children, with lower rates for gardens under five hundred acres. At the same time plucking rates were increased. These increases were substantial and represented the inevitable, though unfortunate, reaction to the high prices and profits of 1954. They were perhaps not justified by the long-term economic position of Dooars gardens.

The agreement of February 1955 was not statutory in form and was in any case to last only until the West Bengal Government were able to pass orders on the proposed enquiry into the economics of the tea industry in the Dooars. In return for the non-statutory agreement, unions undertook to urge labour to do a full day's work and to refrain from striking on the subject of wages. Towards the end of 1955 a meeting of the Minimum Wages Advisory Committee was called. The Indian Tea Planters Association argued strongly that the agreement for the extra 3 annas a day should be terminated, first, because the industry was no longer in an exceptionally prosperous condition and, second, because the cost of living had dropped. The Indian Tea Association, somewhat reluctantly, felt bound to support the proposals of the Indian Tea Planters Association and were prepared to put them into effect. After prolonged discussions, however, the Government, employers, and labour agreed that the agreement for a 3 annas increase should continue until 31 December 1956, unless the government inquiry was completed before then. The union leaders in return undertook to extend the undertaking already given by them.

The government inquiry dragged on for many months and at the end of it no agreement could be reached in the Minimum Wages Advisory

Committee. The chairman of that committee then recommended an increase of one anna per day for adults. Still the matter held fire and in the meantime the demands of labour were raised and strikes were threatened. At length in August 1959 an order under the Minimum Wages Act was passed, granting labour an increase of 2 annas per day with effect from 1 June 1959. The Indian Tea Association successfully challenged the legality of a retrospective order of this kind and the increase therefore only took effect from the date of the order, namely 20 August 1959.

No further changes were made during the period covered by this book.

(6) *Remuneration in Darjeeling*

At the Industrial Committee on Plantations wages in Darjeeling were fixed in March 1948 on the basis of the Deshpande Report. Basic wages were left unaltered but dearness allowance was raised from 2 annas to 5 annas per day for adults and from one anna to 3 annas for minors. The next changes took place in 1951 when as a result of a unanimous recommendation by the West Bengal Minimum Wage Advisory Committee, remuneration was fixed at 8 annas basic wage and 7 annas dearness allowance for men, with corresponding figures for women and minors.

By the end of 1952 the financial position of Darjeeling companies had deteriorated considerably and on the recommendation of the Minimum Wages Advisory Committee, the concession price of rice was increased with effect from 1 January 1953, from Rs 8 to Rs 17/8 per maund. The Government undertook to supply rice at Rs 16 per maund and it can thus be said that for practical purposes conversion had been effected. A little later labour was given an increase of $1\frac{1}{2}$ annas per day in dearness allowance as a partial compensation for the abolition of concessions.

By the beginning of 1954, in view of the improvement in the economic condition of the industry, the minimum wage was increased by 2 annas a day for adults and $1\frac{3}{4}$ annas a day for children. Part of the increase was given retrospective effect in spite of the objection of the Indian Tea Association to the principle involved.

The increase of wages in the Dooars in February 1955 naturally led to a demand for a similar increase in Darjeeling, but the Association considered that the financial condition of most Darjeeling gardens did not justify any increase, particularly in view of the trend of prices early in 1955. Labour demanded an increase of 9 annas in the daily wage, but later reduced this claim to 5 annas and in April 1955 the chairman of the Minimum Wages Advisory Committee for Darjeeling suggested an interim increase of 3 annas per day, pending the general inquiry into minimum wages in West Bengal, which the Government proposed to conduct. Employers were unable to accept this suggestion and offered

an increase of 1½ annas in the daily wage, together with an increase of 3 pies per *seer* for leaf pice. No formal agreement was reached, but labour acquiesced in the increase proposed by the employers, subject to the condition that, if the state of the market in September justified it, the full increase of 3 annas would be given with restrospective effect.

The claim for a further increase was revived in a West Bengal Minimum Wages Advisory Committee after a strike in June 1955, and, in spite of opposition from employers, on 30 August the Government of West Bengal issued a notification under the Minimum Wages Act, increasing the wages of adult labourers by 3½ annas per day with effect from 1 July 1955. The Association considered this increase quite unjustified and its view was confirmed by market trends during the remainder of 1955.

In 1959 fresh demands were stimulated by the proposals for a further increase of remuneration in the Dooars. After a good deal of wrangling, employers and labour agreed on an increase of 8 nP per day for men and 12 nP for women, with effect from 28 September 1959. No further change took place during the period covered by this book.

The matters discussed in this chapter have been complicated and tedious, but three facts stand out from their general dullness. The first is that the governments concerned have as a rule taken an unrealistic view of the paying capacity of the industry. The second noteworthy fact is the considerable time lag in adjusting wages when the industry falls into serious financial difficulties. The third point of interest is, that although labour behaved sensibly in the depression of early 1953, when tea prices rose again neither labour nor government were prepared to limit their demands for a restoration of pre-depression wages in order to give the industry a chance to re-establish its reserves.

C. LABOUR BONUS

Another aspect of remuneration which requires consideration in this period is the labour claim for bonus in the tea districts of North-east India. This claim had been put forward, without much emphasis, for some years, but in the boom year 1954 it took a more spectacular form in the Dooars, where the West Bengal Cha Sramik Union demanded a bonus of sixty days' wages for 1953. This claim together with other demands, led to a threat of a strike in August 1954. In view of the unusual difficulties resulting from the severe floods in the Dooars, the Indian Tea Association felt it necessary to compromise and agreed to an attendance allowance of 2 annas per adult and one anna for a minor in the Dooars.

In 1955 the demand for a bonus became more serious, but it came to a head in Assam sooner than in the Dooars. The reaction of the Indian

Tea Association was thus expressed in the Association's Report for 1955:

These reactions were briefly that a proposal to pay bonus to tea garden labour was one which was entirely inacceptable because, while it was true that the industry had experienced a profitable year in 1954, tea as essentially an agricultural enterprise dependent upon variable world demand was one peculiarly unsuited for the payment of bonus. It was pointed out that the beginning of 1955 had witnessed a most serious decline in prices of tea in the London auctions and that the prospects for the 1955 season were not favourable. It was further argued that such profits as had been made in 1954 were required in the first place to make good the very considerable losses suffered in 1952 and earlier and in the second place to meet the heavy liabilities which were to be imposed upon the industry under the Plantations Labour Act, the Government of Assam Provident Fund Scheme and the considerable increases in taxation both Central and State. Finally it was argued that experience of previous wage increases indicated clearly that labour did not derive any real benefit from larger cash payments because these, in the absence of an abundany supply of goods attractive to labour, merely exercised a strong inflationary pressure or were devoted to the purchase of liquor which was already a serious enough problem in the tea areas.

A little later the same demand was raised in West Bengal and the Central Government therefore took the matter up and referred the issue to a Committee of Inquiry with P. M. Menon, ICS, in the chair. The representatives of the industry went far beyond their own convictions in the attempt to meet the wishes of the Government and offered a bonus on a basis of area prosperity for 1954 and subsequent years. Labour rejected the offer and the conference broke down.

Khandubhai Desai, Labour Minister of the Government of India at this time, made no pretence of holding the scales evenly between employers and labour. He stated frankly that he was a good trade union man, that he was not interested in arguments as to the economic difficulties of the industry in spite of 1954 prosperity, and that he was quite determined that labour should share liberally in the 1954 profits. The Indian Tea Association would perhaps have been prepared to let the matter be referred to a tribunal, but the Labour Minister was wholly unwilling to face the long delay which this would have involved and warned the industry of his intention to force them to pay a bonus. It was in fact quite clear that, although there were cogent arguments against the payment of a bonus, the tea industry in North-east India had no choice but to pay. The Indian Tea Association also had to bear in mind the fact that the general trend of tribunal rulings made it clear that, if the question went to adjudication, the losses before 1954 would not be relevant and that the large profits for that year would certainly lead to a substantial award in favour of labour. At the meeting of the Menon

Committee in New Delhi in January 1956, an agreement was reached. Its essence was (a) that in the Assam Valley, an adult worker who had completed the prescribed number of days would, in respect of bonus claims for 1953 and 1954, receive Rs 130, smaller sums being fixed for other areas and for small gardens, and (b) that for each of the years 1955 and 1956, bonus should be determined by the application to these sums of a factor proportionate to the relative prosperity of each area as determined from a sample of gardens in it. A similar arrangement, with different standard bonuses, was fixed for other districts and in all cases two-thirds was to be paid at once and the rest by November 1956.

A number of companies were seriously embarrassed by this new liability. As stated in the Indian Tea Association's report for 1956 'labour's claim for bonus had been largely based on the profits which the industry had made during 1954, but in fact much of those profits had been swallowed up in clearing off the indebtedness in which many companies had become involved by reason of losses in earlier years and particularly in 1952'. In Cachar and Darjeeling arrangements had to be made for the payment of the 1954 bonus by instalments at dates later than those originally agreed.

A condition of the bonus agreement had been that the final one-third payment should take the form of savings certificates. This proposal, although accepted by the unions, met with considerable opposition from labour in the Dooars and it was abandoned. In Assam it was arranged, with government backing, that the final instalment of the bonus for 1954 should take the form of an additional contribution to the Provident Fund (which had been introduced in 1955) in respect of those workers who were members of the fund, and in other cases should be made in the form of savings certificates. A similar arrangement applied to the bonus for 1955 and 1956.

The deterioration in the financial position of the industry in 1955 led to a considerable reduction in the amount of bonus payable to labour, and in Darjeeling many garden workers refused to take the money when it was offered to them. Fortunately this opposition soon faded away and bonus payments were made satisfactorily in all areas.

In 1956, in the Dooars and the Terai, financial difficulties again made it necessary for many estates to pay by instalments and payment of the 1956 bonus was thus not complete until 30 September 1958.

For the period after 1956, it was necessary to conclude a new agreement and the Government of India appointed a bonus sub-committee under the chairmanship of the Regional Labour Commissioner to consider the matter. Unions took the opportunity to put forward new claims. They demanded a minimum bonus irrespective of profits and at another stage they claimed that the profits of all companies should be pooled so that a standard bonus could be paid. These suggestions were

not acceptable to the employers. As the months dragged on, employers decided that in the interests of good labour relations it would be wise to make an *interim* payment which would be set off against the bonus finally fixed.

Prolonged discussions in the committee did not lead to agreement until the Central Labour Minister, G.L. Nanda, stated that in the absence of any other settlement, the Delhi agreement governing the payment of bonus for the years 1953–6 would have to continue. By this time it was clear that the results of many companies were so poor that no bonus would have been payable under that agreement. Once this had been realized, the union representatives proved more amenable and an agreement was reached on lines which departed considerably from the area prosperity basis of the previous agreement – a matter to which the employers' representatives attached considerable importance, since the area prosperity formula had proved disastrous for some companies. Under the new agreement which was to apply to 1957 and 1958, a basic bonus, calculated as being the average of the bonuses paid in the previous four years, was arrived at for each area. The standard bonus in each company for the year was thus to be determined by application of the formula:

$$\frac{\text{Profit of company for bonus year}}{\text{Average profit for company for 1954, 1955, 1956}} \times \text{basic bonus for area}$$

A worker who had worked the prescribed number of days was to be entitled to the full standard bonus, while an individual who had worked less than that number would receive a proportionate share of the standard bonus. Minors were to receive half the bonus payable to an adult. A special provision was made for estates of less than three hundred acres. They would only be required to pay half the amounts payable by other estates.

Provision was also made in the case of Assam that, when the bonus to be paid to any worker exceeded Rs 40, one-third of the excess over that sum should be invested in national savings certificates through the worker's provident fund.

Discussions regarding the fixation of labour bonus for the years 1959, 1960, and 1961 began in 1959, but were not concluded until April 1961. Neither the area prosperity scheme of 1955–6, nor the modified plan of 1957–8 had proved altogether satisfactory, and for the years from 1959 onwards, a wholly new system was adopted. The essence of the new scheme was that, in the Assam Valley each company should allocate for distribution to workmen who qualified twelve per cent of its profits, while in the case of West Bengal and Cachar the corresponding percentages would be eleven per cent and twelve per cent respectively. It

was stipulated that profits would be calculated after deduction of depreciation and of all charges allowed by the income tax authorities. It was further provided that in the case of a company making a loss in any particular year, an advance of Rs 10 should be paid to any labourer who had worked the stipulated number of days. In this way the employers were able to maintain the principle of no profit, no bonus – while the desire of the workers for some cash payment in every year was met.

It was obviously desirable that the principles governing the calculation of bonuses should be laid down more clearly than had hitherto been the case and in 1960 the Government of India therefore decided to appoint a bonus commission to deal not only with tea but with all industry. That committee was, however, not formed until the end of 1961 and its deliberations thus fall outside the period with which the present book is concerned.

D. PROVIDENT FUNDS

The fourth element of remuneration requiring consideration here is concerned with the Labour Provident Funds. Such funds had previously been started under statutory authority in certain other industries, though employers generally had regarded them as not altogether suitable for illiterate labour. It was not until 1954 that concrete proposals for a provident fund were considered in the case of the Assam tea industry. When conversion of concession rice was accepted at the meeting of the Industrial Committee on Plantations earlier in that year, the Indian Tea Association agreed to compensatory cash payments of 9 annas per day for Zones I and II and 8 annas per day for Zone II of Assam, on the clearly stated understanding that one anna of this conversion allowance would be treated as the employers' contribution to a provident fund, if such a fund were in fact introduced, as then seemed probable. At a meeting of the Assam Standing Labour Committee in June 1954 the Government of Assam proposed the establishment of an Assam Labour Provident Fund, the employers' contribution to which would be an additional payment. This was a clear breach of faith, but the Assam Government evaded that issue by pointing out that the earlier agreement had been for one year only and they stated that they now felt that the employers' contribution should be an addition to the existing remuneration of labour. Early in 1955 the Government of Assam introduced an Assam Tea Plantations Provident Fund Bill, without further consultation with the industry. The Indian Tea Association was not opposed to provident funds in principle, but considered that such matters as the conditions under which labour could withdraw deposits, demanded much greater consideration than they had received. The Association was also of opinion that the whole scheme should be carefully explained to labour before it was introduced. The scheme was,

however, introduced on 12 September 1955. A similar scheme was introduced in West Bengal. It applied to factory workers from 31 July 1956 and was extended to plantation labour with effect from 1 July 1957. The rate of contribution was the same as in Assam, i.e. 6¼ per cent.

E. RETRENCHMENT AND LAY-OFF

The only other aspect of remuneration which we need consider is compensation for cessation of employment, or for short provision of work at slack times. The relations between tea-garden labourers and their employers in this matter had for long been free and easy. Labourers were apt to take holidays and attend to their own cultivation at certain times of the year and the attempts of managers brought up in the old tradition to make labourers ask for leave of absence if they did not want to work, had become increasingly unsuccessful. On the other hand managers regarded themselves as free to offer work for only four or five days a week in the slack season. On over-laboured gardens, managers have always been faced with the practical difficulty that unwanted labour would not leave the garden, and although in theory the manager was under no obligation to offer employment, in practice it was very difficult for managers not to employ the children of their labourers when they reached a suitable age. The practice of offering work for less than six days a week was an alternative on many gardens to retrenchment and the system worked well because relations between managers and labourers were essentially personal. Most managers cared about the welfare of their labourers, and even those few who might be callous could not afford to live surrounded by a discontented and even hostile labour force. This free and easy relationship did not fit in with the new attitude of Indian politicians towards labour problems, or with their desire to be well thought of in ILO circles. It was therefore considered necessary to put the matter on a more regular basis. Opinions still differ as to whether this is likely to be better or worse for labour, but it is certainly in keeping with the mood of modern India.

In 1953 the Industrial Disputes Act was amended to include provision for compensation in respect of retrenchment and lay off of labour and at the meeting of the Industrial Committee on Plantations in January 1954 it was agreed that these particular provisions of the amended Act should be extended to plantations. This was done with effect from 1 April 1954. The most important relevant provisions of the amending Act were that:

> no worker who has been in service more than a year shall be retrenched until he had been given one month's notice or pay in lieu of notice and fifteen days average pay for every complete year of service. The proviso will not apply when the worker reaches the contractual age of superannuation or if his service is terminated on account of ill-health.

When provident funds were introduced it was argued in some quarters that compensation for retrenchment was now unnecessary, but this contention was clearly unsound, since retrenchment compensation is meant to tide the labourer over the period during which he is looking for another job. At this time a good deal of doubt existed in industry generally as to whether retrenchment compensation was payable or not when a business changed hands or was terminated. In the case of the Barsi Light Railway, the Supreme Court held that in neither of these cases was retrenchment compensation payable, but the Government of India subsequently amended the Industrial Disputes Act in the light of the judgement. The position now is that in general, if a tea garden – or any other industrial establishment – is closed down, retrenchment compensation has to be paid. Even a mere transfer of ownership gives rise to a claim for such compensation, unless the new owner accepts full responsibility for the accrued rights of the worker to compensation.

These provisions are of great importance to the tea industry, since for many overlaboured gardens retrenchment offers the only means of survival. It is important, therefore, to note that the amendment to the Industrial Disputes Act does not confer on the employer a right to retrench, it merely requires him to pay compensation if retrenchment is effected. Retrenchment may still be the subject of adjudication by a tribunal, which may or may not allow it.

The amendment to the Industrial Disputes Act also provides that if labour is laid off, a sum amounting to fifty per cent of the worker's pay and dearness allowance (subject to a maximum of forty-five days in a year) must be paid. This proviso is a radical change in the conditions of employment on tea gardens, but it is difficult to regard it as unreasonable. It is indeed only an aspect of the wider change involved in the replacement of the customary relationships between a tea-garden manager and his labour by statutory rights and obligations which has been the main characteristic of the post-war decade in the Indian tea industry.

F. DISPUTES IN THE ASSAM VALLEY

Even the somewhat lengthy account in this chapter does not fully illustrate the immense complexities of the problems involved in concession foodstuffs, conversion, and minimum wage fixation in the Assam Valley and for that purpose it is necessary to discuss briefly three major disputes over the implementation of the minimum wage notification. On logical considerations those disputes should have been discussed in an earlier part of this chapter, but they have been left until this stage to avoid interruption of the narrative. The first dispute related to the issue of concession foodstuffs. Since food concessions were part of wages, and minimum wages had been calculated on the basis of the daily requirements of a worker in an average family, the Indian Tea Association

rightly proposed that the issue of concession foodstuffs to a worker's dependants should be *pro rata* to the amount of work done by the worker. The Assam Government refused to accept this view, or to refer the matter to a tribunal, and on 12 May 1952 issued a notification under the Minimum Wages Act, prohibiting the practice which the Indian Tea Association had proposed to introduce.

The second dispute related to compensation in respect of the reduction of the cereal ration when the all-India ration scale was introduced into Assam in November 1950. The Association naturally recognized labour's right to compensation, but the *quantum* was a subject of dispute. The matter was referred to an Industrial Tribunal whose award, published on 2 February 1952, fixed the rates of compensation to be paid. When minimum wages were fixed under the Minimum Wages Act in March 1952, the Indian Tea Association contended that the rice cut compensation had been subsumed under the Minimum Wages Award. Labour disputed this view and a reference to the Industrial Tribunal resulted in August 1952 in a decision favourable to the employers. Appeals were filed by the employers against the *quantum* of compensation awarded by the first tribunal in February 1952 and by labour against the decision of the second tribunal that the award terminated when the minimum wages were introduced. The Appellate Tribunal reduced the *quantum* of rice cut compensation, but held that it was not affected by the Minimum Wages Award. In 1956 the Supreme Court upheld the finding of the Appellate Tribunal.

In the meantime – and just after the appeal to the Supreme Court had been filed – the Assam Government, by notification dated 1 May 1954, modified the Appellate Tribunal's award and laid down that those gardens which had made losses in 1952 would be exempt from rice cut compensation, while other gardens would pay the compensation only up to the date of conversion of concession foodstuffs.

This order gave rise to a considerable outcry from labour and the Assam Government sought to reverse its order. It then discovered that it had no power to withdraw the notification and it therefore published a Bill modifying the Industrial Disputes Act in its operation in Assam and empowering the Assam Government to cancel its previous Order. The Bill lapsed and the legal position appears to be that the order of 1 May 1954 remained in force and that rice cut compensation was therefore not payable after the date of conversion. Labour did not accept this view and claimed that the compensation would continue to be payable indefinitely.

This dispute continued until the 1959 settlement described earlier in this chapter, but the really important point is that the dual procedure of determination of wages either under the Minimum Wages Act or by a tribunal is highly unsatisfactory. It can be defended, theoretically, on the

grounds that a tribunal is concerned not with minimum wages but with what ought to be paid, but the duality must be a source of conflict and is a symptom of the lack of clarity of thought that has characterized labour policy both at the centre and in the states since the Transfer of Power.

The third matter of dispute was extremely complicated and related to rates of payment for plucking in the Assam Valley.

When minimum wages were fixed in Assam in March 1952 it was laid down that there should be no alteration of existing tasks and hours. This presented no difficulty in the case of task work such as hoeing or pruning, since it was clear that a man must be paid 12 annas for a *quantum* of work for which he was previously paid 8 annas. Dearness allowance and food concessions were not correlated to piece work, but were somewhat vaguely linked to a time or daily basis. In the case of plucking, however, the Association contended that no task had ever been fixed. Pluckers were expected to pluck all day and were generally paid half an anna per *seer* of green leaf. No automatic increase of rates was, therefore, legally necessary and it was hoped that the previous rates would meet the minimum wage requirements. It was soon found, however, that an upward adjustment of rates was necessary, since the pluckers would otherwise be the only section of the labour force to receive no increase in earnings. This need for an increase was particularly great in Zone I, since the rate of compensation for the reduction in the rice ration was greater in that zone than elsewhere and that compensation had been absorbed in the minimum wage. It was indeed found in Zone I that unless rates were increased, pluckers might have earned less than previously. Most gardens in Zone I, therefore, decided to pay men 12 annas for the first sixteen *seers* plucked and half an anna for every additional *seer*. This was in effect an additive of 4 annas to the old basic wage. In the case of women the additive was 5 annas.

It was estimated that this would involve an increase of fifteen per cent in plucking costs in Zone I. If the same rates for plucking had been applied to Zones II and III, a much greater percentage of increase would have been involved. Moreover, the reasons for the high increase in Zone I did not operate in Zones II and III. In these zones a relatively small increase in plucking rates was granted, but pluckers were still well able to earn more than the minimum wage. Labourers themselves appeared satisfied with the new arrangements, but unions in Zone II claimed that there was in fact a task for plucking and that compliance with the Minimum Wage Order demanded a straight increase in plucking rates of the same percentage as had been granted in Zone I. They were able to argue in support of their claim that the grant of dearness allowance and concession foodstuffs to pluckers was in fact conditional on the plucking of a certain quantity of leaf – usually sixteen *seers* – and there was thus a

definite task. The Government of Assam supported the claim of the unions and the Government Labour Officer lodged complaints against the managers of Teok and Khonikar Dallim estates before the Deputy Commissioner of Sibsagar in his capacity as the authority under the Minimum Wages Act.

The Deputy Commissioner came to the conclusion that on those two estates there was a plucking task and he found in favour of labour. His finding was upheld in the High Court and although the Indian Tea Association did not admit that these were in any sense test cases, it recommended gardens in Zone II (and a little later in Zone III) to go on to the Zone I system.

This entailed all the gardens concerned reverting to the plucking rates in force prior to the introduction of minimum wages in March 1952 and paying in addition the difference between the basic minimum wage prescribed in the Government of Assam's notification of 11 March 1952 and the basic wage paid before the introduction of these wages.

The additive was 4 annas for men and 5 annas for women. This was not quite equivalent to the straight increase in plucking rates which labour had claimed, but in practice it seems to have satisfied the unions, though they never formally accepted it. The Indian Tea Association recommended Zone II gardens other than Teok and Khonikar Dallim to refuse to pay arrears of the additive.

The whole matter ceased to be of importance when comprehensive plucking rates were introduced, but it well illustrates the difficulties which confronted the tea industry as a result of the absence of a clear and valid order under the Minimum Wages Act.

CHAPTER TWENTY-FOUR

LABOUR WELFARE

The Indian tea industry came into existence at a time when the philosophy of *laissez-faire* was still in the ascendant throughout most of the world. Educated men believed, in the words of the eminent economic historian W. Cunningham, that 'any interference on the part of Government was injurious to the material prosperity of the community, and that no legislative remedy could be devised which would really mitigate the miseries of the poor'. The circumstances of the tea industry soon compelled both Government and employers to take a more enlightened view. Men, women, and children brought hundreds of miles from their own country to the notoriously unhealthy tea districts could only survive if planters accepted responsibility for their welfare. Nor could any government, however strongly disposed to *laissez-faire* doctrines, have long tolerated the appalling conditions under which tea garden labourers suffered in the early sixties of the nineteenth century. Inevitably, planters and Government alike became what we should now call welfare-minded. Welfare on a tea garden means, primarily, medical facilities and housing, to which in later times education and 'social welfare' have been added. In this chapter we shall study these aspects of the labourers' wellbeing in the tea gardens of North-east India.

I. HEALTH

(1) *The Early Days*

When the rapid expansion of the Assam tea industry began, neither the Government nor proprietors had any conception of what was involved in opening up vast tracts of jungle, or of the appalling results likely to follow the importation of labour into Assam from distant parts of India. These results were studied carefully by the Commissioners of 1868 and, although the Commissioners were handicapped by the failure of many gardens to submit returns, their conclusions form a suitable starting-point for our study of health on tea gardens. They throw a ghastly light on the incidence of mortality in the early days of the industry. For the

two years ending 30 June 1867, the average yearly mortality on the gardens of upper Assam was over one hundred and seventy per thousand, while in the Nowgong District, the figure was as high as 249. There were even worse cases and the general position will be seen from the following tables:

Name of garden	District	Half-year	Total strength[1]	Number of deaths	Ratio of deaths per 1,000 during the half-year
Nagagholee	Upper Assam	2nd of 1865	659	107	162·36
Doomdoomer	,,	,,	103	23	223·30
Rungolating	,,	,,	36	14	388·88
Wilton	,,	,,	309	50	161·49
Moran Company's	,,	,,	357	88	246·49
Gilladharee	,,	,,	282	111	393·61
Rangajan	,,	,,	303	71	234·32
Cherido	,,	2nd of 1866	301	110	365·44
Deopanee	,,	,,	227	80	351·98
Tiphook	,,	,,	299	65	217·38
Chota Jallingah	Cachar	2nd of 1865	313	44	140·57
Majogram	,,	,,	243	39	160·49
Doyapore	,,	,,	136	41	301·47
Joypore	,,	,,	275	103	374·54
Diglee	,,	,,	105	27	257·14
Jhulna Cherra	,,	,,	231	46	199·13
Claverhouse	,,	2nd of 1866	305	45	147·54
Alyen	,,	,,	138	26	188·40
Roopa Cherra	,,	,,	255	50	196·05
Monier Khal	,,	,,	170	28	164·70
Sappanulla	Nowgong (Assam)	2nd of 1865	192	75	390·62
Bamonee	,,	,,	150	62	413·33
Hyah	,,	2nd of 1866	254	78	307·08
Pabhai	Tejpore	,,	228	79	344·73
Pertaubghur	,,	,,	415	115	277·10
Aumchung	Kamroop (Assam)	1st of 1866	151	30	198·67
Tiphook	Upper Assam	,,	106	26	245·28
Diffloo	,,	1st of 1867	235	43	182·98
Sylhet & Cachar Tea Company	Sylhet	2nd of 1865	467	103	220·55
Cherragong	Sylhet	,,	203[1]	113	556·60
Ditto	,,	1st of 1866	202	37	183·16
Ootergateh	,,	2nd of 1866	107	27	251·40
Teelaghur	,,	,,	148	24	162.16
Cherragong	,,	1st of 1867	298	41	137·58

[1] Calculated on number remaining, plus deaths during the half-year.

It is impossible to make a quantitative analysis, but it seems clear that fevers, dysentery, ulcers, and cholera were the commonest fatal diseases. The Commissioners were at great pains to establish the causes of this high mortality. They naturally recognized that the tea districts themselves were unhealthy and their description of the unfavourable factors is interesting:

The Valleys of the Berhampooter and the Soorma, in which the Tea Districts are situated, possess all the conditions calculated to render them unhealthy. With a low elevation, subject to great inundation, having a heavy rainfall, and a high temperature, abounding with swamps and jungle, they may be described as hotbeds of malaria. The Assam Valley consists of one low level plain intersected by numerous channels discharging into the Berhampooter. The area covered with rice-fields is but as a drop in the ocean of uncultivated waste. On all sides there is jungle springing up with marvellous rapidity, consisting of reed grass rising fifteen to twenty feet in height, or of forest in which the canebrake is so dense, that even an elephant can with difficulty pass through it. In the Terai ground towards the hills, the country rises; but here forest and jungle are as dense and rank as they are on the plain. In Cachar and those parts of Sylhet which have been taken up for Tea, the case is somewhat different. The surface there is generally broken into innumerable small hills or *teelas*, which are more or less distinctly divided from each other. These were all at one time covered with jungle, but the summits and sides have been cleared and planted. At the base there are generally swamps in which the jungle remains often as dense as ever. If decaying vegetation, aided by a humid atmosphere and high temperature, are the elements required to generate the unknown poison which is called malaria, they exist in abundance in these situations.

The Commissioners found themselves floundering in a morass. There were no proper measuring rods which they could apply to the new situation. The best comparison available to them was that of the mortality from sickness in the field force employed in the Bhutan War in 1864–5. In that year, although a quarter of the force was sent away on sick leave, deaths during or as a result of service in the campaign amounted to a hundred and sixty per thousand. Even by these standards, tea-garden mortality figures were alarming.

The Commission threw out the suggestion that an improvement might be effected by carrying out the initial jungle-clearing operations for a new estate in the cold weather and then withdrawing the labour force until the next winter. They then probed more deeply into the causes of the very high death rate and they soon realized the great difference between 'old established gardens, where the cultivation is extensive and the comfort of the labourers well provided for' and the new gardens where labourers' lines were often on the edge of clearings, surrounded by jungle and where no amenities of any kind existed. To

some extent, this difference was unavoidable, but the Commissioners found five main preventible causes of high mortality. In the first place, persons not sufficiently robust to cope with unfavourable conditions were often recruited; secondly, they were in many cases sent to Assam in the rainy, unhealthy season of the year; thirdly, they were badly accommodated on many gardens both as to the construction and the siting of their houses; fourthly, their drinking water was often drawn from a pool or a muddy stream, nearly stagnant for a great part of the year, in which they also washed; while, finally, in many cases medical facilities were inadequate. The Commissioners recognized that many gardens were striving to rectify these defects.

Our attention must first be directed to medical facilities. Act VI of 1861 laid it down that every estate with three hundred labourers or more, must employ a medical officer. The Commission of 1868 recognized that this requirement had been implemented and that 'native doctors' on high salaries were common all over the tea districts. They found, however, that these doctors were generally unsatisfactory, either through ignorance or from dishonesty, and their remarks in this context are interesting:

> Native Doctors on high salaries are common over the Tea Districts, especially in Assam. As a rule, however, they are most unsatisfactory practitioners. Generally, they have been either ignorant or inexperienced; or where they have had experience, they have been careless and dishonest.

The 'medical gentlemen' consulted by the Commission attributed the high mortality rate at least partly to lack of care in the hospitals. The 'native doctor' generally provided the diet and apparently often regarded this service 'as a means by which he could make a profit at the expense of the sick and dying cooly'.

It seemed clear that European medical supervision was necessary and the Commission proposed the division of the tea districts into circles, in each of which a European medical officer would be stationed. All gardens would be required to pay him retaining fees for regular visits. It was thought that his combined salary from the Government and from the tea gardens should be between Rs 500 and 600 per month. Apart from his strictly medical duties, he would also submit monthly sickness and mortality returns and generally report on medical and sanitary conditions on the tea gardens in his circle. The magistrate would on the strength of the circle medical officer's report, be empowered to order managers to take action and to impose fines for default. It is perhaps a pity that this proposal for the compulsory implementation of medical requirements was not accepted.

The health of tea-garden labour in Assam was next examined in 1873, when J.W. Edgar submitted to the Government of India a report on tea

cultivation, for which that Government had called from the Government of Bengal in the previous year. In his study of the early position, Edgar mentioned one factor affecting health which had escaped the attention of the 1868 Commissioners. It was the simple fact that between 1862 and 1864, the number of imported labourers far exceeded the supply of food available for them. It had been assumed that the supply of food would follow the demand created by the importation of labour. This did not happen and although a few far-sighted planters themselves encouraged the cultivation of foodgrains, in general the Assam labourer was inevitably underfed.

Nevertheless, a great improvement in health and a corresponding reduction in mortality had occurred by 1873. The comments of the Deputy Commissioner, Cachar, on this subject, quoted in Edgar's report are interesting:

> The decrease in the mortality-rate is satisfactory. It appears to be due to several causes: –
> 1st There have been no new gardens opened in remote situations buried in jungle and far from bazaars and villages.
> 2nd There have been fewer labourers imported.
> With regard to these two points, I think it may be taken for granted there must be a high mortality among large bodies of newly imported labourers, and so also in newly opened jungly gardens; and where these two causes coexist the mortality must be very excessive.
> 3rd Improved medical supervision.
> 4th Greatly improved management and accommodation.
> 5th Increase in the number of bazaars.

At the same time, the Assistant Commissioner of Mangaldai stated that importation of coolies was now rare and referred to the resulting low mortality in his areas.

The Deputy Commissioner of Lakhimpur submitted striking statistics of the decrease in mortality on tea gardens, though by modern standards it was still very heavy.

Period	*Total number imported*	*Total deaths*	*Percentage of deaths*
2nd half of 1865	8,098	999	12·33
1st half of 1866	10,397	437	4·20
2nd half of 1866	9,362	714	7·62
1st half of 1867	9,291	224	2·41
2nd half of 1867	7,438	266	3·57
1st half of 1868	6,897	106	1·53
2nd half of 1868	6,123	192	3·13
1st half of 1869	5,223	132	2·52

2nd half of 1869	3,436	148	4·33
1st half of 1870	6,162	89	1·44
2nd half of 1870	6,681	179	2·67
1st half of 1871	7,205	103	1·42
2nd half of 1871	5,413	163	3·01
1st half of 1872	6,880	112	1·62
2nd half of 1872		Not received	

There can be no doubt that tea-garden managers were becoming health-minded and although at that time practically nothing was known as to the causes of malaria, or as to the treatment of cholera, the next thirty years were a period of marked improvement.

(2) *A Period of Improvement*

The subject was studied in some detail by the Enquiry Committee of 1906. That committee was impressed by the decline in the death rate – which according to the Assam emigration reports had fallen to 22·9 per thousand in 1904–5, and by the fact that 'lighter work and the opening up of the country have led to a general improvement in the health of the labour force'. The report does not deal directly with medical facilities, but it is clear from other sources that a great advance had taken place.

In 1908 Captain Christophers and Dr Bentley surveyed the position with regard to malaria in the Dooars, and were apparently very critical of medical conditions on tea estates. In 1910, the Government of East Bengal and Assam therefore appointed the Dooars Committee, under the chairmanship of the Honourable Mr S. J. Monahan, ICS, to inquire into the sanitary and economic conditions of labour in the Dooars. All attempts to obtain a copy either of the report of the two doctors, or of the Report of the Dooars Committee have so far failed, but it appears from the annual report of the Dooars Planters Association for 1911 that the Dooars Committee refuted many of the statements of the two medical officers. The Government of East Bengal thus commented on the divergence of views.

> It must in the first place be remembered that the two enquiries were carried out at different times. Captain Christophers and Dr Bentley held their enquiry in 1908, which was a year of scarcity, unhealthiness, and high prices, and was marked by an abnormally large importation of new coolies, many of whom emigrated to escape from conditions of distress in their native districts and were probably of poor physique. Conditions were much more favourable in 1910 when the Dooars Committee held their enquiry, and for this reason it would be somewhat unfair to test the accuracy of statements which refer to conditions in 1908 by evidence and facts collected in 1910. In the second place the Dooars Committee themselves admit that the statistics collected by them, valuable as these are, have not in many cases been subjected to check, and caution must therefore be exercised before they are accepted as final evidence.

Nevertheless, it was quite clear that there were serious deficiencies in medical arrangements in the Dooars. The Government of East Bengal and Assam considered the question as to whether protective legislation to impose upon employers the obligation to provide satisfactory medical and sanitary arrangements should be introduced or not, and decided against such a course, 'in view of the fact that the economic condition of the labour force is generally satisfactory and that there is a general disposition amongst employers to effect improvement'.

The industry accepted these criticisms in the right spirit and set to work with determination to remedy the defects which had been revealed. The application of new knowledge and the constantly increasing interest taken by the tea industry at this period soon began to show results and mortality rates came down rapidly.

The Assam Labour Enquiry Committee of 1921–2 was able to report that 'most gardens are equipped with an ample supply of medical and surgical appliances, and on large estates the expenditure on hospitals and medical stores is a very considerable item' . . . 'Many hospitals in the Assam Valley fulfill all modern requirements and leave nothing to be desired.' On the other hand, the committee referred to a garden where the indoor hospital accommodation consisted of a temporary grass hut attached to a dispensary, and in the Surma Valley they attributed the unwillingness of coolies to come into hospital to the fact that the accommodation was often of an inferior character.

At the same time the committee commented on the backwardness of conservancy in the tea districts. As early as 1917 the Sanitary Commission had issued a pamphlet calling attention to 'the substantial improvement which may be expected in the health of the labour force by introducing a system of conservancy'. Managers were divided on this issue. Many held that coolies would not use latrines, while more progressive managers were convinced that if latrines were well built and kept clean, labour could soon be taught sanitary habits. It is interesting to note that the same argument was still going on when the author first became connected with the tea industry in 1937, though experience was beginning to establish beyond doubt the popularity of individual latrines in labourers' houses.

The committee also examined the position with regard to sickness and maternity leave. They found that on most gardens adequate financial assistance, generally in the form of leave on half pay, was given to the sick, but that in the matter of maternity leave the range of variation from garden to garden was very wide. At one end of the scale they found gardens which gave six months' maternity leave on full pay; while at the other end, there were gardens which confined their assistance to free meals in the hospital if the pregnant woman chose to go for them.

Perhaps the majority of gardens occupied a mean position and gave three months' maternity leave with pay.

(3) *The Growth of Medical Knowledge*

In spite of the improvement of medical facilities on tea gardens, greater scientific knowledge was necessary before substantial progress could be made. In 1914, the School of Tropical Medicine was opened in Calcutta and new light began to be thrown on the diseases common to the tea districts, such as malaria, *kala azar*, and hook-worm. The Indian Tea Association realized the importance of the School of Tropical Medicine at the outset and contributed substantially to its upkeep.

In 1925 a new and spectacular phase of the fight against malaria opened and its unfolding has been well described by Rege in his Report on the Conditions of Labour on Plantations:

> Until 1925, very little was known regarding the habits of those particular malaria mosquito carriers which inhabit the plantation areas. Dr Ramsay, the then Medical Officer of the Labac Central Hospital, started his great work on malaria control in 1925. He studied the habits and breeding places of mosquitos and in the end solved the puzzle, detecting the principal carrier, *Anopheles Minimus* in the course of fifty thousand dissections. He evolved the plan of densely shading drains and swamps, having found that it did not breed in these conditions.

In 1930 this work was put on a more systematic basis by the establishment of an Assam Branch of the Ross Institute of Tropical Hygiene to which the tea industry subscribed generously. Ramsay, whose work was based on methods tried elsewhere by Sir Ronald Ross, became the first director of the branch and was indeed for years the focal point of all advance in this field. Some years later, Sir Malcolm Watson, director of the Ross Institute, was able to state 'without hesitation and without qualification that in the last decade nowhere in the British Empire had such progress been made in the control of malaria as in the tea estates in India; it is a remarkable achievement'.

(4) *The Royal Commission on Labour*

In the meantime, health conditions on tea estates had again been investigated. The Royal Commission on Labour found that death and infantile mortality rates were lower on plantations than elsewhere in India; that the physique of tea-garden labour appeared better than that of the population of the recruiting areas and 'that in many of the larger and more progressive concerns the medical arrangements are of a high standard'. On the other hand they noted that 'in the case of the smaller gardens as might be expected the medical arrangements are often unsatisfactory both as regards staff and facilities for treatment'. They

observed that in such gardens 'the compounder takes the place of the medical officer, the dispensary contains a minimum of drugs, while the so called hospital accommodation is uninviting'. They found that there were also gardens in which no medical facilities of any kind existed. They recommended the establishment of central hospitals serving groups of gardens.

Water supply seemed to the Royal Commission to be 'generally speaking, reasonably satisfactory' but they noted that 'in most plantation areas latrines are uncommon', and they justly remarked that without latrine accommodation, mass treatment of hook-worm was bound to be ineffective. The Commission's comments on the housing of labour will be considered later in this chapter.

The Royal Commission's main criticism of the medical and health arrangements in the industry was directed to the lack of co-ordination or even of interchange of ideas between different gardens, or between the industry and the Government. To remove this deficiency, they proposed the establishment of a Health Board, financed by a cess and empowered to issue regulations with regard to the provision of health and medical facilities. This proposal was not implemented and in the following years progress continued to depend on voluntary action on the part of tea companies. Fortunately, the industry at this time was very health-minded and progress was rapid.

(5) *The Second World War and After*

The impact of the war will be discussed in a later chapter. Here we need only note that it put an end to progress for the time being and that the absence on service of a large proportion of European planters and doctors, as well as the difficulty of obtaining insecticides, resulted in a curtailment of anti-malarial measures. At the same time, the shortage of drugs and medicines and the difficulty of constructing or extending hospitals made it impossible for medical facilities to expand in proportion to the growth of the population. The unavailability of the protective foods also led to serious malnutrition in the tea districts.

In 1944 D.V.Rege conducted an inquiry into conditions on tea gardens. In some respects his report was superficial and as the subject of health was studied in much greater detail by another official enquirer a few years later, we need not dwell on the Rege Report in its relation to health. One comment, however, must be made. Rege states that from 1929 to 1944 the garden death rate in the Assam tea districts was higher than the death rate for the rest of the province. If this statement were correct, it would be a complete reversal of the position in the previous two decades. It is true that garden death rates had increased considerably during the war, but the figures quoted by Rege for the general Assam death rate – ranging from 15·42 to 19·25 per thousand during this

period – seem to be completely unreal. R. A. Gopalaswami made a scientific study of birth and death rates in his 1951 Census Report and arrived at the conclusion that the death rate for Eastern India was between twenty-six and twenty-eight per thousand. There can be little doubt that the general Assam figures quoted by Rege are unduly favourable as a result of the defective recording which could have been expected in what had for long been one of the least efficiently administered States of India.

In 1946 the Indian Tea Association decided to review medical facilities on tea gardens in the light of the further knowledge and experience gained before and during the war. The writer put up proposals for the organisation of tea-garden doctors on an industry-service basis with compact geographical practices. It was felt by the Association that a somewhat impersonal arrangement of this kind would have disadvantages as compared with the system under which tea-garden practices are organised and financed by individual agency houses or by companies. Professor Macdonald of the Ross Institute was therefore asked to inspect the medical facilities of the industry in Assam and make recommendations for their improvement.

At a tripartite conference in New Delhi in January 1947 the Government of India proposed to levy a medical cess from which medical services in the tea districts would be financed. Once again the Indian Tea Association objected to the substitution of an impersonal service for the individual human interest of agency houses and managers. Government dropped this proposal, apparently accepting the view that it would meet the case if they laid down standards and insisted on their observance.

Recovery from war-time difficulties affecting health and the tea-garden medical services was necessarily slow and conditions had by no means returned to their pre-war level when Major Lloyd Jones, IMS, was deputed by the Government of India in 1947 to draw up standards for the medical care of labour in tea plantations, as had been suggested by the employers' representatives at the first Tea Plantation Labour Conference in January 1947.

When the Lloyd Jones Report was published, the general opinion in the tea industry was that he had judged conditions in the tea districts by ideal standards which obtained nowhere in India. Nevertheless, many of his criticisms were unanswerable and were borne out by the observations of experienced planters. In the Assam Valley he formed a general impression that labour was under-nourished and lacking in vitality and that nearly all hospital patients were anaemic. He recognized that this was largely the result of the war-time and immediate post-war shortages of protective foods and also that, to some extent he was unconsciously comparing tea-garden labourers with the vigorous people of Northern

India with whom he was more familiar, but he picked out the high maternal mortality on tea gardens as an index which could not be disputed. General mortality rates were no higher than in the rest of the province, but Lloyd Jones was rightly shocked by the fact that for every thousand live births in the tea districts, twenty-nine mothers died.

In the Surma Valley he found the general standards of health rather better, even though the standards of medical care were on the whole inferior to those in the Assam Valley. It seemed to him that the reasons for the difference were, firstly, that the Surma Valley labour force consisted, not of immigrants, but of a settled population; secondly, that a higher proportion of labour in the Surma Valley were non-vegetarians; and, thirdly, that labour in Surma Valley was much more inclined to grow vegetables and keep cattle – largely no doubt because Surma Valley tea gardens are often very large and land for the private use of tea garden labourers is readily available. The contrast between the Assam Valley and the Surma Valley is revealing. All experienced planters know that the short-term immigrant seems obsessed during his three years' term of service with the determination to make as much money as possible. He (or she) half starves himself in order to remit considerable sums of money home. The settled labourer, on the other hand, spends his earnings and feeds himself well. Moreover, he naturally develops greater confidence in the manager and the garden doctor. He and, more particularly, his womenfolk are therefore more ready to go into hospital when necessary than is the case with the short term immigrant. This is of particular importance in childbirth, where the immigrant labourer as a rule only calls in the doctor when difficulties have arisen – and it is then often too late.

Nevertheless, Lloyd Jones pointed out that – apart from immediate post-war conditions – the prime causes of the unsatisfactory state of affairs were poor conservancy arrangements, lack of protective foods, and malaria, even though, as he recognized, 'the anti-malaria campaign in the tea industry in India has been the biggest single campaign against disease anywhere in the world'.

In Bengal, where the impact of the war had been less severe, he found conditions rather better than in Assam, and he observed that the life of a Dooars labourer was in a sense more natural than that of his fellow in Assam. He lived in an independent holding rather than in lines; he grew more of his own food requirements; and above all he was a settled labourer.

In his study of the medical organization of the tea industry, Lloyd Jones revealed himself as something of a theorist with a bureaucratic desire for uniformity. His description of the different types of medical practice is nevertheless interesting. Firstly, there is the Medical Association financed by a number of companies who employ a senior medical

officer to supervise the medical officers on all the gardens of the group. Secondly, there is the private practice – and in this case the doctor has individual contracts with a number of companies. Thirdly, there are company practices where the whole of the practice is carried on in gardens controlled by one company or agency – though the medical officer himself may also exercise medical supervision in his individual capacity over a few independent gardens. Lloyd Jones criticized all these systems on the grounds firstly, that medical policy was to a great extent settled by laymen rather than doctors, and secondly, that one doctor might be concerned with gardens in which different health policy standards prevailed. The first objection would apply equally to the health services of any public or private corporation, while the second defect is mainly an inevitable consequence of the different financial position of different companies. In spite of his criticisms Lloyd Jones recognized that in many cases the general level of medical care was very high – though he regretted that in Darjeeling there were no medical practices and individual garden doctors tended to work in deadening isolation.

A fair general comment would be that Lloyd Jones was not sufficiently conscious of the great superiority of tea-garden medical facilities over those under which the great majority of the inhabitants of India still suffer. Nevertheless, when he turned from generalizations to concrete proposals, he became more practical. He laid down that the availability of simple medical care was more important than the provision of specialist hospitals, and he put forward a number of sound proposals for the improvement of tea-garden medical facilities. It is not worth while discussing those proposals in detail, since they have to some extent been superseded by the Plantations Labour Act, under which standards for hospitals are to be laid down by the Government. On the whole, although there is much in the Lloyd Jones Report which could be criticised, his strictures had a stimulating effect. They compelled companies with good hospitals to be a little less complacent, and perhaps made the laggards slightly ashamed.

By 1950 conditions seemed to be returning to normal after the war and the Association encouraged its members to make a determined effort at further improvement in the medical services on tea gardens. In 1951 progress in the construction of hospitals was unfortunately held up by the inability of the Government to make cement and other materials available, and in the following year when the Government offered larger quantities of these essentials, the serious financial condition of the industry made it impossible for many companies to accept the offer. In 1953 the financial condition of the industry had improved, but the Government were then quite unable to say when supplies of cement could be made available. In spite of these difficulties considerable

progress was made as will be seen from the following figures taken from the Association's Annual Report for 1955:

	ITA members standards at 31.3.55	Lloyd Jones standards	Bhore Committee standards		
	—	—	End of 5 yrs 1951	End of 10 yrs 1956	Long-term plan 1971
	(per thousand population)				
Hospital beds	11·34	10·00	0·55	1·02	5·67
Doctors	0·60	0·40	0·05	0·09	0·62
Midwives	0·74	0·40	—	—	—
Nurses	0·73	1·00	0·10	0·23	1·81
Compounders	0·55	0·40	—	—	0·23
Anti-malaria assistants	0·23	0·40	—	—	—

The Association's record is in fact in many respects in advance of the standards laid down by the Lloyd Jones and the Bhore reports.

II. HOUSING

The fact that tea gardens were initially established in areas of dense jungle naturally meant that labour must be housed by the industry, and even when the jungle had been cleared, the same necessity continued, since labour was not indigenous but came from distant provinces. The importance of satisfactory housing was emphasized by the 1868 Commission who stated bluntly that 'want of proper houses for the labour had been a serious evil – even though the cost of construction was small'.

Many planters told the Commission that coolies tore down the *machans* of their houses for firewood, but the Commissioners' comment on that complaint was that 'managers who interest themselves in the welfare of their labourers . . . have sufficient influence to overcome this difficulty'. The Commission laid it down that the floor should be two feet from the ground, the sides as nearly as possible impervious to the deadly night air, and the roof well thatched. They called attention to the many cases of overcrowding, where labourers had less than twenty-five feet superficial area per head, and they recommended that statutory directives should be issued laying down in detail the nature of the proper house accommodation which planters were required to provide. They condemned barrack-like sheds merely divided by partitions running up to within

two feet of the roof and they pointed out that labour lines were often on the very edge of the area cleared and in the immediate neighbourhood of rank jungle.

In the next two or three decades, housing conditions on tea gardens steadily improved and the 1906 Committee of Enquiry was favourably impressed with the material condition of labour in Assam. It reported that water supply was generally good, that coolie lines occupied well-drained sites, and that houses were in good repair and commodious, even 'if not perhaps sufficiently in accordance with the labourers' idea of comfort'. The Committee's standards were perhaps not high, but they pointed out that it was repugnant to aborigines and semi-aborigines to be obliged to live in a communal barrack.

> Every facility will have to be given to separate castes to form their own little hamlets and assimilate as far as possible their life on the tea garden to their life in their own country. Everything possible should be done to encourage the provision of a separate house for each family, a reform which is already being effected on many gardens. Too much stress cannot be laid on the necessity of a pure water supply and a healthy and well-drained site; but when these are secured coolies should be allowed to build the class of houses they prefer, and to form the societies which are most congenial to them. The Committee have heard of a garden on which not only had the coolies to live in barracks, but as far as possible people of the same caste were separated from each other. Nothing could possibly be more distasteful than this to the class of labourer whom it is sought to attract.

It is clear from these comments that the indefensible barrack-line system was only too common in the Assam Valley. In the Surma Valley very different conditions prevailed. Garden grants were often very large in relation to the tea area and economy of space was unnecessary. Labourers lived a free and easy life and in many cases were allowed to build their own houses according to their liking, the gardens supplying the materials.

When conditions in the Dooars were examined by the Dooars Committee in 1911, it was found that housing and water supply left much to be desired. The Committee's report is not forthcoming, but it appears from references in the Indian Tea Association report that the absence of plinths, inadequate floor space, congestion, and low-lying lines were particularly criticized.

In 1922 the Assam Enquiry Committee again examined living conditions in tea gardens, and their remarks on the subject of housing are illuminating.

> In some gardens coolies live in separate houses with a vegetable garden attached to each, and in others in more or less congested barracks. In fact, broadly speaking, there are two systems, the system of barrack lines and that

of the *bustee* or small village. The former prevails on gardens where the location of a large labour force in a small area is more or less obligatory, and the latter, where more space is available for groups of houses constituting a scattered hamlet or village . . . Unfortunately on some large estates owing to want of foresight there is no room for hamlets, any more than for rice cultivation, grazing and fuel reserves, as the main area of the grant is under tea cultivation. Barrack lines, especially in the Assam Valley, are usually substantial structures, often with iron roofs and brick walls. It is probable that where the coolie is compelled to live in congested barrack lines under more or less artificial conditions there is a tendency towards more rigid disciplinary methods, as perhaps is inevitable in the interests of sanitation alone. Speaking generally, every effort is made to provide the coolie with good houses, and the initial and repair cost of lines must often be considerable . . . There are gardens where coolies are allowed to build their own houses, thatching grass and other building materials being available free from the grant. The Tara Tea Company on the eastern verge of the Doom-Dooma district affords an interesting example of both systems. The estate consists of 3,600 acres, of which 1,200 acres are under tea. There is one set of barrack lines with iron roofs inhabited by East Coast Uriya coolies. A staff of sweepers is maintained and iron latrines are provided which are said to be used by eighty per cent of these coolies. There are three sets of widely scattered *bustee* lines which are really coolie villages with *baris* and cultivation on high and low land adjacent. In these hamlets the coolies build their own houses and receive an advance of Rs 5 in the first instance to enable them to do so; a large proportion of the labour force live in these hamlets and all have an option and no one is compelled to live in the barracks. The Cuttack Uriyas, however, are said to prefer the barrack lines while coolies from the Kalahandi State and aboriginal or semi-aboriginal labourers prefer the village system. . . . Managers differ as to whether a coolie prefers to live in houses provided by the garden or built by himself and opinions are probably coloured by individual experience of particular districts and classes of labour. It is possible that coolies of some castes are gregarious and prefer to live in barrack lines; most coolies, however, particularly those belonging to aboriginal races, prefer detached houses built by themselves, and like to live with people of their own race or community.

The modern tea garden manager will learn with envy that at that time a *pucca* house for two families cost Rs 300, while in Sylhet a *kutcha* house might cost Rs 60.

In 1926 the Royal Commission on Labour referred to the considerable improvement in housing that had taken place, but repeated the criticism that 'plinths are seldom provided, floor and cubic space are often inadequate, while light and ventilation are too frequently entirely ignored'. They also remarked that 'the addition of suitable verandahs would also give some degree of privacy, a feature which is much appreciated but has received too little consideration in the housing of labour in the past'. They were impressed with the great variation between the good and the bad estates in the matter of housing and considered that a

statutory authority should be set up to bring about a levelling up of standards. Unlike many modern Indian politicians they realized the advantages of the *kutcha* house.

> The average labourer is probably right in preferring the thatched house, which is cooler in the hot weather and warmer in the cold season. He also considers it healthier, although there is nothing to prove that the corrugated iron or asbestos roofs have any deleterious effect on health. We think that the workers might be encouraged, under supervision, to build their own houses on approved sites, where a definite sanitary lay-out had been prepared and where proper plinths had been provided.

In recent times, labour leaders have tended to regard a *pucca* house as progressive and a symbol of the dignity of labour, but from the labourer's point of view there is a great deal to be said for the relative comfort of a *kutcha* house. A *pucca* house is, of course, cheaper for the employer in the long run.

The Commission was critical of the fact that few plantations had made any serious attempt to provide bathing and washing places for their labourers.

In 1938 the whole question of the housing of labour was re-examined by the Indian Tea Association. It was realized that uniform specifications for houses all over the North Indian tea districts would be quite unsuitable – different racial and tribal customs and prejudices, local availability of materials, variations in climate and in the layout of gardens were obvious factors which would make standardization unwise. It was, however, agreed that between estates in the same locality there should not be arbitrary differences arising out of varying degrees of generosity of proprietary interests. After careful local inquiries specifications of very sensible and practical a character were laid down by the Assam Branch Indian Tea Association.

Unfortunately the war and the resulting shortage of materials made the implementation of these plans impossible and little progress was achieved until 1947. In that year, after a Government proposal to establish housing boards and enforce building programmes had been opposed by the industry and dropped, standards agreed to by the Indian Tea Association and other associations were submitted to the Governments of Assam and West Bengal for approval. These standards were in fact a revision and adaptation of the Assam Branch Indian Tea Association pre-war recommendations. Steel and cement were at that time in short supply – as they still are – and the Association's proposals therefore provided for semi-*pucca* houses. Even these houses would require a certain quantity of cement, but the Indian Tea Association expressed the view that 'if such supplies were forthcoming it would be possible to construct houses conforming to the minimum standards at

the rate of five per cent per annum'. The standards proposed are recorded in the Report of the Indian Tea Association for the year 1947. In 1949 the Assam Government suggested certain modifications in the standards for plains gardens, the most important item being a much disputed increase in the height of the roof, and the provision of a separate kitchen. The Indian Tea Association accepted the proposal regarding the height of the roof, but on the basis of practical experience of labourers' likes and dislikes, disagreed with the proposals for a separate kitchen. The standards ultimately fixed are recorded in the report of the Indian Tea Association for 1950.

The Government of India approved the agreed specifications after the third session of the industrial committee on plantations in November 1950 and asked for an assurance that the industry would construct houses in accordance with the new specifications for eight per cent of the labour force each year. The Association was fully in sympathy with the desire for better housing and members were recommended to press on as fast as possible, but it was pointed out by the Association that the rate of progress must clearly depend on the financial position from time to time and it was impossible to give the guarantee suggested.

In 1954 the Association endeavoured to calculate the probable cost of housing the entire labour force in *pucca* houses in accordance with the new specifications. Its calculations were based on a cost of Rs 2,000 per house with Rs 500 additional for water supply, and it was assumed that one house would be required for every two and a quarter workers. It appeared that the total cost would be in the neighbourhood of Rs 50 *crores*. In order to reduce this staggering figure and also to economize in scarce materials, the Association sought permission to construct semi-detached houses in Assam. Government eventually agreed to these proposals, but opposition from the unions was strong and this economy has not in general been effected.

It is difficult to see how the industry will ever be able to finance housing on the approved standards and interest attaches, therefore, to suggestions which have been made from time to time, that Government should assist. In 1952 the Government of India put up a scheme for subsidizing the construction of housing for industrial labour, but it subsequently appeared that only the houses of factory workers would be eligible for the subsidy. The scheme was therefore of little interest to the tea industry.

In 1955 the Government of India declared their readiness to grant loans under the Second Five Year Plan to tea companies for the construction of labourers' houses up to eighty per cent of the actual cost. The loans would bear interest at about 4½ per cent and be repayable in thirty equal annual instalments. When the scheme was disclosed to the tea industry in 1956, it appeared that the loans would only be avail-

able to small estates. This restriction was subsequently removed, but it was left to the State Governments to implement the scheme. Up to the end of the period with which this book is concerned the rules had not been finalized and members of the Indian Tea Association had not in fact been able to take loans under this scheme.

III. EDUCATION

Until early in the twentieth century educational facilities on tea gardens in North-east India were almost negligible. A few enthusiastic and liberal-minded managers organized primary schools, but perhaps the majority of planters held the view that education would unfit children for work on tea gardens and in the absence of other forms of employment, would merely create discontent. Government in the nineteenth century took little or no interest in this matter, while labourers themselves regarded the earnings of their children as of greater value than time spent in primary schools.

In 1906 the Government of East Bengal and Assam awoke to its responsibilities and Captain W. M. Kennedy was deputed to survey educational facilities on tea gardens. His report showed that about five thousand children were attending either government or tea-garden schools, but that labour was apathetic and such schools as there were depended on the interest of the managers.

Kennedy proposed the establishment of three categories of schools, namely:

(a) Government lower primary schools.
(b) Government-aided garden schools.
(c) Private, unaided garden schools.

The interest of the Government faded as soon as Kennedy had presented his report and for over twenty years it was left for enthusiastic individual managers to start schools in the third category.

In 1930 the Director of Public Instruction, Bengal, called attention to the fact that in the Darjeeling Hills and in the Terai there were still many gardens without schools, and suggested that each garden should undertake the upkeep of a school. Planters and agency houses were responsive and the Darjeeling and Dooars Sub-Committee of the Indian Tea Association accepted a recommendation of the Darjeeling Planters Association that educational facilities should be provided on every garden in collaboration with the Church of Scotland Mission, and that proprietors of agency houses should finance garden education to the extent of Rs 5 monthly for every hundred of acres under tea.

In 1930 the Director of Public Instruction, Assam, asked the Association to what extent its constituents would be prepared to support a scheme for the extension of education on tea estates. The Association declared itself willing to co-operate, but no scheme appears ever to have

been produced by the Director of Public Instruction. The industry itself now began to give more attention to this aspect of estate life. This development was stimulated by public criticism and by the suggestion that legislation making the establishment of schools compulsory might be introduced. In 1938 the Indian Tea Association laid it down as a matter of policy that there should be one good primary school on each garden, that the manager should take a personal interest in the school, and that he should submit to his proprietors a yearly report on progress. At the same time notes, intended to assist managers in the organization of primary schools, were issued by the Indian Tea Association.

From this stage onwards, progress was marked, and by 31 March 1942, there were 547 schools on Assam tea gardens, 467 of which were maintained entirely by the companies concerned at an annual cost of Rs 1½ *lakhs*. The Government still continued to lag behind in this matter and the local self-governing authorities took little interest in tea-garden areas.

At this time there was a good deal of discussion as to whether primary education in the tea districts should be the responsibility of the State or of the tea industry. By 1947 the view had gained ground that the tea industry was not in a position to discharge this responsibility adequately, and at the Tripartite Conference in 1947 representatives of the Indian Tea Association suggested that provincial governments concerned should introduce and administer compulsory primary education in accordance with the respective provincial Acts. The industry would continue to assist in the matter of providing buildings. The same view was put forward in 1950 and the Indian Tea Association rejected a proposal from the Central Education Board that the tea industry should accept full responsibility for the running of primary schools, but should be exempt from payment of education cess. The Association stated emphatically that though its members would construct and maintain school buildings, they were not competent to discharge the responsibility for running the schools.

In West Bengal this view has been accepted. All estates pay education cess and have no further statutory responsibilities for education. In Assam the old system – or lack of system – continues.

IV. MATERNITY AND SICKNESS BENEFITS

Certain other aspects of welfare on tea estates before the passing of the Plantations Labour Act call for comment and prominent amongst them are maternity and sickness benefits. Before the Second World War these measures were in the main unregulated and the estate manager used his discretion with regard to them. This system worked well, since most managers had a genuine interest in the well-being of labour. Interesting evidence on this point is provided by a letter addressed by the Indian

Tea Association to the Government of Bengal in 1938, when that Government first contemplated the introduction of statutory maternity benefits on tea estates. The information contained in the letter was based on a questionnaire issued to 228 estates, 179 of which replied. In all cases it appeared that provision was made for the care of pregnant women, before, during and after confinement and in 166 gardens monetary benefits were also provided.

The general remarks of the Indian Tea Association in this letter deserve quotation:

> The relationship between employer and worker is not that of money economy nor can it readily be translated into the wage terms which are characteristic of modern urban industrial relations. Thus while it is usual to find on a majority of estates maternity schemes which include the payment of monetary benefits it is the invariable practice for such benefits to be supplemented by the provision of free medical attention, medicine, and where necessary by hospital facilities both before, during and after confinement, and in many cases by the maintenance of special clinics, trained midwives, and special food for the expectant mother or, after birth, for the mother and child. It is difficult to assess the value of such services: in all cases however they form an integral part of maternity benefit schemes and in so far as they provide skilled professional attention for every mother both before and after confinement it may be questioned whether they are not of greater value than the mere payment of monetary benefits, however generous such benefits may be.

The letter went on to analyse in great detail the benefits provided and showed that much thought had been given to the needs of the expectant mother and to the desirability of anti-natal supervision. The contemplated legislation was dropped.

A similar state of affairs prevailed in Assam, and when the Assam Government in 1944 introduced a Maternity Benefit Bill, representatives of the tea industry in the Assam Legislature gave it wholehearted support and pointed out that the practice of well-run tea gardens was in advance of that provided by the Bill. Assam planters at this time attached great importance to the regular appearance of the young mother and infant at the hospital, and some planters felt so strongly on this subject that they would even have made the payment of the maternity bonus conditional on such attendance. This suggestion was not adopted.

Rege's comments on the payment of voluntary maternity benefit in Assam are of interest:

> There is a great deal of variety in the method of paying maternity benefit and the most usual method is a weekly payment of about 8 annas to a rupee or so for sometime before and after birth. In some gardens, the woman is given leave for three months and is paid her daily *hazri*. Some gardens give a bonus of Rs 5 at the time of childbirth, while some others give the bonus to the mother when she comes to work or if the child is alive at the end of the year

and is regularly brought for medical inspection from birth onwards. The total benefit, generally speaking, ranges from Rs 14 to Rs 25. The amount is usually paid in cash, though some gardens give a portion of it in kind. Some gardens also give extra milk to pregnant and nursing mothers. As stated by the Indian Tea Association in its reply, both philanthropical and business considerations continue to encourage a liberal policy with regard to maternity benefits on tea estates. It is after all cheaper to facilitate the birth and growth of healthy children than to recruit the future labour force from distant provinces.

Rege went on to deal with the new Assam Maternity Benefit Act (Assam Act I of 1944) and remarked as follows:

Some of the sampled European-owned gardens were found giving higher benefit than is prescribed under the Act, but it was noticed in one or two gardens that it was reduced as a result of the Act in spite of the recommendation of the Indian Tea Association to the contrary. Some of the sampled Indian-owned gardens give very little maternity benefit and will have to increase it now at least to the extent required by the Act.

In Bengal, where no maternity benefit legislation was in force at the time of his inquiry, Rege found that most estates paid the benefit according to scales varying between Rs 10 and Rs 18/8 in the Dooars, and between Rs 2/8 and Rs 19/8 in Darjeeling. He also noticed that in both the Dooars and Darjeeling some gardens gave a bonus of Rs 5 in addition to maternity benefit if the child survived the first year.

In 1947 the Government of Bengal proposed legislation to make the payment of maternity benefit compulsory on tea estates. The Indian Tea Association supported the proposal and agreed that the scale of payments should be Rs 5/4 per week for eight weeks. The relevant Act came into force in 1949 and provided for a maternity benefit for a period of twelve weeks in the form of a daily cash allowance of 8 annas together with concession foodstuffs. In Assam at that time the corresponding benefit was 11½ annas a day in cash, together with concession foodstuffs, for a period of eight weeks.

Generally speaking, it could be stated that maternity benefit legislation merely gave statutory force to what most British-owned gardens had long been doing and when the Assam Rules under the Plantations Labour Act provided for twelve weeks leave with pay – four weeks before and eight weeks after maternity – no additional burden had to be borne.

In the matter of sickness benefits, too, there was great variation in the traditional arrangements on different estates, but the evidence is overwhelming that most estates were liberal in their attitude, though there was always the problem of dealing with the malingerer. Rege commented thus on this subject with respect to the Dooars:

In the Dooars payment of *hazri* to sick patients was said to be customary, but it was found during the enquiries that it was given only to those who were very ill. Workers stated that when they approached the doctor, they would be given some medicine and told to go back to work as they were not sick enough to be entitled to leave and consequently to sick *hazri*. This was said to be due to the managers' instructions to the doctors not to encourage malingering and not to recommend leave very often.

Rege had clearly overlooked experience in the Army and elsewhere or he would have realized how often 'medicine and duty' have to be prescribed for minor cases of sickness in order to prevent malingering. It is unfortunate that in this rather superficial inquiry by Rege, no attempt was made to discover whether sick labourers as a rule received reasonable treatment or not. The writer, from a considerable experience of conditions in the tea industry, has no doubt that on most British gardens such labourers received reasonable and often generous treatment.

V. OTHER AMENITIES

Perhaps the most important of the other amenities rather ponderously described in recent days as welfare measures – which have long been a part of tea garden practice – is the provision of free meals for children. Rege's comment on this amenity is of interest. In regard to Assam, he reports as follows:

> The most important measure taken to combat malnutrition is, of course, the provision of cooked meals to non-working children and some estates provide two meals, one at noon and the other in the evening, for undernourished children only. The meal usually consists of rice, *dal*, some vegetable, and *matikalai* (i.e. sprouted pulse), but meat and egg curries are occasionally given in a few gardens. The children are collected in a shed and the distribution of food is usually supervised by the doctor or the compounder. It was stated by a few managers that free feeding of children was not popular with some self-respecting labourers who did not like this form of charity. Free feeding of children is not common among the Indian-owned gardens.

His remarks on the corresponding practice in the Dooars are as follows:

> Many gardens in the Dooars have started the practice of giving a free midday meal to children when the effects of malnutrition were becoming evident. A typical meal consists of rice, *dal*, vegetables, and one garden occasionally gives even fish and mutton. In one garden the children were sitting in dust while taking their free meal. The doctor, when asked, stated that he had suggested better seating arrangement to the manager who, however, said that they were used to it. Full advantage is not, however, taken of this amenity by workers who take their children with them to work. Some managers, on the other hand, refused to introduce free feeding on the ground that such feeding should be the sole responsibility of parents and that by its introduction an

element of irresponsibility is allowed to creep into the attitude of the parents towards their children.

Opinions differ sharply as to the theoretical desirability or otherwise of providing free meals for children and so relieving parents of their proper responsibility. Whatever the sound economic view may be, anybody who has watched children in a tea garden enjoying a meal provided by the estate, and has studied the improvement in physique and health resulting from this practice, would find it very hard to support its abolition.

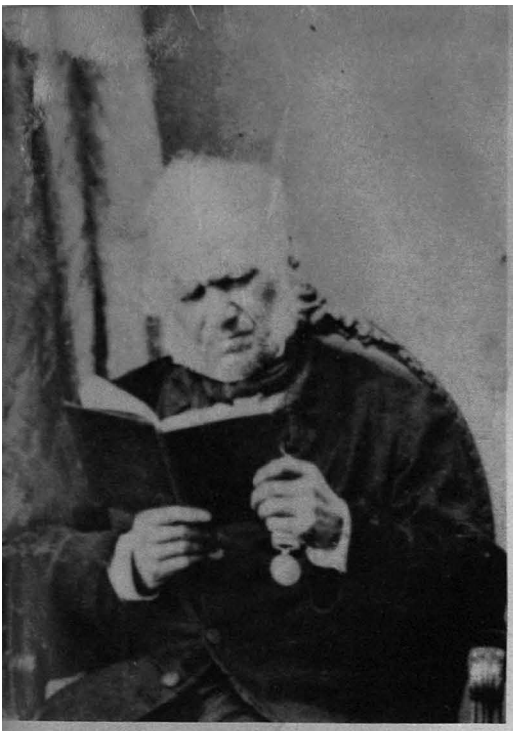
Creches for infants or working women have been the subject of much controversy. On theoretical grounds it is impossible to disagree with the idea behind them, but many managers, well known for their humane attitude towards labour have stated that such creches are not in fact either wanted or used by women labourers. This statement does not necessarily dispose of the matter, for experience throughout the world shows that a facility to which one generation is indifferent may be of great value in the next generation. The case for amenities of one kind or another in tea gardens rests indeed largely on the belief that in this way labour can gradually be made to demand more and that standards of living can thus be improved. The theory will be proved sound if it results in a corresponding increase in productivity, so that the new amenities can be financed by the industry without undue strain. In any case it is to the credit of the tea industry that many of these amenities were provided on a considerable number of gardens before the Plantations Labour Act made them obligatory.

Although for many years it has been the practice to give two or three days leave with pay on the occasion of the *Durga Puja* or *Fagua*, it is only recently that regular leave with pay has been introduced. In 1940 the Indian Jute Mills Association suggested that holidays with pay should be given on six recognized annual festivals, but the tea industry did not consider the proposal favourably, since tea garden labour was only in the habit of working for sixty per cent or seventy per cent of the working days of the year. Moreover, the stress and strain of factory life which furnish the *raison d'être* for the grant of leave to industrial workers, are not present on a tea garden.

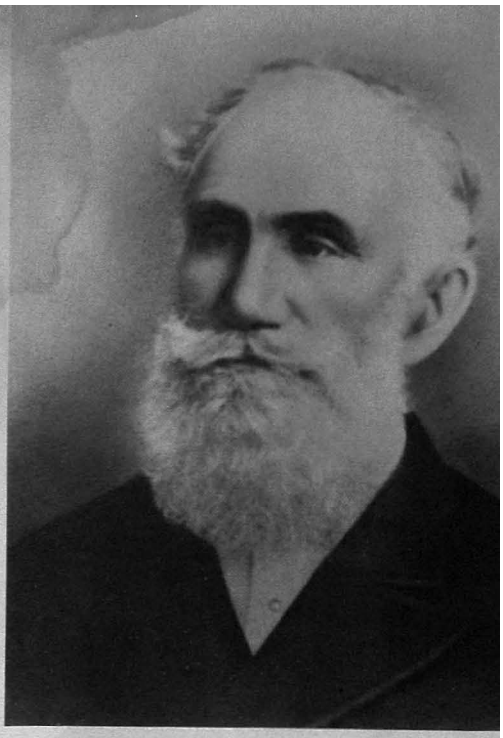
In 1948 an amendment to the Factories Act, abolishing for this purpose the distinction between seasonal and non-seasonal factories, gave the worker in a tea factory the right to ten days' leave with pay each year and in 1951 the Plantations Labour Act gave the same right, on a somewhat more lavish scale, to labour in the gardens.

VI. SOCIAL WELFARE

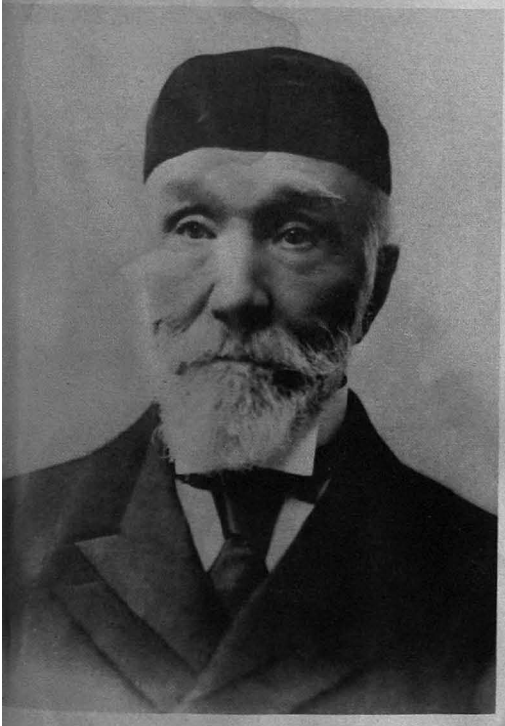
In the days when the welfare of a tea-garden labourer was thought to depend only on due provision for his physical needs, a good employer



1 C. A. Bruce



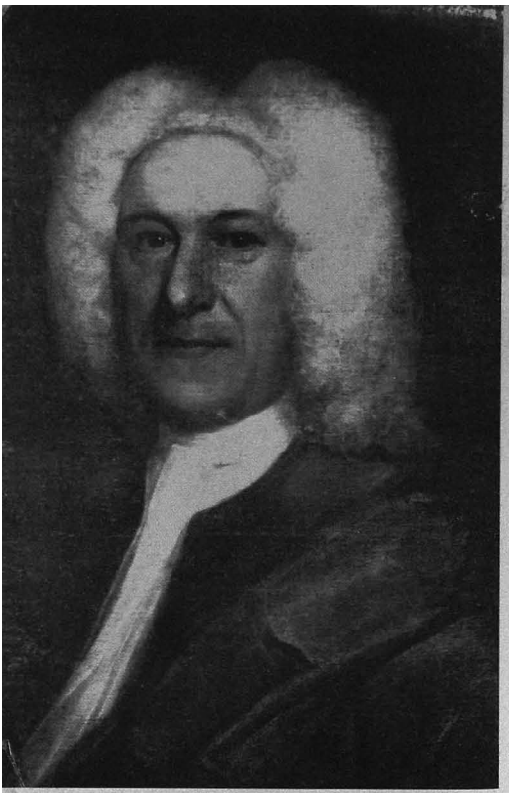
2 J. H. Williamson



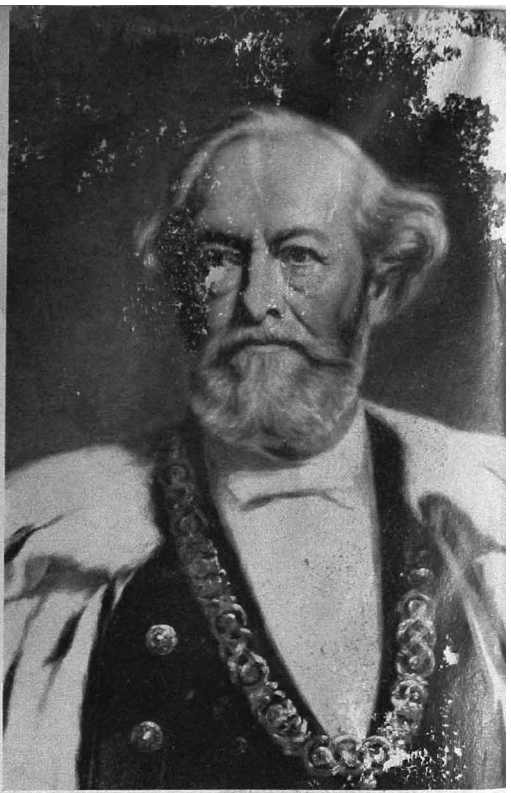
3 G. Williamson



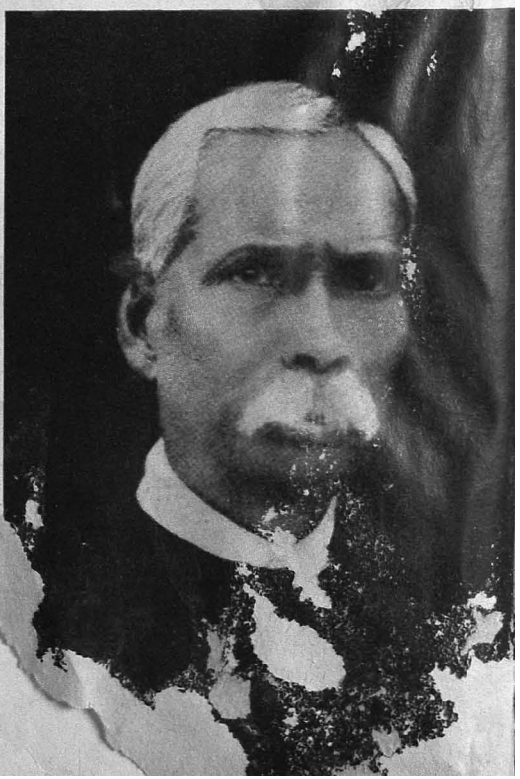
Carver Marsh Statue

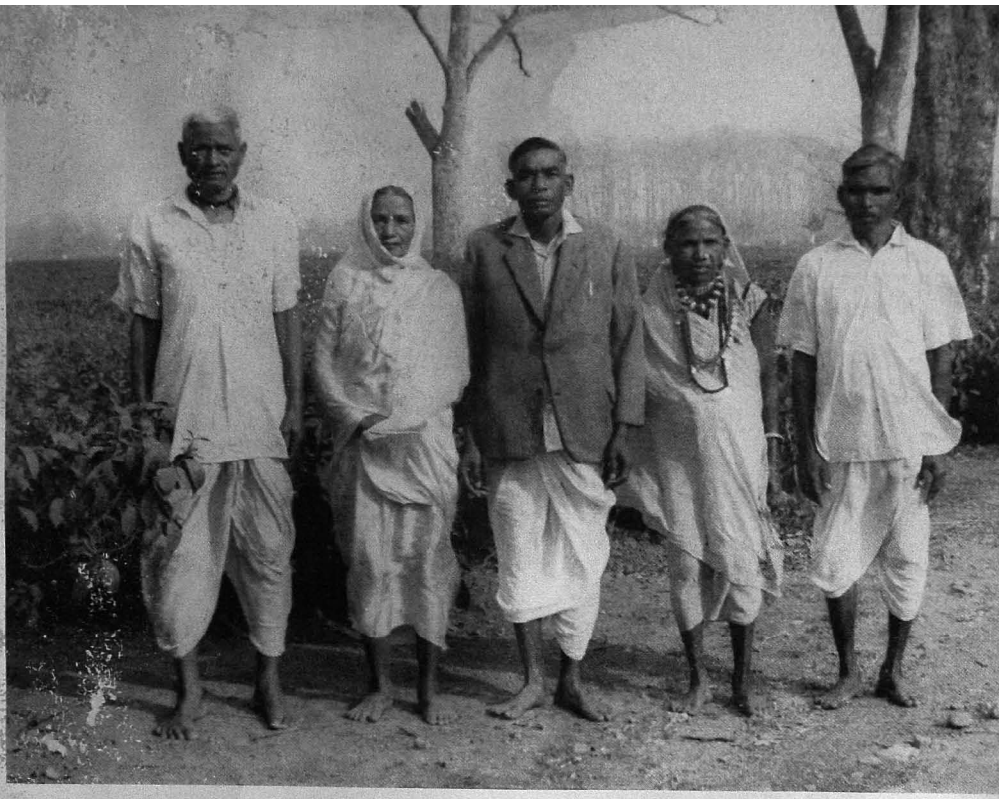


5 Thomas Twining,
after original painting by Hogarth



6 Sir John Muir, Bt.



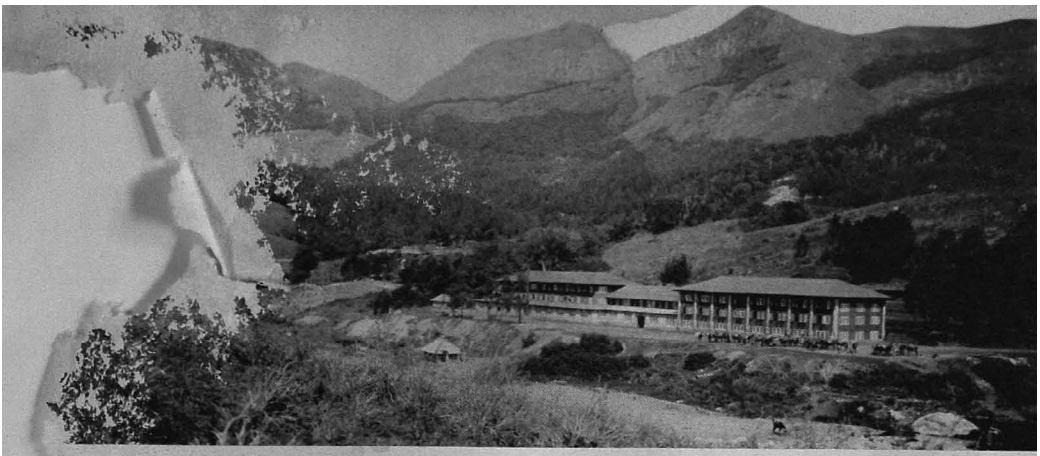


8 Tea Garden Labour, Terai

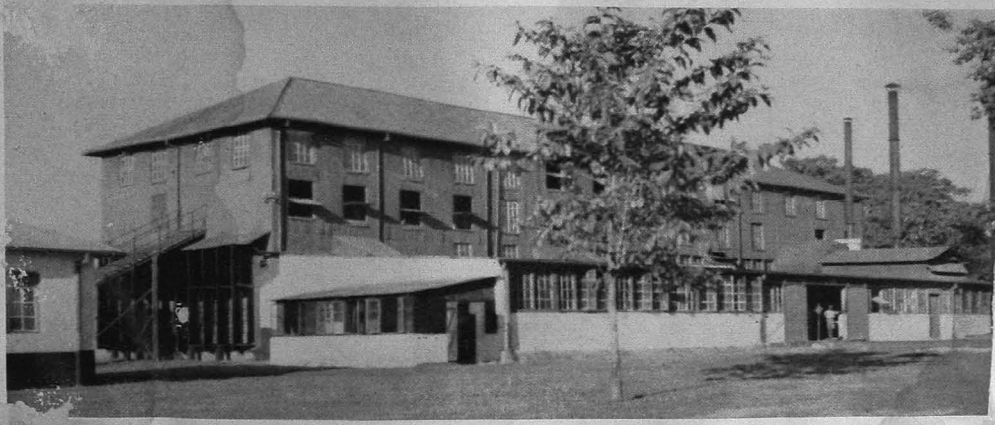




10 Tea Garden Labour in South India



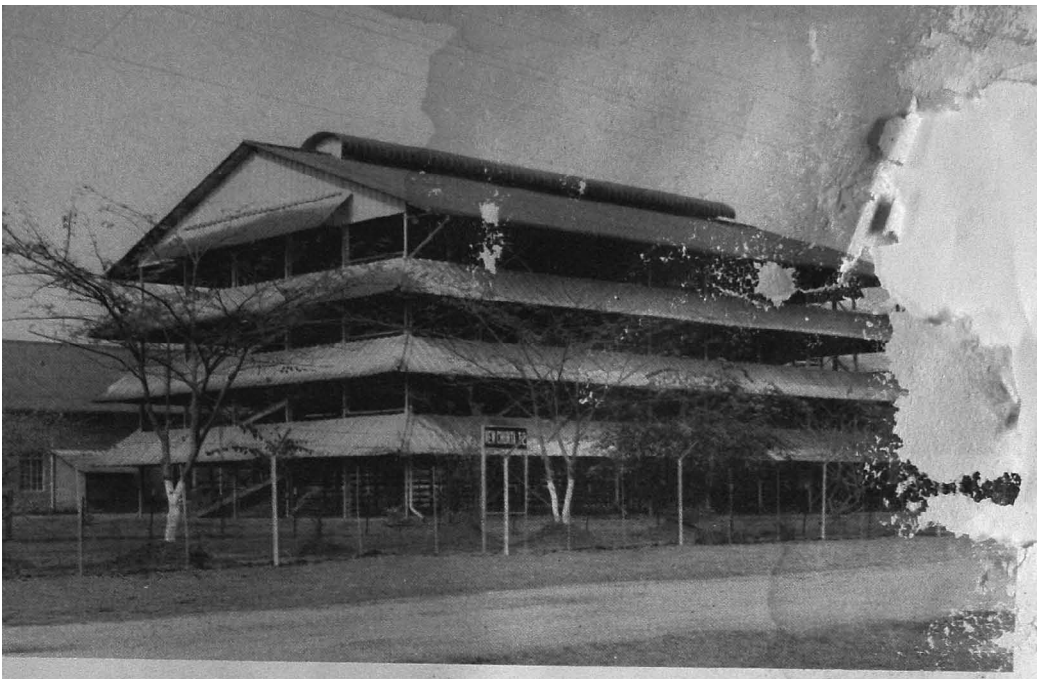
11 A Typical South India Factory Building



12 Tea Factory in North India

13 An Old Wooden Factory in the Anaimalais – burnt down in 1947





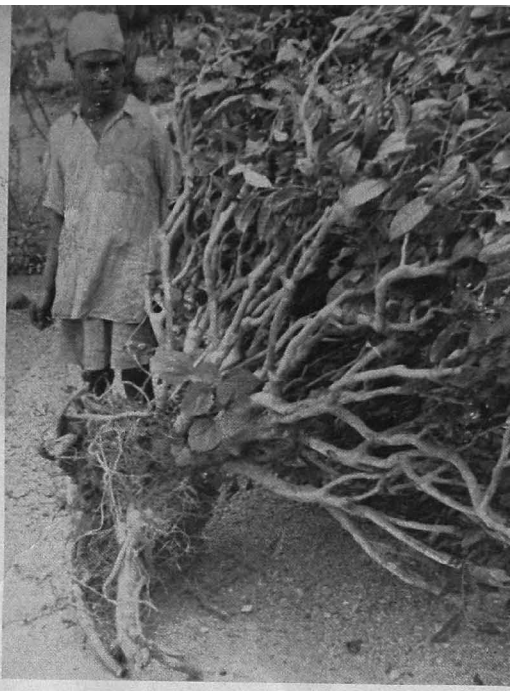
14 A Dooars Withering House

15 A Typical Darjeeling Tea Garden





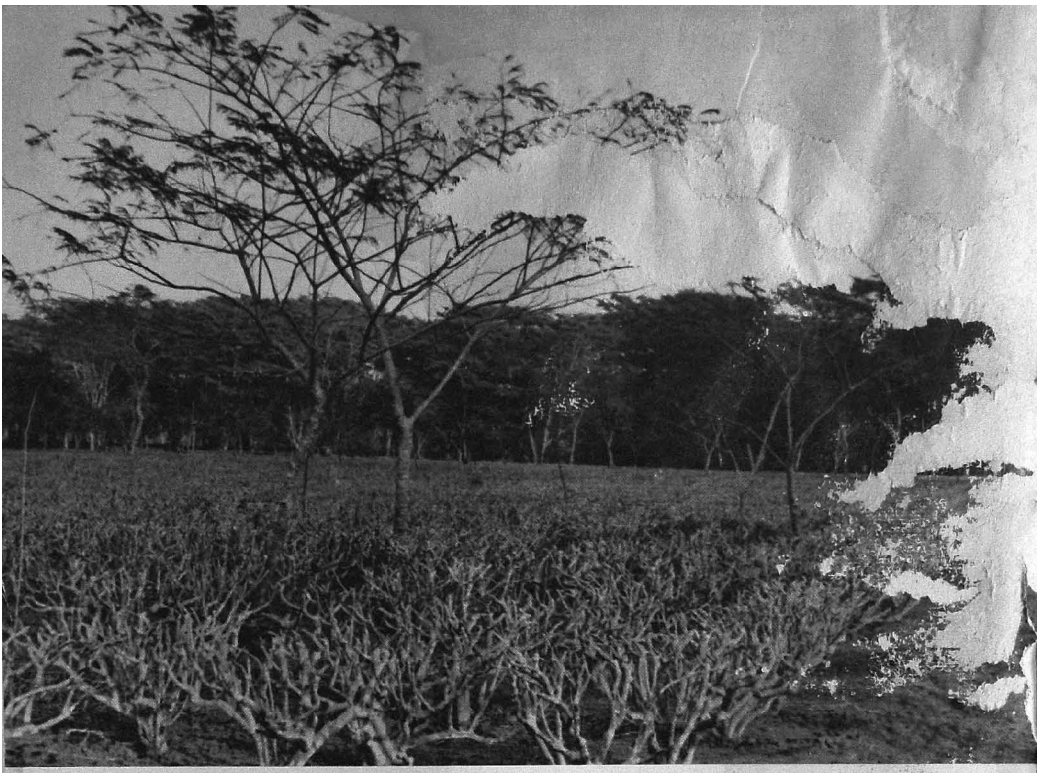
16 Two-year Old Seedling



17 Uprooted Tea Bush

18 Light Pruned Tea in Assam





19 Cut-back Tea in North India

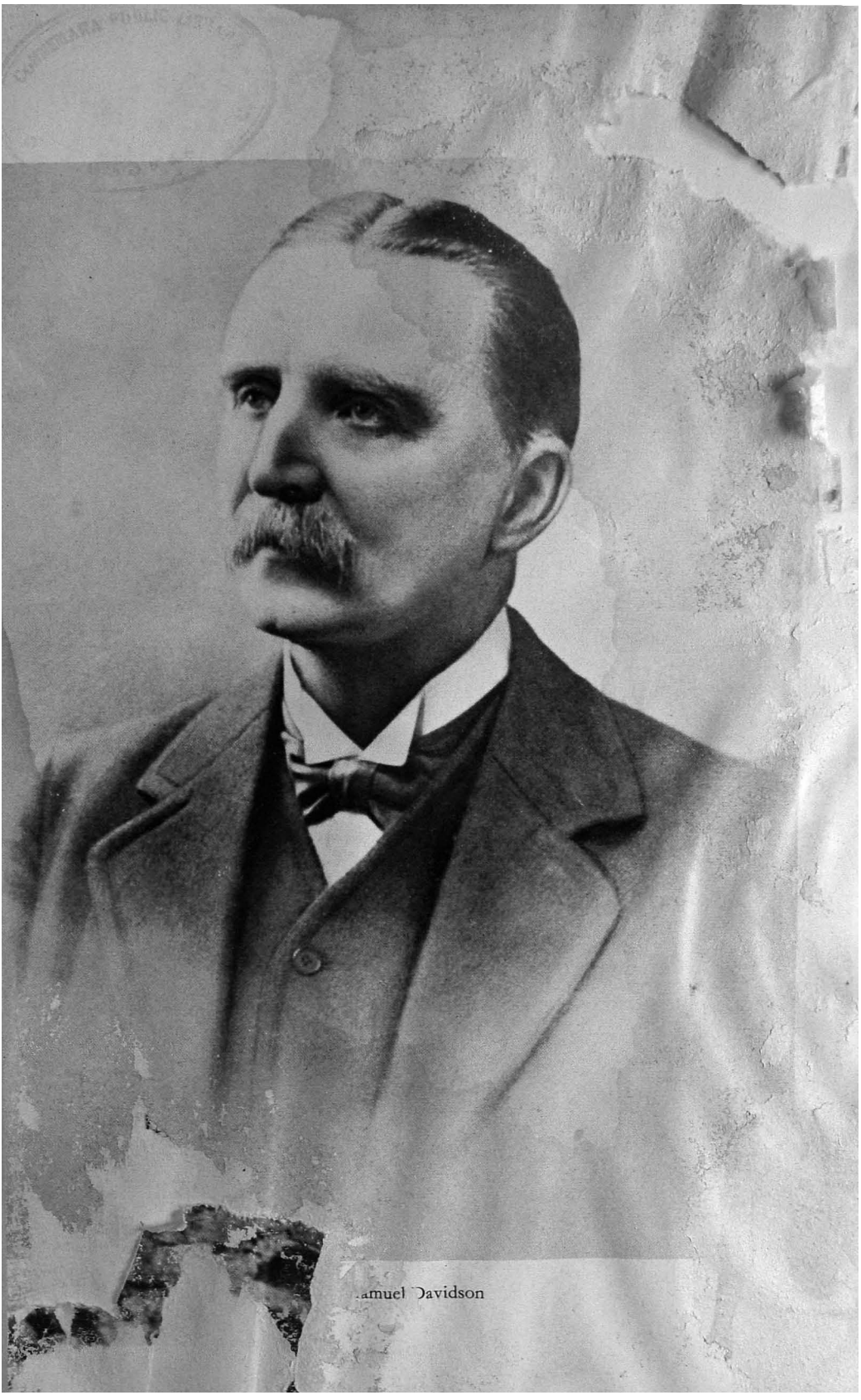


ing Leaf in Assam

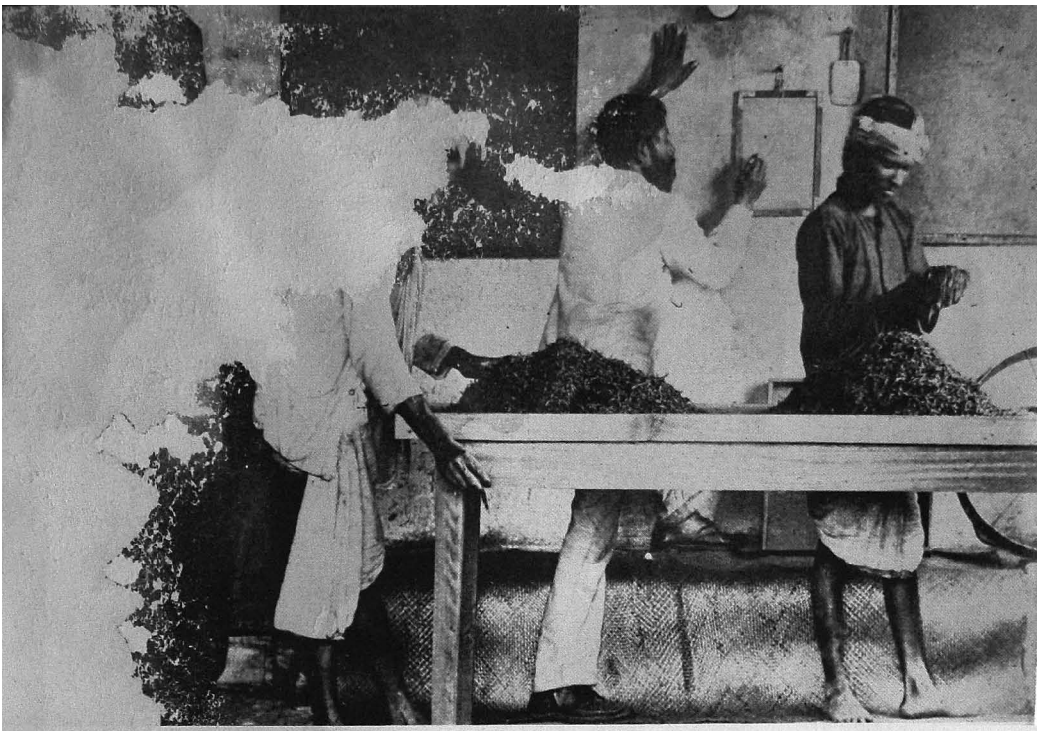


21 Artificial Irrigation



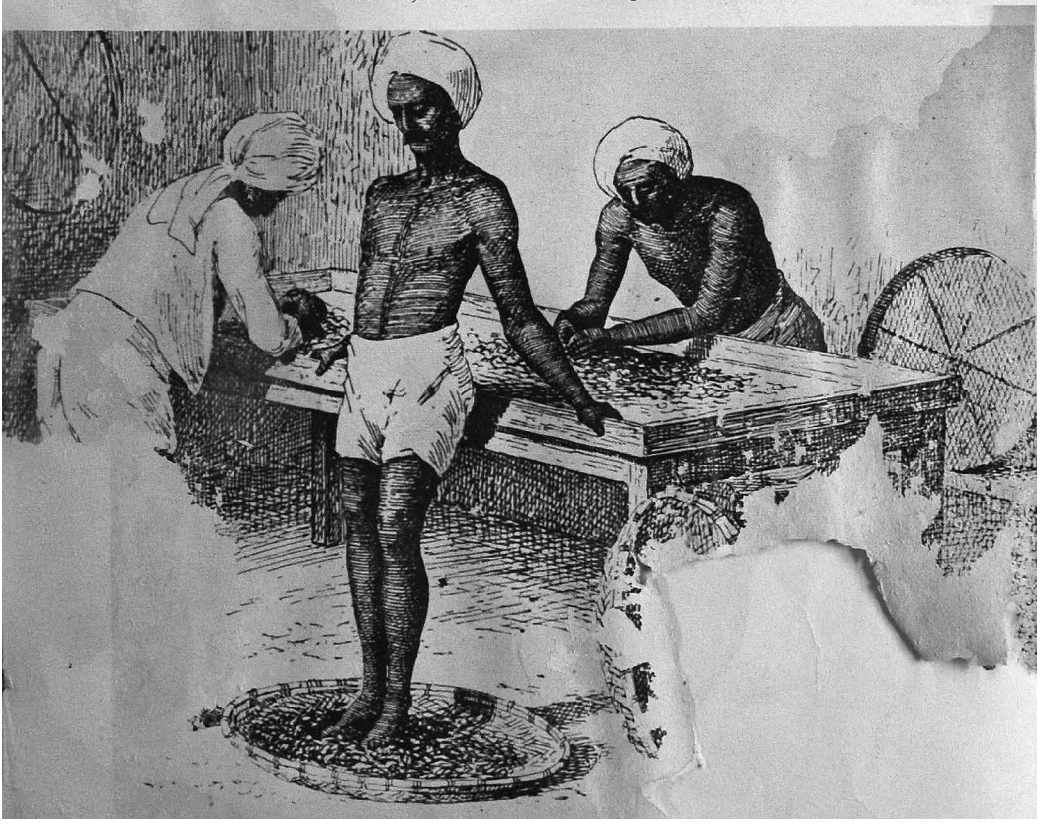


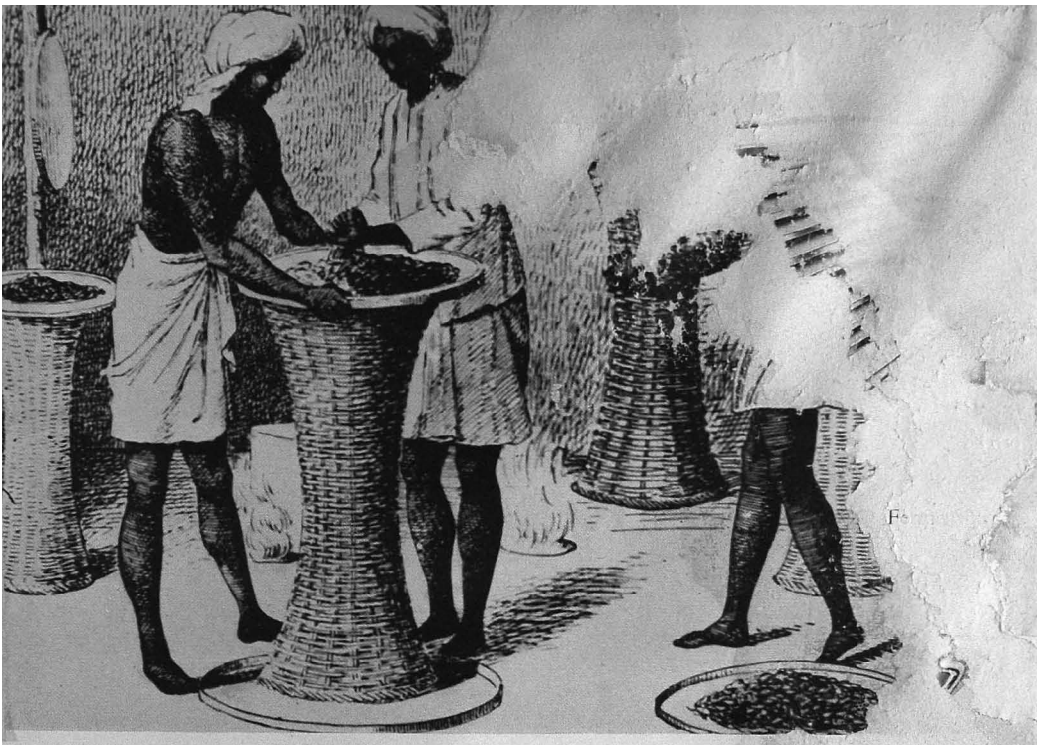
amuel Davidson



24 Old Method of Fermenting

25 Old Method of Rolling





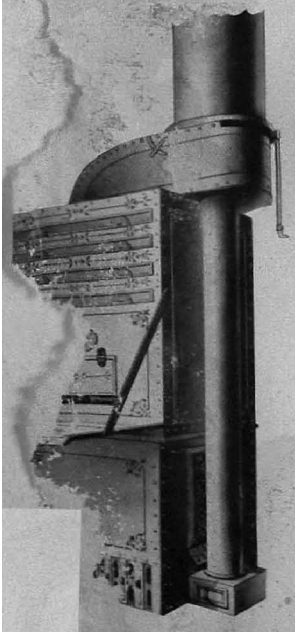
26 Old Method of Drying

27 Drying over a Charcoal fire



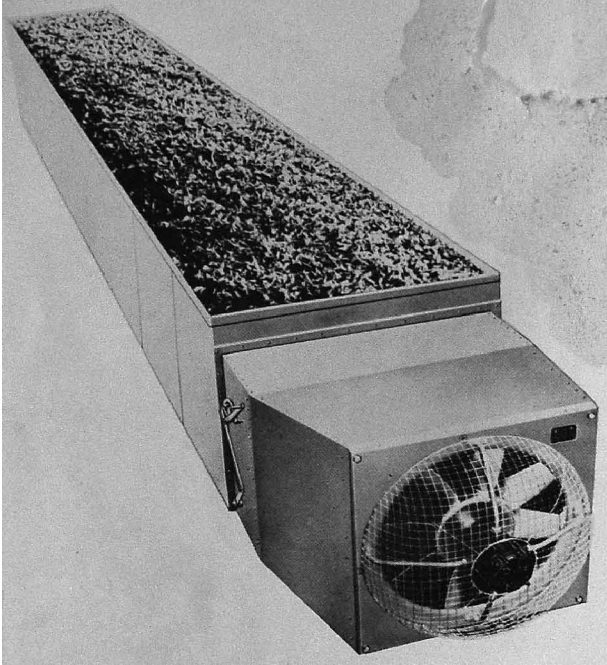


28 Hand Sorting

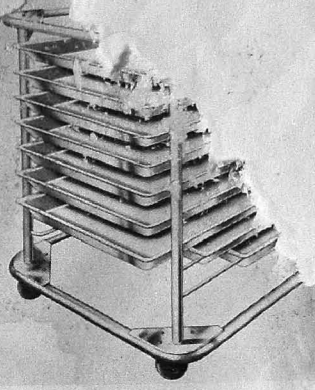


Sirocco' Drier

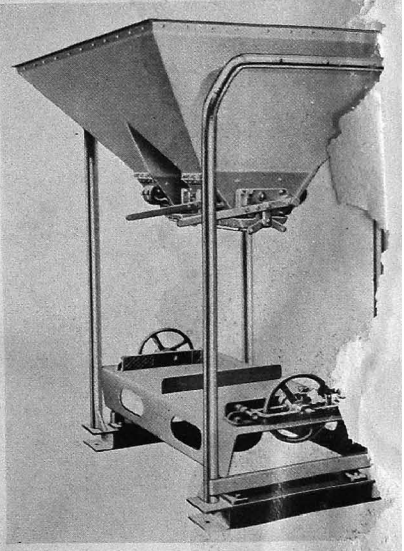




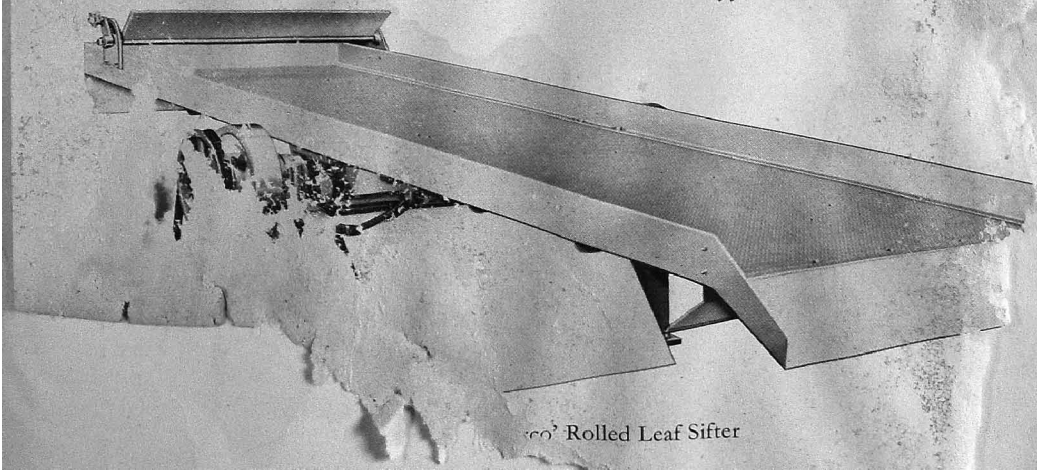
31 'Sirocco' Controlled Trough Withering Unit



32 'Sirocco' Stacked Tray Trolley



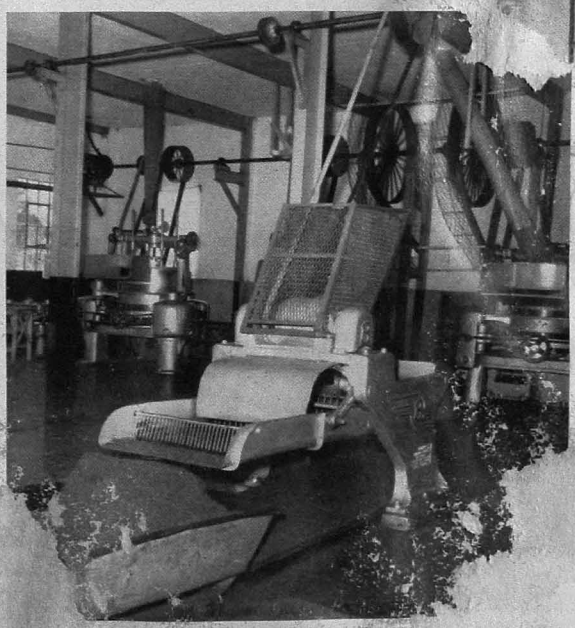
33 'Sirocco' Vibratory T

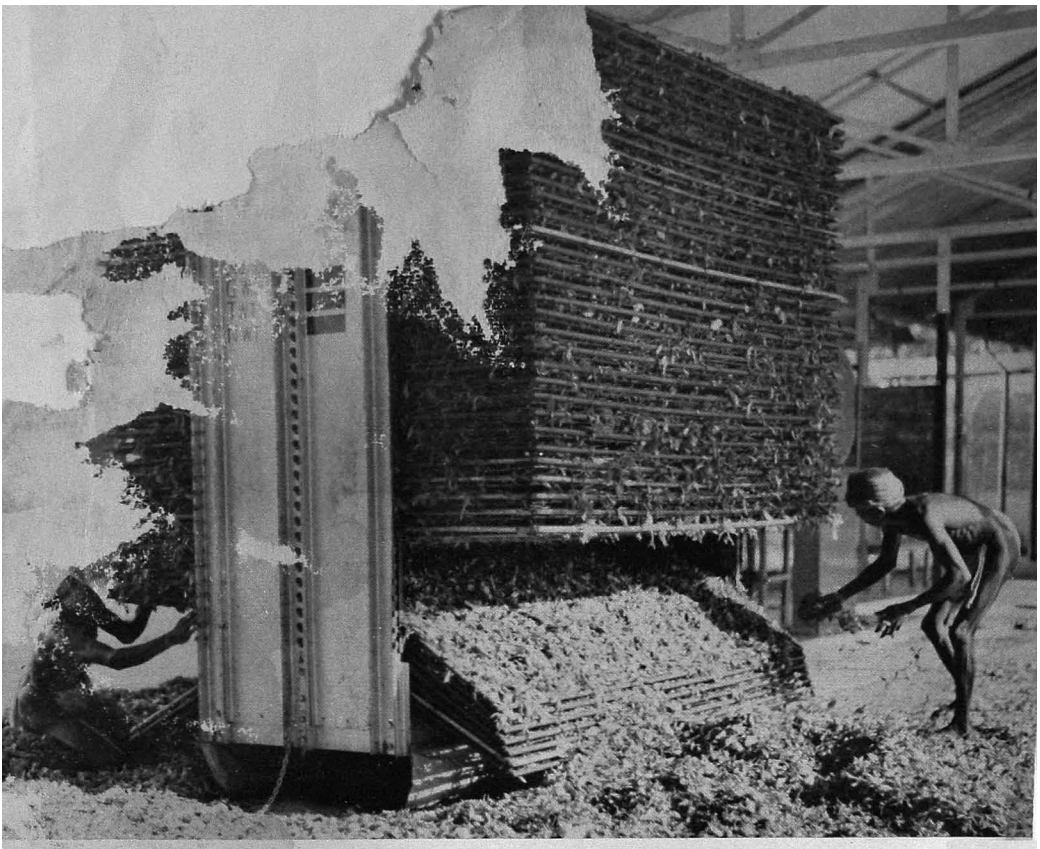


'co' Rolled Leaf Sifter



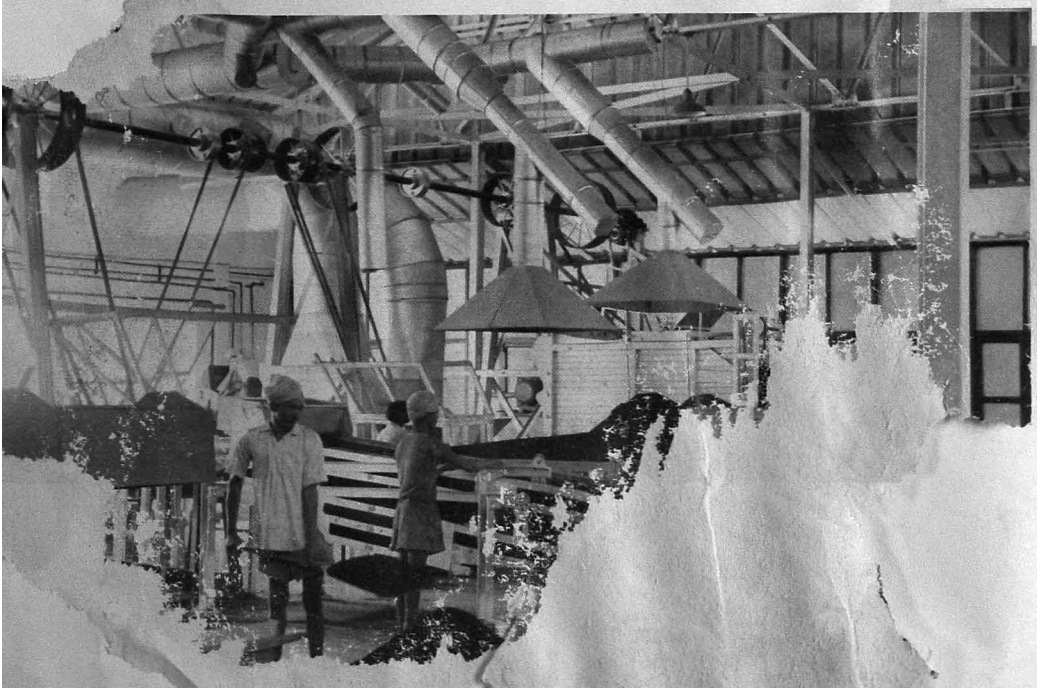
37 Firing in a Darjeeling Tea Estate

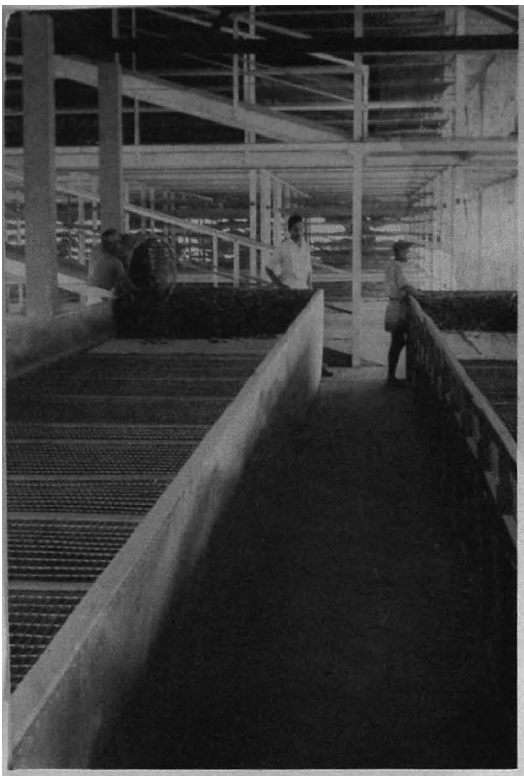




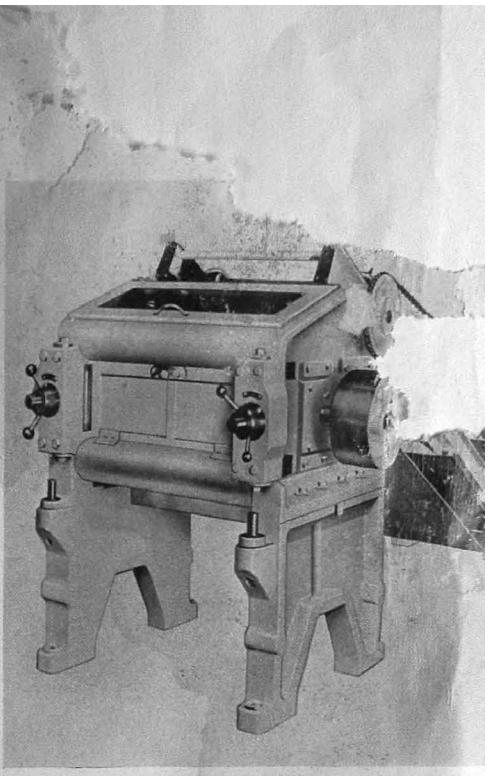
39 Withering Trolley

40 A Typical Sorting Room





41 Withering Trough



42 CTC Machine



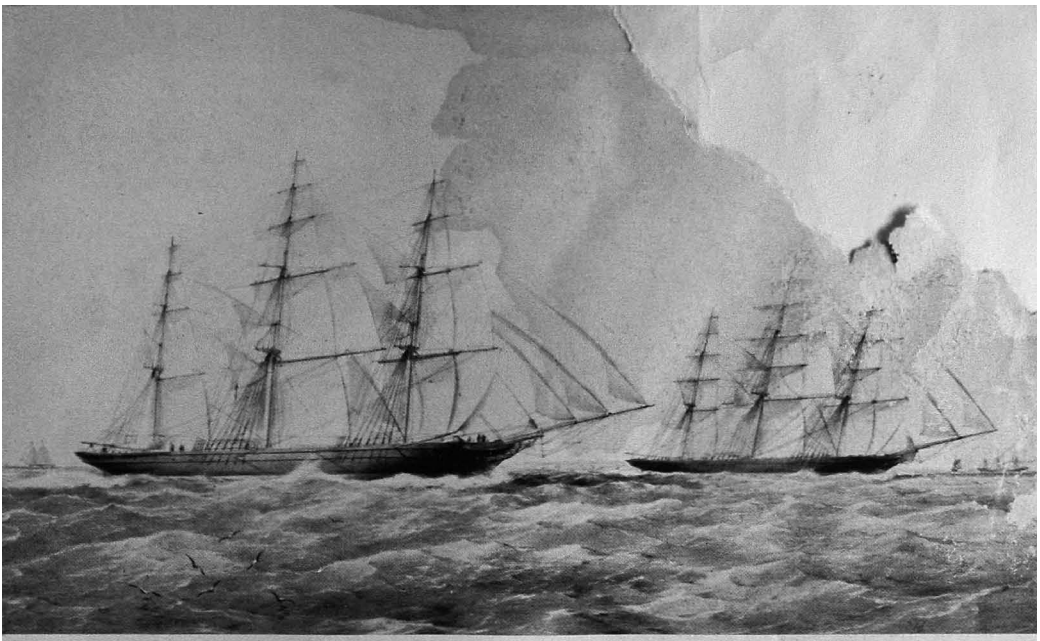
Continuous CTC Complex



44 An Indian Tea Propaganda Van

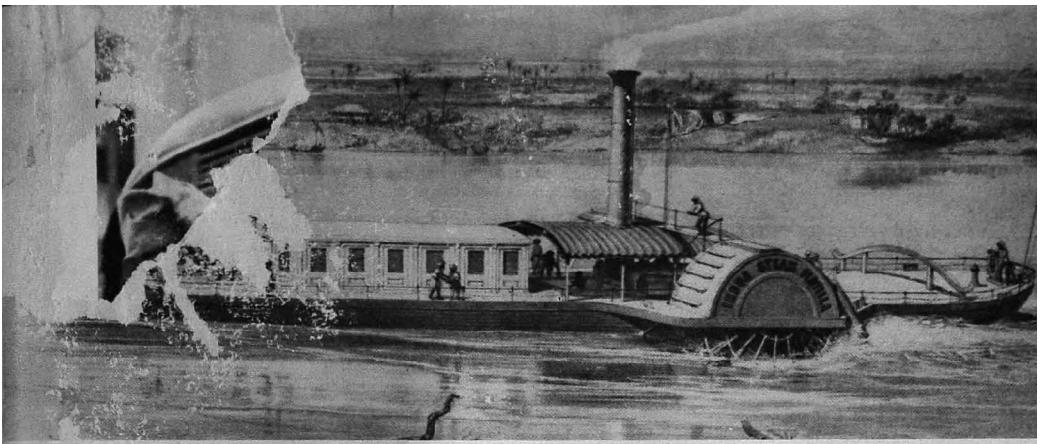
45 Tea on Service



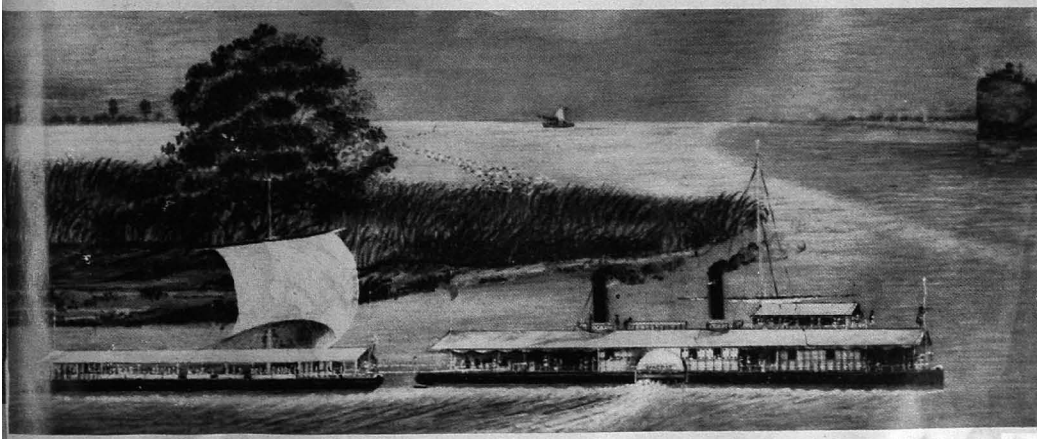


46 *Taeping* and *Ariel* passing the Lizard on 6th September 1866



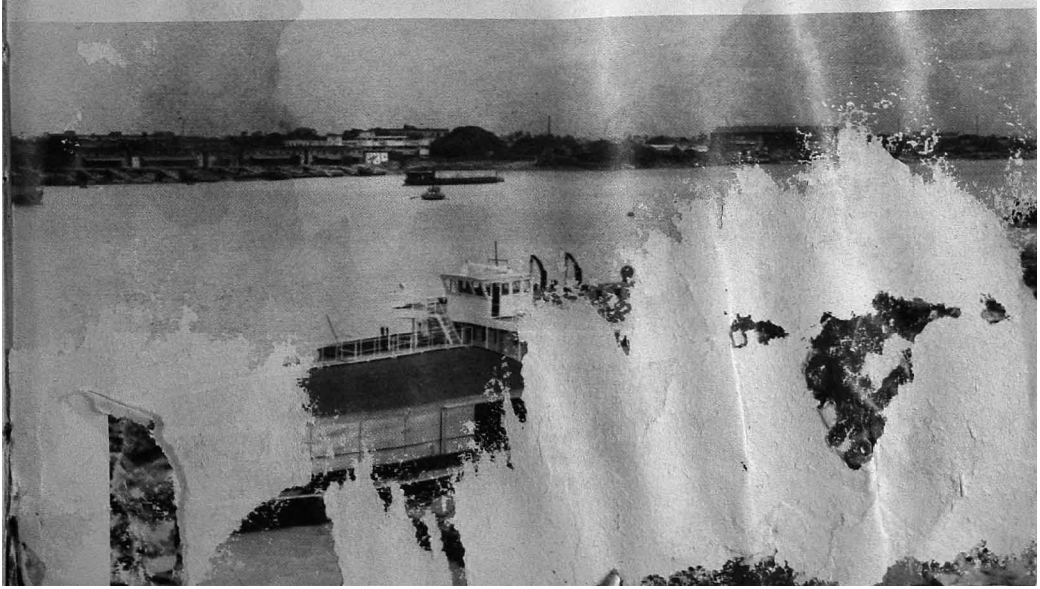


48 An Old Towing Steamer on the Brahmaputra River



49 An Old Assam Despatch Steamer with Tea Chests and Tea Garden Labour

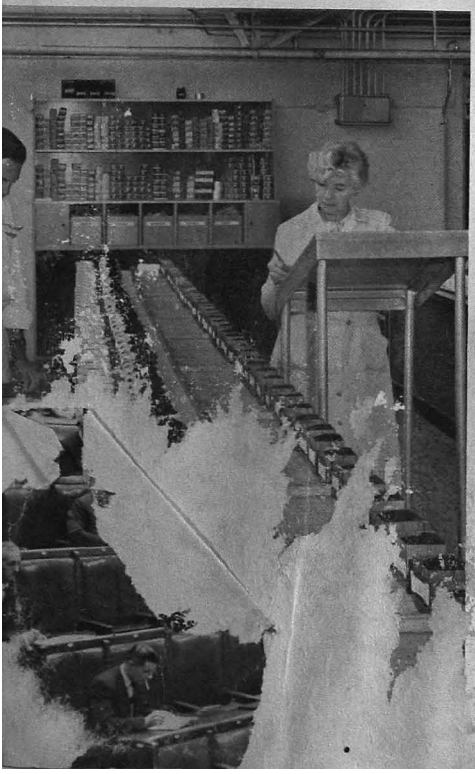
50 A Modern Steamer



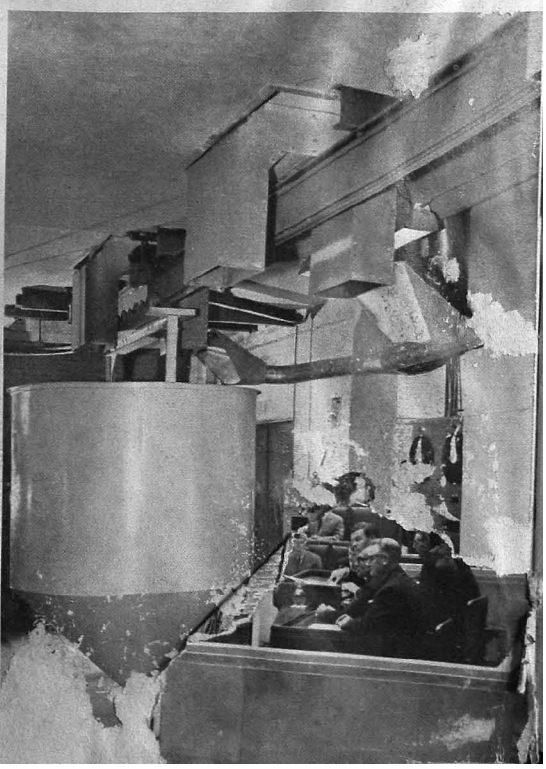


51 Tea Tasting

52 Tea Tasting



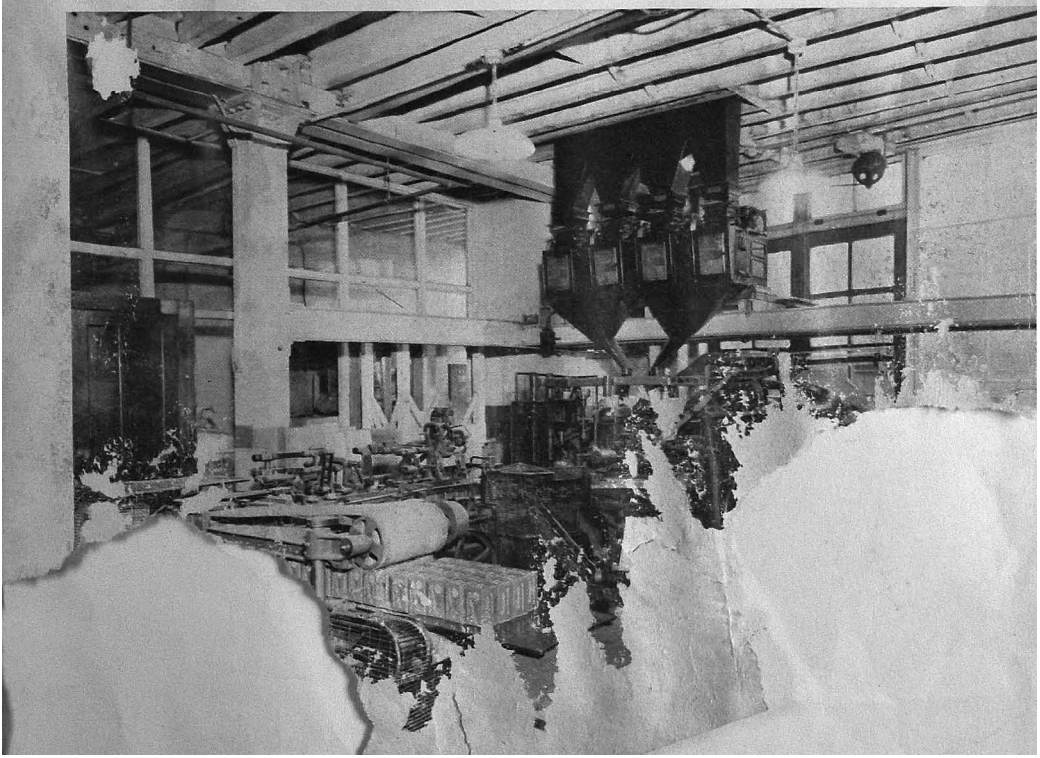
53 Tea Blending





54 Tea Chests being opened to be fed into Blending Drums

55 Packaging





56 Packaging

57 Tea Sale Room, Mincing Lane



could do all that was required. Today, however, it is recognized that the labourer must be trained for better living and such training can be given only by those with special skill and experience. The State has, therefore, begun to assume a greater responsibility for the welfare of the worker. In 1950 it was proposed that a grant should be made by the Central Tea Board for welfare measures, and in the case of Assam it was suggested that it should be utilized for the provision of a training centre for welfare workers. In the following year it was agreed to set up a Central Training Centre near Tezpur from which welfare workers could be sent to five garden centres – two in Zone I, one in Zone II, and one in Zone III of the Assam Valley, with one in Cachar. Each centre would consist of a small hostel to accommodate two women social workers and also womenfolk from the gardens, who would be sent in groups of ten for a period of training. The industry agreed to provide sites and construct the hostels. At the same time a plan for the establishment in 1952 of five welfare centres for men was accepted. Progress was slower than had been hoped, partly because of government delays, and partly because of the financial difficulties of the industry, but three centres in Assam were started in 1952 and in 1953 welfare training courses for garden workers were instituted at the Rowriah Labour Welfare Training Centre for men and at the Borasali Welfare Training Centre for women. It is too early yet to estimate the degree of success in this welfare work, but responsible planting opinion is that it is proving of value.

In the meantime, another line of thought has been pursued. In 1952, the Government of West Bengal, on the suggestion of the Government of India, asked the tea industry to establish a voluntary welfare fund to which employers and labour would alike contribute. The Association considered that better results could be obtained through individual garden action and did not implement this proposal.

In 1955 the Government of West Bengal asked the Association for proposals for the utilization of the Tea Board Welfare Grant. The Association proposed grants to the Jalpaiguri Hospital, to the Charteris Hospital, Kalimpong, for the training of midwives, and towards nurses' training schemes. At the same time the Labour Welfare Board, on which employers and labour were represented, put up proposals for welfare centres, health visitors, film libraries, sports meetings, and the like.

VII. THE PLANTATIONS LABOUR ACT

In his report on conditions of labour in plantations, Rege observed that there was no 'common uniform standard of the conditions of work', and that 'labour conditions on plantations must be brought under regulation'. He recognized, however, that it would be unsatisfactory to 'fit the plantation labour into the general framework of industrial

legislation' and that it would, for example, be meaningless under plantation conditions to frame standing orders laying down hours of work, conditions of absence from work, and the like. The Indian Tea Association had for some time realized that by reason of its liberal policy towards labour, its members were in effect penalized *vis-à-vis* non-member gardens by the absence of regulation. It also considered that the industry had long suffered from the application of measures originally intended for factory labour and quite unsuited to the circumstances of the tea industry, and for this reason, shortly after the Second World War, its representatives had urged the enactment of a central plantation code comprehending all labour legislation in force on tea gardens.

This proposal was accepted in principle at the first meeting of the Industrial Committee on Plantations in January 1947 and when that committee met again in April 1948, the general outlines of the proposed legislation were discussed. In September 1949 a comprehensive questionnaire on the subject was issued to employers and labour in plantation industries. The discussion at the ensuing meeting of the Standing Plantation Committee was to some extent infructuous since the labour representatives were absent, but it was apparent that there was a large measure of agreement between the employers' representatives and Government. There were, however, several matters in which the Association's representatives felt somewhat nervous as to official intentions. They emphasized their view that all statutory powers under the proposed Act must be Central rather than Provincial; that the imposition of a cess from which health and welfare measures could be implemented would be unjust to the good employer; that there was no need for a new and expensive inspectorate; and that wage boards under the Plantations Labour Act should supersede the minimum wage boards existing under the Minimum Wages Act. They also pointed out that it would be neither fair nor sensible to insist on a wholesale replacement of labourers' houses merely in order to secure compliance with the rules under the Plantations Labour Act when they came into force.

The Plantations Labour Act was passed as Act LXIX of 1951 on 2nd November but some of its provision were permissive in the sense that they would only have effect if and when a State Government made the relevant rules. It is not necessary to study the Act in detail. It must, however, be observed that in two important respects it departed seriously from the principles on which the industry thought it had secured agreement. In the first place it did not secure uniformity throughout India, inasmuch as in all the most important matters the implementation of the Act is in the hands of the State Governments, which are the rule-making authorities. The State Governments are to prescribe the medical facilities to be provided, the standards of housing, and the amounts of sickness and maternity benefit, and it is left to the State Governments, in

their discretion, to establish inspectorates, to require the provision of canteens, or to insist that employers should provide prescribed educational facilities. Secondly, it was not a comprehensive code including all legislation affecting labour on tea estates. It left untouched, for example, the Payment of Wages Act, the Minimum Wages Act, the Industrial Disputes Act, the Factories Act and many other Acts which were framed primarily for manufacturing industries and which in their present form are not altogether suitable to plantation conditions. In fact, Act LXIX of 1951 is not a plantation code at all; it is merely an Act conferring on the State Government additional powers of control in regard to the housing, medical facilities, and the like, and imposing on the industry an almost unlimited liability, the extent of which will be determined from time to time by whatever government happens to be in power in the State concerned.

The implementation of the Act was postponed by the Government of India in view of the economic difficulties of the tea industry in 1952. After discussions at the fifth session of the Industrial Committee on Plantations in January 1954, it was agreed that the Act should be brought into force from 1 April 1954, but that after the State Government had framed the necessary rules, there should be a phased programme of implementation of the most urgent welfare measures, namely medical facilities, creches, recreational facilities, housing and welfare officers. Measures with regard to education, conservancy, and canteens were to be postponed. Certain sections of the Act, such as that relating to leave with wages, came into force automatically.

In 1954, the Government of India framed model rules which were the basis of the draft rules subsequently published, for comment by the Assam and West Bengal Government. Some of these draft rules were quite unrealistic – for example, that which laid down that garden hospitals on the prescribed scale should be constructed by 31 December 1955, and that which dealt with the appointment of lady doctors. The Association's representatives spent a great deal of time and energy in trying to ensure that the final rules would be more realistic, but they met with only partial success and the rules ultimately issued in 1956 bear unmistakable marks of the influence of theorists. If ever they were rigorously implemented, they would spell disaster for a considerable proportion of North Indian tea gardens.

CHAPTER TWENTY-FIVE

LABOUR RELATIONS IN NORTH-EAST INDIA

I. ASSAM INCLUDING THE SURMA VALLEY*

Labour relations in the early days of the tea industry were naturally conditioned by the circumstances of recruitment. Labourers came mainly from far distant areas and felt at first the bewilderment of a stranger in a strange land. They depended wholly on the manager for the simplest amenities and even for the necessities of life and at the same time the penal contract put them effectively under his control. He was, moreover, clad in the authority of the ruling race during the heyday of British power – the unquestioned king of a garden population geographically isolated from more advanced elements of society. If the unscrupulous European adventurers who flocked to the tea industry during the boom of the sixties had continued to form an important element in the managerial personnel, circumstances would indeed have led to a reign of tyranny. Fortunately, tea-garden managers in the last few decades of the last century were drawn from a better class of society and so the system which grew up was as a rule not tyranny, but paternalism.

Every aspect of garden life had the manager as its focal point. He built the coolies' houses, he established the market and regulated prices, he supplied rice when necessary, he constructed the *puja* house where religious festivals were celebrated, and he arbitrated in the disputes between labourers or their wives. Such a system developed a sense of responsibility and brought out the best in any naturally humane manager, and, fortunately, there is abundant evidence that such managers were in a great majority. Their methods were rough and ready and sometimes included personal chastizement, but there is little doubt that the lot of a tea garden coolie was happier than that of the ordinary Indian landless labourer at that time. In the minority of cases where the coolie required protection the Government and its officers showed no

* When planters say Assam, they generally mean only the Assam Valley and exclude the Surma Valley.

reluctance to interfere, and indeed a certain type of manager at that time was always complaining of government interference.

Under such a system, strikes and riots were of rare occurrence, but in the nineties there were signs that labourers were becoming a little more self-confident and perhaps less inclined to accept the absolute authority of the manager. In the Dooars, the right of free labour to leave a garden at will secured the speedy remedy of grievances, but in Assam no such protection was available to labour and the growth of a greater spirit of independence led to an increase in the frequency of riots and collisions between employers and labourers.

Nevertheless, the Assam Labour Immigration Reports for the last decade of the nineteenth century refer regularly to the harmonious relations between employers and labour. In the Report for 1899, the Chief Commissioner, Sir Henry Cotton, endorsed the finding of Sir Dennis Fitzpatrick in 1887 and 1888 that, generally speaking, the relations between managers and labourers were good. Cotton continued as follows:

> On the whole he thinks it is creditable to the European management that cases of collision should be so few. He observes as a symptom of the times that there is a growing tendency among the coolie class to resent a blow by striking a blow in return, and this soon leads to serious results, as the coolies act in combination among themselves, and are armed with formidable weapons – the implements of their industry; but this very tendency exercises a healthy influence in restraining the hot-headed and impetuous European assistant from raising his hand against them. The Chief Commissioner is not so sanguine as to look forward to the day when young Englishmen will altogether abandon the regrettable habit of giving a cuff or even a kick or a blow with a cane to natives of the labouring classes, but this habit among tea-planters is undoubtedly on the wane, and is probably less common among them than among other members of the European community, for their action is tempered by self-interest, which enjoins both prudence and patience in their dealing with their employees.

In 1901, Cotton's remarks were less temperate, and led to a protest by the Association to the Government of India. In a carefully considered reply, that Government repudiated Cotton's wholesale criticisms of the tea industry and were 'reluctant to believe that the Hon'ble Mr Cotton can be correct in his rejection of the views expressed by an unbroken series of his predecessors and endorsed by himself a little more than a year ago'. The Government of India went on to observe

> that the relations between the great majority of planters and their coolies are of a kindly nature, that the planter takes a humane interest in the well-being of the families amongst whom he lives and with whom he is in almost daily contact, and that the coolies look to their employer with the regard which is ordinarily felt by Indian servants for their masters. Instances of oppression are unhappily not altogether rare, and the Governor-General in Council

entirely sympathizes with the Chief Commissioner in the desire that they should be severely dealt with. But he sees no reason to find in them a stigma which should apply to the planting community as a whole.

The attention of the Government of India was again drawn to conditions on tea gardens in 1903 and statistics were collected for the years 1890 to 1903 by the Government of Assam

who admitted in their reply to the Government of India in August 1904, that the figures show that although cases of collision between employers and labourers were not numerous, they had shown a steady increase, and that conditions in Assam were less satisfactory than those which obtained in the neighbouring tea districts of Bengal.

From 1904 onwards, statistics of cases of rioting, unlawful assembly, and the like, were given in the annual immigration reports and they bear witness to a regrettable increase in such cases in the first two decades of the century. According to the Assam Labour Enquiry Committee of 1921–2, 141 cases of rioting and unlawful assembly occurred in the Assam tea districts between 1904–5 and 1920–1 and the committee contrasted that figure with the situation amongst free labour in the Dooars where 'in a period of thirty years (1889 to 1921) there appear to have been only two cases of rioting by coolies directed against their employers, or of serious collision between employers and labourers'.

It is important to see these reports in their correct perspective and to remember that the 141 cases referred to above were spread over some 400,000 acres and over a period of seventeen years. A garden of a thousand acres might on this statistical basis have expected to have a case of rioting or unlawful assembly once in more than forty years. Statistics thus confirm the other evidence that on a normal tea garden in the first decade or so of this century life was peaceful and happy, if somewhat unprogressive.

It was, however, not possible for even areas as remote from large towns as the Assam tea districts to remain wholly unaffected by the convulsions that shook the world from 1914 onwards. The cost of living rose, the tea industry did not pass on to labour sufficiently rapidly a share in the prosperity of the war years, and at the same time labour began to be influenced by the political developments which were then moulding India in a more progressive pattern. By the time that the industry had become conscious of the new unrest, difficulties arising from the spectacular rise in the value of the rupee were followed almost at once by a slump in world tea markets and the industry was not in a position to do anything effective to meet the economic difficulties of labour. For the first time labour unrest on a serious scale developed in several districts of Assam.

The Assam Labour Enquiry Committee 1921

In November 1921 the Government of Assam appointed a committee with the Honourable Mr J. C. Arbuthnot, who had reported on labour conditions in Assam in 1903, as its president, to enquire into the adequacy of the wages of tea-garden labour in Assam and the committee's report enables us to follow in some detail the first great wave of unrest amongst tea-garden labour.

The background of the inquiry was a series of riots in the Doom Dooma group of gardens in the Lakhimpur district in September and October 1920; the serious rioting at Monabari and Halem in the Darrang district a little later; and the wholesale exodus of labour from the Karimganj area in the Surma Valley in 1921.

In Doom Dooma, justifiable complaints about the poor quality of the rice issued appeared to have precipitated the trouble, but the Commissioner of the Assam Valley arrived at the conclusion that the real trouble was 'the failure of wages to respond to the enormous increase in prices'. It is difficult to defend this failure on the grounds of financial stringency, since the companies mainly involved paid substantial dividends in the years concerned.

In the Darrang district the situation was more complicated. The Monabari riots were clearly the result of hardship experienced by coolies as the result of the reduction of permissible *ticca* earnings and the increase of the price of rice – both factors resulting from the slump. The Deputy Commissioner expressed the view that the managing agents were out of touch with economic conditions on tea gardens. In Halem, on the other hand, the Deputy Commissioner considered that the trouble was largely the result of social and political propaganda in which German and other missionaries played a considerable part. The remarks of the Deputy Commissioner on this point are of interest.

> The labour force on Halem consists of a very large element of native Christians – there are three churches on the garden built and maintained by the garden for the Church of England, the Roman Catholic and the Lutheran communities. These coolies are mainly Mundas from Ranchi and neighbourhood. The Lutheran denomination was before the war supervised by a German pastor and it is not impossible that their present attitude is partly the outcome of his teachings. Many of these native Christians are literate and their religious interests are looked after by pastors and pundits of their own caste. Sometime before the riot the chief resident pandit by name Christoson obtained leave to go to his country from which he returned shortly before the riot. Since his return the Manager had noticed a gradual growth of a feeling of sullenness and discontent among the coolies for which no apparent cause could be assigned. No grievances were formulated but a spirit of *ca' canny* began to pervade all forms of garden work. The Manager was at first inclined to blame his *Jemadar* and work *Moburrirs* for this attitude, but the riot showed that the

Manager's suspicion was unfounded as these men were the first to be attacked by the rioters. This feeling of discontent came to a head some two days before the occurrence when the coolies who had been sent out to do a specific work deliberately scamped the work. I visited the work in question and satisfied myself by experiment that the task assigned was very reasonable and that the coolies had no cause for complaint on this score . . . In numerous cases the minimum unit prescribed was more than doubled by some of the plucking women before noon and in no case could the task assigned be considered to be hard . . . It is I believe beyond a doubt that these Munda Christians have been largely influenced by the social and semi-political propaganda which appears to be now pervading the Munda country. The Manager had noticed that for sometime before the riot correspondence between the coolies and their own country had enormously increased, and it was also reported that a number of subscriptions had been sent by Christian coolies towards the expenses of this social and political propaganda in their own country. The visit of the pundit to his own country appears to have increased his sympathy with the movement, and on his return there is no doubt that he and his friends have attempted to spread it on the garden and on other gardens in the east of the district where Christian Mundas are to be found.

The Karimganj troubles were more deep-seated and produced more serious results, and can best be described by a somewhat lengthy extract from a communique issued by the Government of Assam on the 5 June 1921.

On 2 May 1921, the coolies on a number of tea-gardens in the Chargola Valley in the Karimganj subdivision struck work and demanded largely increased rates of pay. On being told that the demand was impossible they left the gardens and proceeded to Karimganj. The movement spread rapidly throughout the Chargola Valley and affected also certain gardens in the neighbouring Longai Valley.

On 6 May, it was decided at a meeting of Managers of the Chargola Valley, which the Commissioner and Deputy Commissioner attended, to offer new rates of wages, which though less than what the strikers demanded amounted to an increase of from thirty to fifty per cent. This offer was made at once on several gardens but did not produce the effect anticipated. By about the middle of the month between six and seven thousand coolies had left the gardens. Two gardens in the Chargola Valley had lost practically their entire labour force, and all gardens but one in the Valley had lost from thirty to sixty per cent. In the Longai Valley three gardens only were affected and the proportion of losses was smaller.

This influx of coolies into the little town of Karimganj caused great trouble to the municipal authorities and no little suffering to the coolies themselves. Food was provided by Government for those in need of it and one issue of rice was accepted. Then the coolies were led to believe that the acceptance of food from Government would entail their being sent back to the gardens. Gradually the great majority of coolies made their way as far as Chandpur in the Tippera district of Bengal, some by train from Karimganj and others from

stations further down the line which they had reached on foot. In the first instance many forced their way on to the trains without tickets while others took tickets for short distances and then refused to leave the trains. There are still some five or six hundred coolies in the town of Karimganj.

It is unquestioned that great suffering and hardship have been caused by these events, and the allegation has been repeatedly and publicly made that the exodus was spontaneous and was due to the inadequate pay and brutal treatment received by the coolies on the gardens. On the other hand, the employers are convinced that the coolies would not have left the gardens but for the efforts of unscrupulous persons who have been filling their minds with wild suggestions. It is a fact that the first batches to leave the gardens invoked the name of *Maharaj Gandhi* and declared that they were obeying his orders. It is also beyond dispute that many of them sold their cattle and household belongings, in some cases at ridiculously low prices, in order to be unencumbered on their travels.

The committee arrived at a well-balanced conclusion. It was clear to them that the tea garden coolie had suffered acute economic hardship and that this had made him more than ready to listen to the incitements of political agitators. The relevant paragraphs in the committee's report merit quotation.

In the latter half of 1920, and the beginning of 1921, owing to the unfavourable rate of exchange and the crisis in tea, many gardens found that their resources were crippled, at a time when the coolies required special assistance to enable them to meet the high cost of living. In view of the depression in the tea industry, and the uncertainty as to the future, an increase of wages was considered impracticable. Gardens found it difficult to induce Banks and Agents to advance money to carry on, and the case of some concerns owned by Indians was particularly critical. An increased wage bill might well have meant in some instances the temporary or permanent closure of gardens, and the dispersion of the labour force. Help was given to the coolie in the shape of concession rice, and, to some extent, of clothing. Opportunities for overtime earnings had to be restricted. It is not surprising that there was unrest among tea-garden labour. The Committee are satisfied that though economies had to be effected, Managers did their best to see that the labourer did not suffer. Their inability to provide full employment on the estates was met by granting coolies liberal leave, by encouraging them to take up land for rice cultivation, and in some instances by arranging for outside work on the construction and repair of Local Board roads.

In these circumstances, the fact that non-co-operators found a congenial field for their activities was only to be expected. The short historical retrospect indicates that full advantage was taken of the opportunities. The Committee are convinced that the agitators who interfered with garden bazaars and who addressed coolies in meetings on the subject of low wages and maltreatment were mainly actuated by the desire to unsettle and disturb labour and not by any benevolent intentions of improving the material condition of the labourer. The whole atmosphere was surcharged with racial feeling. The

aim of the non-co-operators in the tea districts of Assam, as elsewhere, was avowedly revolutionary, and this is the only interpretation which can reasonably be placed on the policy of civil disobedience which was so insistently advocated last cold weather.

The Committee are of opinion that, though their main task is to enquire into present conditions on tea-gardens, a brief review of the political situation was essential to obtain a correct perspective. At the same time an analysis of the causes of the more serious disturbances and riots indicates that the economic factor cannot be ignored. The Committee desire to dissociate themselves from the view that political agitation was the sole and only cause of the recent unrest in tea-gardens. They hold that the unrest was due to a combination of economic and political conditions, and that undoubtedly the existence of economic grievances rendered coolies more ready to listen to the exhortations and incitements of non-co-operators and other agitators.

Two planting members of the committee wrote a minute of dissent, but it did not effectively controvert the findings of the majority. In its resolution on the report of the committee, the Government of Assam accepted the view that the unrest was due to a combination of economic and political conditions and that the rise in prices had exceeded the rise in wages. They concluded that the industry would have been wiser 'to take advantage of the fat years and to have raised wages before the coolie began to feel the pinch of the lean years'. They recommended that each district sub-committee of the Assam Branch of the Indian Tea Association should be asked to prepare a standard rate of wages for each district. Those wages were to be 'not a mere subsistence allowance, but a wage that would suffice to keep the coolie in health and reasonable comfort with the possibility of saving a little'. Cases where the standard wage was not paid, should be brought by the sub-committee to the notice of the Association.

The Indian Tea Association in Calcutta and London agreed that in the case of districts where the Committee of Enquiry had considered investigation desirable, the Assam and Surma Valley Branches should refer the proposal for a standard wage to their sub-district committees. They pointed out, however, that:

> so far as the Assam Valley is concerned, indeed, it should be mentioned that the report of the Enquiry Committee indicated that there were, in this valley, not more than a few isolated instances where increases in wages were required; and that in such cases all that was necessary was to bring the wages into line with those paid by neighbouring gardens. On the other hand, the position in the Surma Valley is different; in some cases, indeed, steps have already been taken to place wages on a higher level, but the Committee have suggested that the wages question should be the subject of full consideration generally throughout the valley.

The Assam Branch considered that no further inquiry was necessary, while the Surma Valley Branch took the view that district committees ought not to be asked to take the responsibility of fixing rates and suggested the appointment of a joint committee of planters and Calcutta representatives to settle the matter. The Calcutta Committee proposed to call such a conference, but before it was done the financial condition of the industry improved, more *ticca* work was made available to labour and the problem was felt to have solved itself. It is perhaps unfortunate that the sub-district inquiries were not held, for they might have provided a useful statistical foundation for the work of wage fixation in later years.

The next exodus of tea-garden labour was of an altogether different character. In 1924 the Madras Presidency was opened as a permissible recruiting area and in that year a considerable number of wholly unsuitable labourers were recruited. According to the Annual Report of the Indian Tea Association, some of them had never worked as agricultural labourers and had no intention of doing so; their idea was that they would at once be sent back home as recruiting *sardars*. Others were 'nothing but ordinary bazaar loafers'. Discontent developed rapidly among these new recruits and in some cases it was fomented by outsiders. A number of them left their gardens and began to walk back to Madras. Government obviously could not allow these misguided coolies to wander about without means of support and undertook their repatriation. The incident seems to have had no repercussions on other classes of coolie and did not prevent the healthy growth of recruiting in Madras.

The Impact of Politics

No further serious or widespread labour trouble was experienced in Assam until shortly before the Second World War. In 1937 politics began to impinge more regularly on tea garden life. Under the Government of India Act 1935, which came into force in 1937, tea-garden labourers were allotted four seats in the legislative assembly of Assam and one in that of Bengal. The first elections held in January 1937 aroused little interest on tea gardens, but before long the Congress and other parties realized the importance of making a bid for the support of labour. Political propaganda was thus organized intensively in the tea districts and for the first time the tea-garden labourer was told that his views mattered. In the long run this kind of political education was perhaps desirable, but its first impact on illiterate labour was not very happy. The Congress Party in Assam at this time was extreme in its views and the idea of harassing the British capitalist appealed strongly to it. Other parties still further to the left also took a hand and discontent grew rapidly.

Towards the end of 1938 political agitators began to make a dead set at the Assam Oil Company's establishment at Digboi. The company's employees were well paid by contemporary Indian standards, and to those like the writer who were in touch with the situation it was quite clear that origin of the Digboi unrest was not economic, but political. It culminated in a prolonged strike accompanied with violence and the Government of Assam displayed lamentable weakness in dealing with the situation. Trouble spread in April and May 1939 from Digboi to the tea districts of Upper Assam. Prolonged strikes occurred on a number of gardens, without adequate economic cause and the general atmosphere was one of unrest and insecurity, made worse by the fact that some of the local officials displayed a spinelessness which, though understandable under the circumstances, did them little credit. The tea industry soon devised its own remedial measures. Emergency committees were set up and a threefold policy was laid down by the Indian Tea Association. In the first place, when a strike occurred on a garden, an inquiry committee consisting of senior planters appointed by the local branch of the Indian Tea Association would investigate the circumstances, and if a genuine grievance were found to exist, the committee would make recommendations for its immediate redress. Secondly, in the event of an unjustified strike, the factory and garden would remain closed and the manager would not discuss any question of alteration in tasks or wages until labour returned to work. Thirdly, suitable publicity would be given to all cases of this kind.

In May 1939 – somewhat late in the day – the Government of Assam appointed a Committee of Enquiry to determine the cause of the strikes and other manifestations of discontent. The Association welcomed the appointment of the committee, but the two non-official members of it soon made it clear that their sole purpose was to use the committee as a platform for anti-capitalist propaganda, and that they were not at all concerned to sift the many irresponsible statements made to the committee. Instead of leading to harmonious relations it was evident that the committee would be a further cause of strife and on 1 July 1939 the Indian Tea Association therefore informed the Government of Assam that they were no longer prepared to co-operate in the inquiry. It was subsequently dropped altogether. This firm attitude produced the anticipated effect. By September the situation had improved considerably. When war broke out, the Congress Government went out of office and the possibility of stringent action under the Defence of India Act by its successor, put an end to the trouble.

The Assam Valley was now fairly quiet, but subversive activities were evident in the Sylhet District and in June 1940 the Government of Assam used their powers under the Defence of India Act to prohibit meetings and processions. The situation rapidly improved, but strikes

had now become a regular part of the apparatus of labour relations in India and it was necessary for the Association to consider its policy in regard to strikes.

The Association recognized that employees had a right to strike and that there must be no discrimination against strikers or their leaders. Conversely, employers were entitled to expect that a settlement should be respected, and the Association therefore recommended that if strike leaders continued to foment trouble after the settlement of the strike they should be dismissed and evicted, not as strike leaders, but as troublemakers. Violent strikers were also to be dismissed and evicted. In practice, eviction had for long been very difficult to carry out and, even today, only too often a dismissed troublemaker remains on the garden and is the focal point of discontent long after his dismissal.

The troubles of 1939 and 1940 had been almost wholly due to mischievous propaganda. The war put a stop to this harmful activity and by 1941, relations between managers and labourers in the tea industry had returned to normal. The industry took adequate steps to screen labour from the effect of rising prices and at the same time war projects offered lucrative – though often uncomfortable and sometimes dangerous – employment to considerable numbers. It had been arranged in 1940 that the industry should report to the Government of Assam all strikes except the most trivial ones. The satisfactory labour relations of the later war years can be gauged by the fact that in 1942 there were no reportable strikes in Assam and that in the three succeeding years, there were two, one, and two strikes respectively. It should be noted that none of the 1939–40 troubles had affected the North Bank and that area had been practically free from unrest during this period.

At the end of the war a more difficult phase of labour relations was seen to be at hand. Trade unions, which will be discussed later in this chapter, were coming into operation without suitable leaders to guide them, and the great psychological upheaval involved in the Transfer of Power was to make itself felt in the tea districts, and, indeed, in the sphere of labour throughout India.

Nevertheless managers rapidly adapted themselves to the new political background, and after a transition period during which agitators tried to persuade labour in some areas that they now owned the gardens, the labour forces rapidly settled down. In 1949 there were only twenty-seven strikes in the tea districts of North-east India and in 1950, though the number of strikes rose to forty, over three-quarters of them lasted for one or two days only. The fact that in an industry employing a labour force of over half a million, only 31,522 man days were lost as a result of strikes in 1950 is a remarkable testimony to the good relations which prevailed between employers and labour on tea gardens. Thanks to this situation – and in spite of the attempts of some

irresponsible leaders to stir up agitation – labour readily accepted the reduction of the rice ration, which was imposed on the industry by the Government in view of supply difficulties.

Few observers in 1947 would have anticipated that labour relations would have been as satisfactory as proved to be the case during the first five years of independence. It is true that in India as in the rest of the world, the bonds of discipline were unhealthily relaxed, and that a certain sullenness was reported from some areas. Nevertheless in 1952 Assam and Cachar planters as a whole felt reasonably happy over their relations with labour, and their confidence was justified in 1952 when labour in Cachar accepted the reduction in the minimum wage which economic difficulties necessitated.

The next few years may be described as the period during which the obligations of employers towards labour – which on the whole tea companies had fulfilled reasonably well without compulsion – became statutory. The old *ma-bap** relationship was to a great extent replaced by codes of rights and by settlements arrived at in tripartite conference or by collective bargaining.

The early years of this period were characterized by some deterioration in relations between tea-garden management and labour. Incidents of violence were not uncommon in 1955, and in 1956 'as a means of assisting the preservation of law and order in the face of a constant tendency towards irresponsible violence on the part of labour' the Indian Tea Association suggested to the Government of Assam that detachments of armed police should be stationed at central points in the tea districts. No action appears to have been taken on this suggestion, and at the Annual General Meeting held in March 1958, the chairman of the Indian Tea Association again had to refer to the subject of disorderly behaviour. He spoke of 'the bombardment of managers' bungalows night after night with insults and taunts through loud-speakers' and described the evil effect of attempts of rival unions and parties to outbid each other for the workers' favour.

Fortunately this phase soon passed and in spite of innumerable arguments about specific matters such as minimum wages, bonus, holidays with pay, and the like, the last few years of our period were relatively peaceful. In 1958, for example, in the Assam tea districts there were only eleven strikes, involving eight thousand workers and a total loss of man days of only nineteen thousand. These figures are impressive, but perhaps the best testimony to the good spirit in the tea districts was provided during the Assam language riots of 1960, when the tea gardens were rightly described as oases of peace.

* Literally 'mother-father'.

II. BENGAL

The Dooars

Neither the troubles of 1921 nor the political agitation of 1939 affected the Dooars. The North Bengal tea districts were happily isolated from the rest of the province, and for many years the bad reputation of the Dooars for malaria and black-water fever effectively discouraged political leaders from seeking to work there. It was therefore only in 1946 that serious unrest developed in the Bengal tea districts. It began in Darjeeling – to which we shall refer later – but spread to the Dooars towards the end of the year. According to the Report of the Indian Tea Association for 1947, early in that year,

> as a result of outside agitation bands of labourers had left their work and, headed by Communist leaders, were roaming the countryside, in many cases armed with lathis and spears, with the object of entering *bustees* and raiding paddy stocks in support of a general demand by the *ryots* of the district for a two-thirds share of the paddy crop, instead of the half share which they had always received in the past from the *zemindars*. In most cases where demands were put forward by the labour to the tea garden managers, these included demands for increased rations of food and cloth and were not infrequently accompanied by a demand for the dismissal of one or more members of the garden clerical staff, with the result that on some gardens the Indian staff had been forced to leave.

The Dooars troubles resulted in the extension to Bengal of the labour organization which the Association had established in Assam and which will be described in another chapter. It soon proved its value, and skilful handling of the unrest, together with the removal of any possible economic grievances by the wage increases given in the tripartite conferences, helped to produce a considerable improvement in labour relations. This was maintained in the two following years except in isolated instances where trouble was engendered from outside.

In 1950 there seems to have been some deterioration. Cases of violence were not numerous, but at the Dooars Planters Association annual meeting in January 1951, the chairman found it necessary to refer to incidents where unions had sought to enforce demands by threats of lawlessness and *satyagraha*.* The following two years were reasonably quiet and labour accepted what amounted to a wage cut, in the form of an increase in the selling price of concession rice, but in 1953, after prosperity had returned, the number of strikes increased, and a token strike in the Dooars was characterized by considerable intimidation exercised on workers who were not prepared to strike. In 1954 things took a further turn for the worse and there can be little doubt that there would have been a prolonged and bitter strike in the Dooars in 1954 if the Indian

* Literally 'seizing truth' – can roughly be described as civil disobedience.

Tea Association had not abandoned its principle of refusing to negotiate under threat of a strike. It did this with the utmost reluctance, on the ground that 'a general strike added to the distress caused by floods in the Dooars would place a heavy strain upon the resources of the local authorities which might well prove excessive'. Opinions will continue to differ as to the wisdom of this surrender, but it is clear that labour was in an ugly mood and it is unlikely that the strike would have been peaceful. The situation was thus described by the Chairman at the annual meeting of the Indian Tea Association, Calcutta, in March 1955.

Our relations with Labour and with the Labour leaders have, I am proud to declare, been generally most satisfactory during 1954. Inevitably there have been misunderstandings, but, even so, we have had only 31 strikes compared with 281 in 1953, and we have lost only 30,642 man days' work. Of the strikes, no less than seventeen finished the first day, and expressed – as is now traditional – in terms of seconds, we have lost under three seconds per worker per day through industrial disputes. This reflects the greatest credit on our Managers, and on the workers with whom they have to deal, and is, I am glad to say, even better than the figure which Mr Galloway was able to announce in 1951.

It is therefore with the greatest regret that I have to report a deterioration in certain areas in the Dooars during the last three months. This deterioration is the more discouraging in that it follows the recognition on a garden basis of certain of the Unions which have been operating in those areas. Whether the disturbances owe their origin to the Unions which have been recognised, or to those which have not been recognised, or to our abandonment of our traditional policy to defer recognition of any Union until simultaneous recognition of all Unions was possible, I cannot say, but there is undoubtedly a grave deterioration in relations. The pattern of the disturbances has not greatly varied; the victims are workers, or members of the subordinate staff, whose crime is one of loyalty or independence, and the story culminates in mass attacks upon the police when they come to arrest or question those alleged to be guilty of the assaults. The police have reacted with vigour and competence, but they have suffered many injuries from the arrows and stones of the rioters, and it would seem that the disturbances are engineered not spontaneous.

The year 1955 was a very unhappy one in the matter of labour relations in the Dooars. Rival unions, seeking to outbid each other, grew increasingly irresponsible and at the annual meeting in March 1956, the chairman of the Indian Tea Association referred to 'the sorry series of assaults upon management and clerical staff which has disgraced the Dooars and Darjeeling'. In that year too there occurred what was described in the Annual Report of the Indian Tea Association as 'a worse strike than has been experienced in the Dooars for a considerable time', as well as the first strike of a general nature in the Terai. The Dooars and Terai strike was wholly unjustifiable in as much as it related mainly to

demands which were due for discussion at a tripartite conference. In the weeks before the strike, labour relations had deteriorated seriously. Labourers refused to perform the allotted tasks, indiscipline was rife and threats against management were frequent. Fortunately, the strike itself was on the whole peaceful and the local authorities handled the situation firmly and efficiently. Out of the gardens in the membership of the Dooars Branch of the Indian Tea Association, there was a complete strike on thirty-one, a partial strike on thirty, and on the remaining forty gardens there was no strike. The employers, who had the support of the Government of West Bengal, remained firm and in less than three weeks the strike was called off.

Unrest continued in 1957, though the number of strikes decreased. Labour relations improved considerably thereafter, and Dooars planters can derive particular satisfaction from the manner in which in 1960 a threatened strike was avoided as the result of the reasonable spirit shown by both sides in a conference convened by the Labour Commissioner. The industry appears in fact to have emerged happily from a period of unrest.

Darjeeling

In Darjeeling trouble began with the election of a Communist candidate to the Bengal Legislative Assembly in 1946, after which the Communist Party organized a Tea Garden Labour Union in the Darjeeling District and then proceeded to serve strike notices on seventeen estates. Lack of uniformity in wages and other forms of remuneration between one garden and another played into the hands of the mischief makers. The Darjeeling planter has always been a sturdy individualist and the independent tradition of the old proprietary gardens still lingered. It was easy, therefore, for the Communists to pick on gardens where conditions either were, or seemed, less favourable to labour than on neighbouring gardens and they exploited this technique with considerable skill. It was at one time hoped that the non-Communist body known as the Gurkha League would have a steadying effect on labour in Darjeeling, but the league at this time was badly led. It showed no sense of responsibility and it was often concerned to outbid the Communists in its demands. The Darjeeling Planters Association took steps to secure greater uniformity of conditions, but the situation remained uneasy.

Troubles developed in an acute form on the Dhajia outgarden of the Moondakotee Tea Estate in the second half of 1946. The Communist Party of India had secured a firm footing in that garden and had for some months deliberately encouraged indiscipline and fostered a go-slow movement. Disciplinary action was taken in December 1946 and eleven of the ring-leaders signed a declaration that they would be amenable to garden discipline and refrain from subversive activity. In the words of

S. C. Dutta, the chairman of the Industrial Tribunal which subsequently inquired into these matters, 'the promise was in words only and never followed in action'. Matters went from worse to worse and in April 1947 the garden authorities felt themselves obliged to declare a lock-out. The instigators of the trouble were dismissed and eviction orders were secured against eleven of them. The lock-out continued until 26 January 1948, and was perhaps the most prolonged lock-out ever known in the North-east Indian tea districts. In July 1948 the chairman of the Industrial Tribunal completely vindicated the action of the company. He held that labour had had no substantial grievances, that the company would have been justified in closing the garden at least twice before the lock-out in 1947, and that every attempt had been made by the management to avoid such drastic action.

The strong action taken by the authorities of the Moondakotee Tea Estate, and the unequivocal report of the Industrial Tribunal, had a salutary effect for a time, but in spite of the West Bengal Government's ban on the Communist Party, the Communist union continued actively to stir up trouble in Darjeeling tea gardens. In 1950 trouble again broke out in the Moondakotee gardens, but strong action by the police, followed by arrests of some ring-leaders seem to have convinced labour that they were being led astray. Other estates, however, were affected by the general unrest created by the Communist Party. In the Margaret's Hope tea estate, for example, an estate employee, known by the police to be an active communist, set himself out to make work impossible. In the words of the Association's Chief Labour Adviser, 'he organized a reign of terror on the garden. By day all appeared to be quiet, but at night workers were forced to join the Communist Party and to pay subscriptions, and were assaulted if they refused.' It is believed, on reliable evidence, that a plot to kill the manager and his head clerk was hatched, and on 27 March 1950 a serious assault was made on a garden employee who had refused to join the Communist Party. The manager took strong but fair action against subversive elements – action which was subsequently approved by the Assistant Labour Commissioner – and the prime mover of these troubles was arrested. Conditions gradually returned to normal.

These incidents at Moondakotee and Margaret's Hope were typical of the spirit which prevailed in many parts of the district at that time. The mood lasted for a considerable time and at the end of a tour of the district in 1955, the writer recorded a note to the effect that the Government had loosed the bonds of discipline, that frequent Communist meetings in the local bazaars were the starting-point of disorder on the gardens and that, in some areas, intimidation of the staff was going on all the time. Planters were in a continual state of nervous tension.

Since that time a gradual improvement has taken place and at the end

of our period, relations between management and labour in Darjeeling were reasonably good.

III. TRADE UNIONS

Assam

As a result of the backwardness of tea-garden labour and its isolation from the main centres of political activity, trade unions in the tea districts of North-east India had a comparatively late development. Although no trade union was actually registered in those districts until 1947, in a sense the provincial elections of 1936–7 may be regarded as the starting-point of the movement. Those elections not only made the labourer more fully conscious of his rights than before, but they also gave the political leaders of Assam and Bengal a vested interest in the development of the unions.

In Assam, as we have seen, in the years just before the war, the Assam Oil Company's installation at Digboi became the focal point of unrest and it was inherently probable that the institution of trade unions would spread from there to the tea districts. Many planters realized that such a development was inevitable and in due course desirable, but genuinely feared that labour was not ready for it and that unions would become merely an instrument for exploitation by self-seeking agitators.

In 1939 R. B. Lagden, chairman of the Indian Tea Association, conceived the idea of welfare committees as a means of training labour in the representation of its grievances. Each committee was to be concerned only with a particular estate, its members were to be workers elected on the estate, and the manager was to preside over its deliberations. It was not to be concerned with wages or similar subjects, but with what would now be described as welfare and amenities. Planting opinion was sharply divided as to the advantages or disadvantages of welfare committees. Some regarded them as a useful half-way house to the inevitable unions, while others felt not only that they would force the pace unhealthily, but also that an arrangement under which the manager presided over an institution which he had himself called into being, would be both embarrassing and suspect. In spite of Lagden's enthusiasm, the preponderance of planting opinion was against these committees and they died a natural death on most gardens.

At the end of the war it was obvious that unions would soon be effectively established, and the Indian Tea Association, which was not at all unsympathetic to the idea of collective bargaining, laid down the conditions on which unions would be recognized. Those conditions were that the unions should not be affiliated to the Communist Party, that staff and labour should not be members of the same union, and that 33⅓ per cent of the garden labour force should be paying members.

These conditions did not mean much in practice. In the early days many nominal members of the unions only paid subscriptions in times of crisis. None of the unions could have satisfied the condition of $33\frac{1}{3}$ per cent membership in any effective sense. The only useful criterion of fitness for recognition was the ability of a particular union to speak in practice for a considerable section of the labour force, and when this test was satisfied the manager necessarily had to deal with the union, whether he formally recognized it or not. A considerable number of garden unions came into being in this way in 1947 and 1948. For a time they worked more or less in isolation from each other, and unless outside help had been forthcoming it is doubtful if tea garden labour could have constructed the higher *echelons* of union organization. It is doubtful if illiterate labourers could indeed have organized unions at all without outside help. The trade union movement in Britain received much help in its infancy from outsiders, with no political axe to grind, genuinely interested in the welfare of labour. No such class of individuals appears to have existed in the tea districts of North-East India, and the outsiders who came to organize unions were in nearly all cases minor politicians seeking a means to better their positions. The unions therefore became linked with particular political parties.

In 1946 the disagreements between the Congress and the Communist Parties on the All-India stage led to the secession of what is now the Indian National Trade Union Congress from the Communist-dominated All-India Trade Union Congress. A little later a third group of unions grew up in connexion with the Socialist Party. A branch of the Indian Trade Union Congress was soon established in Assam, but initially it did not have much to do with tea garden affairs.

Nevertheless the political leaders of Assam naturally wanted to deal with regional rather than garden unions, and as a result of their efforts, in 1947 the first regional union – namely the Cachar Cha Sramik Union came into being. It does not appear to have been registered until 1950, but it received provisional recognition from the Surma Valley Branch of the Indian Tea Association in 1947 and six months later it was granted formal recognition. At about the same time, a staff union in Cachar, known as the Indian Tea Employees Union, was registered.

The Cachar Cha Sramik Union was characterized right from the start by moderation and in 1948 it issued a bulletin containing the following wise counsel:

> The Manager is the representative of the employer. The gardens are not yet our national property. They belong to the employers. How the gardens should be run is decided between Managers and employers and we merely carry out instructions. The primary objective of the Manager and the employer is to earn more profits. There are two ways to do this. The first one is by way of producing more tea and good quality tea and selling at high prices. The other

method is to under-pay the workers and *Babus** and thereby increase profits. The Union and the *Panchayats* have been set up to prevent their taking recourse to the second method. The Union will fight for proper wages but simultaneously it is the duty of the workers to improve the productivity of the gardens. If more tea or better quality tea is produced, more profits will be the result. The Congress, the National Government, and the Union will keep a strict watch so that the workers receive a due share of the profits earned thereby. That is why it is necessary to carry out the order of the Manager regarding the administration of the garden. Nothing can be done unless this dictum is followed. It would be unjust to nurse a spirit of distrust and suspicion against Managers only because they happen to be the Agents of the employers.

At a later stage the union ran into difficulties on account of the strong left-wing bias of its then secretary, but it recovered and has in general been an influence for good – firm in its protection of labour, but not irresponsible.

In the Assam Valley regional organization took longer to develop. The first regional union there was the Assam Cha Karmachari Sangha – a union of clerical and subordinate medical staff and artisans, linked to the Congress Party, which was registered in April 1947, and provisionally recognized by the Assam Branch of the Indian Tea Association in 1948. It was not until 8 November 1958 that the first regional labourers' union in Assam was registered†. Its formation accelerated the establishment of garden unions and before long the regional unions became an integral part of the Assam Branch of the Indian National Trade Union Congress. In due course that branch became organized on lines parallel to those of the Assam Branch of the Indian Tea Association – Cha Mazdoor Circle Sanghas corresponded to the Indian Tea Association Circles, and Cha Mazdoor Zilla Sanghas were established in the three zones into which the Indian Tea Association had divided the Assam Valley for administration purposes. For a time the Cachar Cha Sramik Union operated independently of the Assam Branch of the Indian National Trade Union Congress, but partly as a result of the creation by the Assam Government of an Assam Standing Labour Committee for the entire province, the Cachar Union ultimately came under the jurisdiction of the Assam Branch of the Indian National Trade Union Congress.

Unions in Assam grew rapidly in strength and the payment of subscriptions became more regular – a process much encouraged by the success of the unions in forcing the 1953–6 bonus agreement on reluctant employers. Unfortunately splinter groups also developed, and before long there were Congress, Socialist, and Communist trade unions, as well as at least one labour union not affiliated to any party.

* *Babu*= English-speaking clerk.
† Before that date the INTUC (Assam Branch) acted as a regional union.

Bengal

Whatever may be the theoretical arguments for or against the presence of 'outsiders' in a union, it is clear that the orderly progress of unions in the tea districts of Bengal was hampered by the absence of sound, active, political leaders. The Congress Party was poorly organized and badly led in those districts and the tradition of subversive activities from pre-Independence days still lingered. Irresponsible political parties were thus able to dominate the labour field, and the first trade union in Darjeeling, known as the Darjeeling District Tea Garden Workers Union, was closely linked with the Communist Party. It appears to have come into being about 1945, though it was not registered until some years later, and in April 1946 the president of the Darjeeling Planters Association wrote as follows:

> The present position in the Darjeeling District is that the Communist Party have a firm footing on many gardens and in my opinion are gaining ground.
>
> The ultimate aim of this party is to expropriate Estates and for this reason it is impossible for us to recognise any trade union formed by them.
>
> Their present policy is to create unrest on any Estates in the District where there is inequality in treatment of the labour in comparison to neighbouring Estates.

As we have seen, the decade after the Second World War was an unhappy period in the Darjeeling District. Most Darjeeling planters had a strong, natural sympathy with the hillmen, and, harassed beyond endurance by the Communists from the plains, they were only too ready to look favourably on the Gurkha League. In 1948 that league formed a union under the name of the Darjeeling Chia Kaman Sramik Sangha. It soon proved almost as irresponsible as the Communist controlled union, but since the antagonism between the Nepalese and the Bengalis made it difficult for the Indian National Trade Union Congress to organize unions in Darjeeling, planters had to make the best of a bad job, and to put up with two unions, neither of which was fit for recognition. This indeed continued to be the position until the end of our period.

It was in the Dooars that the birth of unions proved most difficult. Garden unions sprang up soon after the Transfer of Power, but many of them were controlled by self-seeking local agitators, and the perennial quarrels between Congress, Socialist, and Communist leaders – and even between rival leaders in the Congress fold – bedevilled their early existence. It is not worthwhile recounting these sordid struggles for power. Their unfortunate result was that it was not until 1955, after a period of general unrest and indeed of violence, that it was possible for the Indian Tea Association to recognize Dooars unions on terms similar to those which had long been accepted for Assam.

CHAPTER TWENTY-SEVEN

LABOUR AND STAFF IN THE PAKISTAN TEA DISTRICTS

TRADE UNIONS

At the time of Partition, the working labour force in Pakistan consisted of 88,000 workers in Sylhet and a relatively small number in Chittagong. For many years, recruitment of outside labour for the Surma Valley had been on a very limited scale, and the great majority of the labourers were Hindus or aboriginals whose families had been settled in the tea districts for one or two generations. They were thus legally Pakistanis, but in the state of communal tension that prevailed immediately after Partition, they were not at all sure of their own position. This necessarily retarded the growth of unions, and perhaps for this reason the two Moslem labour leaders, Dr Malik and Mr Faiz Ahmed, who came to East Pakistan from Calcutta, do not appear to have interested themselves seriously in tea-garden labour. Several unions nevertheless came into being soon after Partition, but only two of them require mention. The less important of the two was the Sylhet Tea Garden Mazdoor Union, whose president and moving spirit was Mr Abdul Mannan Choudhury. On account of its Moslem leadership, this union felt more sure of itself than some of its rivals and soon became a thorn in the flesh of the planters. Before long it over-stepped the mark and incurred the displeasure of the Government of East Pakistan, and its registration was cancelled on 25 April 1952. It is said that its membership never exceeded seven hundred.

Of much greater long-term importance was the Sreehatta Zilla Cha Sramik Union, often described as the Kulaura Union, which was established almost immediately after Partition and of which the moving spirit was P. K. Sen Gupta, M L A. From 1948 onwards, this union was active in pressing the demands of labour on the Government, but as it commanded little practical support among the workers, it was not at this stage recognized by the employers. Planters in Pakistan were, indeed,

still averse to the encouragement of an institution for which they thought their tea-garden labourers were not yet ready, and their attitude could perhaps be justified by the fact that, in spite of inevitable disputes regarding measures to meet the ever increasing cost of living, relations between managers and labour at this time were in general good. Nevertheless, the Kulaura Union grew rapidly in strength during the early fifties.

By 1957 conditions had materially changed. Unrest was rife in the province and in some industries a multiplicity of rival unions were creating continual trouble. If one union reached an agreement with the employers, another union would then put forward demands for something better. Strikes were of frequent occurrence and industrial tribunals were overwhelmed with cases. Although this state of affairs did not prevail to any extent in the tea industry, planters had now come to recognize the importance of establishing unions and the industry was included in the conference convened by the Provincial Minister for Commerce, Labour and Industries, Sheikh Mujibur Rahman. That conference led to an industrial truce, under the terms of which the outstanding demands of tea-garden labourers would be referred to arbitration. The Pakistan Tea Association and representatives of labour agreed that N. L. Hindley, ICS (Retd), a former judge, much respected by all communities and classes in Pakistan, should be asked to undertake this arbitration, but it was first necessary to ascertain if Sen Gupta's union did in fact represent labour. The procedure to be followed for this purpose was settled with the Labour Commissioner in July 1957 and tea-garden polls were organized. The early result showed that about ninety per cent of the labour force supported the Sreehatta Zilla Cha Sramik Union, but before the poll was more than half complete, the Labour Commissioner ordered its discontinuance in spite of the protests of the Pakistan Tea Association. The reasons for this change of front have never been made public. It has been said that since the union used as its symbol the flag of the Congress Party, the Government of East Pakistan feared that labour was thereby being conditioned to vote for that party in the next elections – and it has been stated that one labourer, on being asked by a labour officer whom he would vote for, replied, 'Mr Nehru'. This may or may not be true, but it is clear that Sen Gupta and his colleagues were not regarded with favour by the Government. The influence of the Congress Party in the legislature was nevertheless growing and the Government soon had second thoughts. In March 1958, the Government in fact directed the Pakistan Tea Association to recognize the union and to undertake discussions with it about matters under dispute.

In October 1958, martial law was declared and the union was closed down. Thereafter, there was no body with whom tea-garden authorities

could negotiate. In 1959 the Government recognized that this was an unsatisfactory position, and the Deputy Commissioner of Sylhet suggested that managers might call a meeting of *sardars* in order to form a union. The Pakistan Tea Association rightly felt that this method of forming a union would be quite wrong. The Deputy Commissioner then called a meeting of *sardars* for the same purpose, but his efforts failed. He then instructed one Sitaram Naidu, a school teacher who had at one time taught on a tea estate, to form a union. Naidu's attempt proved abortive and his union was never even registered.

In April 1960 the Pakistan Minister for Labour, General Burki, directed that the Sreehatta Zilla Cha Sramik Union should be revived under the aegis of the East Pakistan Federation of Labour, which had Aftab Ali as its president and Sulaiman as its honorary general secretary. At a meeting of the executive committee of the union called on 28 February 1961 by M. Sulaiman, Sen Gupta and other former officials were removed from office, and henceforth Sulaiman controlled the union's activities.

Right from the beginning of union activity, the clerical and medical staffs and artisans had their own separate organizations. In September 1946 the Indian Tea Employees Union had been formed at Kulaura, its jurisdiction covering clerical and medical staffs in Sylhet, Cachar, and the Tripura State. In June 1948 members of that union in the area which had been included in Pakistan formed the Purba Pakistan Cha Karmachari Sangh to represent all monthly paid employees below the rank of assistant manager. The union was registered on 18 November 1948.

Another clerical staff union, known as the East Pakistan Moslem Tea Garden Employees Association, had been formed some time previously, but it does not appear to have done anything at all and in February 1952 it was amalgamated with the Purba Pakistan Cha Karmachari Sangh to form the East Pakistan Tea Estates Staff Association, representing clerical and medical staff and monthly paid artisans. This new union was registered in September 1953 and was recognized by the Pakistan Tea Association in December 1953, with effect from January 1954.

REMUNERATION OF LABOUR

When Partition took place, labour in the Surma Valley was in general paid on the *hazri* and *ticca* system, the *hazri* rate being 7 annas with a dearness allowance of 2 annas a day. Rice was issued to the extent of $4\frac{1}{2}$ *seers* per week for each adult worker at a concession rate of Rs 5 per maund. In June 1948 representations by employers to the Government as to the heavy financial burden imposed upon them by this obligation to sell foodstuffs at concession rates so far below the market price were successful, and partial 'conversion' was effected. Rice was to be sold to labour at Rs 17/8 per maund and by way of compensation the dearness allowance was increased to 9 annas per day. The union's demand that it

should be fixed at 15 annas, of which 10 annas would be regarded as compensation for the loss of concessions, was not justified by facts, since the equivalent of the difference between Rs 17/8 and the price per maund at which rice had formerly been purchased from gardens was less than the increased dearness allowance now given.

At the end of 1948 the Government of East Pakistan neither made rice available to gardens nor allowed managers to buy rice or paddy in bulk. The issue of foodgrains, therefore, had to be discontinued and a variable cash compensation for the difference between Rs 17/8 per maund and the current market rates, was paid to labour. A little later the supply situation improved and gardens were able to resume issues. In practice, however, market rates were for a time below Rs 17/8 per maund, so that labourers had no inducement to buy from the gardens.

When provincial shortages again occurred, rationing was introduced in the urban areas, and the Government of East Pakistan limited issues of rice by gardens to 3½ *seers* per week per adult labourer. The unions continued to press for the restoration of the 4½ *seer* ration, but even when, in August 1950, the ration for heavy manual workers in urban areas was raised to 5 *seers*, the Government still declined to allow the Pakistan Tea Association to increase its scale of issue. The Pakistan Tea Association protested rigorously against this discrimination, but the Government had now made itself responsible for supplying rice to gardens, and would not risk increasing its obligations. In April 1951 the Pakistan Tea Association was informed that managers might supply rations in such quantities as they chose, but as the Government continued to supply rice to the gardens on a restricted basis and to prohibit gardens from purchasing privately, the permission meant little.

Pressure from labour for an increased dearness allowance continued throughout 1952, but at the end of that year producers in Pakistan and India alike were facing a serious financial crisis. On 1 January 1953 wages were cut by 2 annas per day and salaries of managers and subordinate staff were reduced by five per cent. These cuts were accepted by labour with a fairly good grace. By August 1953 the situation had improved and the cuts were restored. Demands for increased wages were again put forward by the Kulaura Union, but when in the middle of 1954, Governor's rule was introduced in the province, some of the officials of the Kulaura Union were arrested, and 'agitation' was strongly discouraged by Government. Economic facts nevertheless justified an increase in wages, and with effect from Pakistan Day, August 1954, the Pakistan Tea Association on its own initiative and without any pressure from the union, increased the *hazri* rate to 9 annas.

By 1955, the union was in a militant mood and at a meeting held on 3 July 1955, demanded, *inter alia*, a substantial increase in wages, a bonus equivalent of three months' pay, and the establishment of provident

funds. At this time labour had a weak case, inasmuch as the market price for rice had fallen to the lowest figure known for many years. In the middle of the year the normal price for paddy was Rs 6 per maund and gardens were quite unable to dispose of the stocks which they had purchased at high prices.

At the beginning of 1956, thanks to a poor paddy harvest in 1955, the foodgrains situation took a dramatic turn for the worse. By the beginning of February, the price of rice had reached Rs 19 per maund and it was evident that there would be a considerable provincial shortage. The Government of East Pakistan were unable to supply tea gardens with rice until July, and labourers had to buy in the open market at prices which rapidly rose to Rs 27 per maund. An increased wage was obviously necessary. On 15 February 1956, the Pakistan Tea Association introduced a variable dearness allowance, in addition, of course, to the existing dearness allowance. The scheme provided as follows:

Cost of rice (per maund)	*Variable dearness allowance for adults* (per day)	*Variable dearness allowance for children*
Rs 17/8	Nil	Nil
Rs 21	one anna	6 pies
Rs 24	2 annas	one anna
Rs 27	3 annas	one anna 6 pies
Rs 30	4 annas	2 annas

This variable dearness allowance was paid for several months, but in July 1956 the Government fixed the price at which rice obtained from them should be sold to labour at Rs 20 per maund. The variable dearness allowance was therefore no longer payable. Rice was supplied to the industry by the Government at Rs 19/8 ex *godown* Chittagong, and the quantity supplied was based on a ration of $3\frac{1}{2}$ *seers* per adult heavy manual worker, with smaller amounts for other workers and dependants. The Government also assumed that, in the case of any worker who had *khet* land, a deduction from the issued ration would be made, and the Pakistan Tea Association therefore recommended that in such cases the rations of families should be reduced by fifty per cent. In October 1956 the Pakistan Tea Association voluntarily lowered its selling price of rice to Rs 17/8 per maund.

As we have seen, the truce of 1957 provided for the reference to arbitration of outstanding labour demands. Later, this proposal was replaced by an agreement that matters in dispute should be the subject of bipartite negotiation, and in March 1958 discussions between the Pakistan Tea Association and the Srihatta Zilla Cha Sramik Union, resulted in an agreement for a period of three years covering a number of items. Wages were increased by 2 annas per day, so that a male labourer would

receive a basic wage of 11 annas and a dearness allowance of 9 annas, while foodgrains would continue to be sold to labour at Rs 17/8 per maund. The number of holidays with pay in the year was to be increased from two to twelve and the usual annual bonus was to be raised from Rs 20 to Rs 25 in the case of a man, with corresponding increases for women and children. It was also agreed in later discussions that employers and labour should send a joint letter to Government, stating that in view of this settlement there would be no need to appoint a minimum wage board. Sen Gupta appears in the end to have avoided signing any such letter.

No other substantial change in the remuneration of labour occurred during our period, except the establishment of a provident fund in 1959. The fund was vested in trustees appointed by Government and employers and employees were each required to contribute to the fund 6¼ per cent of the basic wage.

General amenities were in the main, during the years with which this book is concerned, left to be governed by custom or settled between employers and labour, rather than controlled, as in India, by detailed government regulation. They require no discussion here and it should be sufficient to quote an extract from the report of the ILO Mission which visited the Pakistan tea districts in 1953. 'The Mission found these families living almost a primitive state of existence, yet they were perhaps the happiest body of employees encountered and the relations between the majority of Managers and their work people seemed intimate and sincere.' In fact, the old *ma-bap* tradition, still to a large extent prevailed.

REMUNERATION OF CLERICAL AND MEDICAL STAFF

At the time of Partition the clerical and medical staff of tea estates were mainly Hindus. Conscious of their uneasy position in Pakistan, they were for some years content not to join in the general demand for better remuneration. By 1955, however, the cost of living had risen considerably and the Pakistan Tea Association therefore took the initiative and recommended special allowances to meet the increased cost of food. Two years later a further step was taken. Basic salary scales more appropriate to the times were introduced and dearness allowance at the rate of thirty per cent on the first Rs 100 of basic salary and fifteen per cent on the balance was granted.

The initiative taken by the Pakistan Tea Association in forestalling demands justified itself and clerical and medical staff in East Pakistan have been remarkably loyal.

Section 4

SCIENTIFIC RESEARCH

CHAPTER TWENTY-EIGHT

SCIENTIFIC RESEARCH: THE FIRST PHASE

The history of scientific research in the tea industry in North-east India falls naturally into three phases, in the first of which the foundations were laid by Kelway Bamber, Watt and Mann. The second period, which may be said to have begun in 1919, was mainly one of *ad hoc* experiments into particular problems and Carpenter must be regarded as the central figure in it. The third phase, which began in 1936, will always be associated with the name of Sir Frank Engledow, under whose chairmanship the Commission of 1936 first planned the work of Tocklai on a systematic and long-term basis. In this chapter we shall be concerned only with the first of these three phases.

Although scientists of the calibre of Griffith, Falconer, and Royle were associated with Indian tea in the very early days, it was not until 1884 that the first collective approach to research into tea problems was made. In that year, J. Buckingham of the Amgoorie tea estate, wrote to a number of planters regarding the beneficial effects of planting *sau* trees, known botanically as *Albizzia stipulata*, amongst the tea bushes and invited their comments. Their replies, published in the Report of the Indian Tea Association for the year 1885, are of great interest. Some attributed the effect described by Buckingham to a moderate degree of shade, but Buckingham disagreed with this view and stated that shade by itself 'tends to make the bush throw out long stalky shoots each racing with each other to reach the light and the flushes from such teas are necessarily meagre and woody'. Others attributed the result to the drip from the leaves, or the leaf cast and hoed in with the soil, while yet others explained it as being the result of some chemical process set up by the roots of the 'shade' trees. One or two of the correspondents denied that any beneficial results accrued from the planting of *sau* trees, but the overwhelming majority agreed with Buckingham and considered that these shade trees definitely conserved the vitality of old tea bushes. Surgeon Major George King, the Superintendent of the Royal

Botanical Gardens, Calcutta, saw no reason to disbelieve the facts stated by the planters and wrote as follows:

The *sau* tree *Albizzia stipulata* does differ from the majority of Indian trees as regards the shade it gives. Its leaves are divided into very minute leaflets, which have the peculiarity of folding together at night. Even during the day, when the leaflets are expanded, the tree casts a gentle shadow so broken by patches of light that grass and other herbaceous vegetation as also shrubs grow freely under it. The folding together of the leaflets at night permits dew to fall to some extent on the ground protected by the spreading branches of the tree, and the free access of moisture at night is no doubt of great advantage to most plants. There are several large *sau* trees in the Botanical Garden, and I have for years observed the readiness with which plants grow under the shadow of these. It seems thus quite possible that the peculiar shade yielded by the *sau* may be of advantage to tea bushes growing under it.

I have no doubt that by the decay of the dead leaves of the *sau*, a manure is formed which must be of advantage to tea bushes. Any top dressing of decayed leaves would in like manner be useful, and the only peculiarity which gives the decayed *sau* leaves any special value is that they are extremely minute, and may thus be carried into crevices of the soil into which larger leaves could not enter. From their small size they quickly rot, so that whatever benefit they confer would become speedily apparent.

No further research seems to have been done on shade trees for a time, but the minds of progressive planters were beginning to turn towards science and in 1886 A.F. Dowling of the Kornaphuli Association wrote as follows:

There is scarcely an industry of importance which does not call in the aid of the analytical chemist. There are laboratories in most smelting, dyeing, bleaching, mining large works, but Tea ignores the chemist entirely, and yet manufactures an article which depends, perhaps more than any other on quality. An anna per pound more or less represents a fair profit or a serious loss. Tea is at present entirely dependent on the Broker, who, although qualified to pass an opinion on the appearance of the leaf, the color of the outturn, the flavour and the strength, never ventures a remark as to what important constituent the tea is deficient in, or of what objectionable substance it has an excess. He will possibly tell you that your defect is a dull outturn. You send him the finest outturn he could wish to see, and he reports your tea 'soft' and 'wanting in quality'. Tea is not manufactured to be looked at, but to be consumed, and although appearance goes some way, strength and body will ever command most attention, and what we want to know in a Report is not only how the teas look and how they taste, but of what they should have a little more, and of what they would be the better to have a little less.

From the moment pressure is brought to bear on the succulent leaves in the Rolling Machines, through the silent process of fermentation or coloring, to the time when the fragrant smelling tea leaves the fires, a variety of chemical changes occur in the Dextrine, Glucose, Gum, the Tannin, Nitrogen,

Potash, Ammonia, Chlorine and Sulphuric Acids, and Essential Oil, which are found in the extract or 'Liquor'. Is it too much to expect that, in the course of time, to the monotonous report of 'greyish, fair tip, brisk, little flavor', may be added the more desirable information of 'fairly gummy, potash 2–13 per cent only, good trace of Essential Oil'? We could then with our knowledge of manures supply after a while the lacking Potash, and do our best to keep up the desired proportion of Essential Oil.

The next subject to attract scientific attention was the use of oil cakes and other fertilizers. In April 1889, Messrs Jardine, Skinner & Company, who had received an enquiry from Messrs Macneill & Company as to the class of oilcake most suitable as a manure for tea bushes, sent samples of oilcakes to the Agricultural and Horticultural Society and asked for advice 'as to the fertility as a leaf stimulator of each description'. 'Tea managers,' they stated, 'as a rule have little or no idea of the richness as a manure of each kind of oilcake and as long as they obtain deliveries from the local native sellers of the quantity contracted for, do not bother themselves as to the particular description tendered.' They went on to point out the importance of this matter since a *lakh* of rupees were spent annually on organic fertilizers in Cachar alone. No mineral fertilizers were then in use.

The society consulted Surgeon-Major Warden, Professor of Chemistry in the Calcutta Medical College. Warden considered that soil analysis must precede advice regarding manure, and undertook to analyse soil-samples from gardens representing different classes of oil in each district, the representative groups to include both good and bad gardens. Warden was obviously a man with a true scientific spirit and in order to guard against drawing wrong conclusions from the chemical data alone, he asked for samples of the tea plant from the plots whence the soil samples were taken and also required full information about differences in method and manufacture as well as about the subsoils.

It is clear not only that the foundations of scientific research were being well laid, but also that Warden had taken on, in an honorary capacity, a very big job. It is not, therefore, surprising that he soon found it impossible to spare the time for this task and it was agreed to engage a whole-time soil chemist for a period of two years. The sum of Rs 10,000 was guaranteed by the Indian Tea Association and fees for soil analyses were to be levied in reduction of this guarantee. In the relevant memorandum of the Agricultural and Horticultural Society, the following interesting passage occurs:

> At present the tea industry is regulated by more or less empirical methods; the precise conditions which influence the commercial value of the Teas are practically unrecognised. A high priced Tea and a low-priced one, as far as is at present known, are chemically indistinguishable. The Tea plant can be made

to yield a larger crop by the return to the soil of certain principles abstracted by the leaf, and which is at present given back by the indiscriminate use of manures, while those which influence the quality of the leaf are, from a chemical point of view, an unknown factor. There are general rules regarding the restoration to the soil of constituents abstracted which are as applicable to the Tea plant as to any other crop, and the systematic application of which will most certainly improve the yield. But although it cannot, with certainty, be predicted that any special rules will be deduced as an outcome of the enquiry, the application of which will certainly improve the quality of Tea, yet there is every reason to believe that general deductions will be arrived at which will indicate to some extent the system which should be adopted to this end.

The Joint Committee of the Indian Tea Association and the Agricultural and Horticultural Society, which was to control this scheme, appointed as chemist M. K. Kelway Bamber. Since it was found necessary to pay him as high a salary as Rs 400 per month, it was decided to limit the period of his employment to eighteen months. By the time Bamber joined his duties in October 1891, it had been realized that the scope of the inquiry would have to be extended. 'With the present knowledge,' stated the committee of the Indian Tea Association in a memorandum, 'or it might more correctly be said ignorance of the subject, it is impossible to say whether any given manure contains constituents essential to the growth of tea, and whether the constituents it does contain are present or absent from the soil.'

The Association had now embarked on an enquiry the answer to which is still not completely known – namely, what is the chemical basis of quality? Bamber's first report was purely practical in its nature. He insisted on the need for good drainage, he emphasized the disadvantages of the old close two feet by three feet planting, he suggested that all prunings should be burnt, and he referred to the ash from the engines as an important source of manure. He also advised deeper and more frequent hoeing in the Dooars. He examined the problem of finding the best temperature for fermentation, but did not arrive at any conclusion.

In subsequent reports, Bamber went into more fundamental matters such as the changes occurring during fermentation, the presence and effects of essential oils in tea and the chemical constituents of green leaf. He also dealt in a preliminary way with insecticides. His conclusions were set forth in detail in his book *The Chemistry and Agriculture of Tea*, as well as in the annual reports of the Indian Tea Association and need not be summarized here. Unfortunately for the industry, in the middle of 1893 Bamber left to take up an appointment with the Government of India and the enquiry into the chemistry of tea, as well as into soils and manures, was dropped for the time being.

In the meantime, planters had been pressing for systematic investiga-

tion into the insect blights affecting the tea bush and it had been intended to ask Bamber to investigate this subject more fully. In view of his departure, the Association decided to approach the Government of India for help, and in 1894 they forwarded to that Government a memorandum from J. Buckingham, chairman of the Indian Tea Association, urging the appointment of an entomologist, free to move about the country and supported by laboratory assistants in fixed places. Arrangements were made by the Government of India to send Cotes, of the Indian Museum, on a tour of Assam to investigate animal and insect pests; but Cotes resigned and the plan fell through. Dr George Watt, reporter on economic products to the Government of India, was then sent to Assam to make enquiries as to the value of the *Adhatoda Vasica* as an insecticide. The particular hope was that it would check mosquito blight, but it was thought that it might also serve as an antiseptic 'capable of destroying germs of diseases in drinking water as well as in the atmosphere'.

Watt's tour in Assam brought to light many new problems and it was reported by the Indian Tea Association that Watt 'has convinced the planters in the districts visited that there is as much to be learnt on the subject of the proper cultivation of the plant as in that of the remedy of actual blight'. This conclusion led J. Buckingham in November 1895 to propose the appointment of a special scientific officer who should devote his whole time to thorough investigations into the chemistry of the tea plant and its cultivation and manufacture. Watt wrote an excellent note on the project setting forth succinctly the scope of the investigations contemplated. They were to include investigations:

(a) Into the question of the relation of soil, climate, water, situation, exposure, shade, proximity to jungle, etc, to the character of the leaf obtained.

(b) Into the relationship of environment to diseases and pests.

(c) Into the chemical and other properties of the better known forms of the Tea plant, and the suitability or otherwise of these various races, hybrids, etc, to the environment.

(d) Into the chemical conditions of the plant that favour or retard the growth of diseases and pests, with the view to establish the characteristics that should be selected and developed in the production of blight-proof stock.

(e) Into the chemistry of the various systems of cultivation with the view to establish improvement that would bring about a healthier condition of the plant than prevails at present or improve the quality of the leaf. In this connection I may explain that I am firmly convinced the majority of diseases and pests are the direct results of defective and selfish cultivation. The plant is being made to yield more than is consistent with due regard to its health and future. If a high yield has to be maintained, improvements in agriculture through very possibly the supply of specific manures, and the establishment of a system of fallowing periodically certain portions of the garden.

(f) Into the whole process of manufacture in every stage and in relation to each form of the plant, as well as in relation to the better known systems of cultivation. By cultivation I mean every operation connected with the plant until the leaf reaches the factory. Of these may be mentioned the various systems of hoeing, pruning, plucking, etc, etc.

Watt also made it clear that the officer appointed must be almost as much of a botanist as a chemist, and that although association with the Calcutta laboratory of the Indian Museum would be valuable, he must have local laboratories and camp equipment and spend most of his time on tour in the gardens – a view not quite in line with the ideas of the Indian Tea Association today.

The General Committee of the Indian Tea Association, whilst strongly in favour of Buckingham's proposal, were a little uncertain as to whether funds would be forthcoming from the industry for this purpose, in view of the fact that subscriptions were then being sought for the American Market Fund. They therefore referred the whole question to the branches and the sterling companies. Their doubts were justified and in the Annual report for the year ended 28 February 1897 it was explained that in view of the divergence of opinion in Calcutta and London, the proposal had been dropped for the time being.

At the beginning of 1899 the Indian Tea Association in London urged the Indian Tea Association in Calcutta to reconsider the possibility of establishing a scientific research organization, and fresh attempts were made to persuade the Governments of Assam and Bengal to share in the expenses of such a scheme. In 1899 the Governments of Assam and Bengal agreed to contribute Rs 5,000 and Rs 2,000 per annum respectively towards scientific research, and on the strength of this promise, the Indian Tea Association appointed Harold Mann as their scientific officer. He joined his post in the spring of 1900 and this may be regarded as the starting point of systematic investigation into the scientific problems of the tea industry.

Mann was a success from the outset and soon impressed planters and agency houses alike with a sense of the need for expanding the scientific department. D. A. Campbell of Begg, Dunlop & Company Ltd, speaking at the annual meeting in 1902 expressed the view 'that we ought really to have a dozen Mr Manns in the field training the assistants . . . who should possess, in addition to engineering, a practical knowledge of agriculture and chemistry in their relations to growth and manufacture'. It had been hoped that help would be forthcoming from L. de Nicéville, who was appointed by the Government to take charge of the entomological section of the Indian Museum, but he died shortly after his appointment, as the result of a fever contracted during a visit to investigate an outbreak of mosquito blight in the Terai.

Mann's headquarters were in Calcutta, where he was allowed to use the laboratory of the government reporter on economic products at the Indian Museum. Much of his time, however, was spent on tour. Mann proposed to himself three main subjects for investigation, which he thus described:

I propose, to devote my attention principally, in the first instance, to three – or rather four – different questions: –

(1) The relationship between the soil on the one hand and the health and yielding power of the bush, and the quality of tea obtained from it on the other.

(2) The nature of, and remedial measures, to be adopted against:–
  (a) blister blight (*Exobasidium vexans*).
  (b) thread blight (*Stilbum nanum*).

To the study of these might be added that of red rust, a most serious blight which seems extending the area of its attack in a slow but very disquieting manner.

(3) The study of the 'fermentation' of tea, and the methods by which it can be controlled.

C. J. Harrison, Chief Scientific Officer of Tocklai from 1945–52, writes as follows of Mann's work:

When Dr Mann commenced his work in tea, he realised that one of the major troubles was that tea bushes were literally dying of starvation, having used up the supplies of readily available plant food in the soil. He advised the use of oilcake and cattle manure, of which there was plentiful and cheap supply, and the results were at once striking. He also observed that, though the soils were acid, this did not adversely affect the tea and advised that, contrary to general agricultural practice with most other crops, tea should not be limed except in special cases. He also studied the root growth of tea bushes and found that in many cases soils were waterlogged and thus microbiological activity in the soil was restricted and plant food already in the soil could not become available to the tea bush. He therefore advised proper systems of drainage of tea estates. Thus he may be said to have laid the foundations of modern agricultural methods of soil management in tea.

Methods of heavy pruning in various parts of the Assam Valley were also studied and experiments were started in the Terai with a view to discovering how to combat mosquito blight which was then considered 'the most alarming of all the pests of the tea planter'. Progress was in fact made in many departments of research and pamphlets were issued on the subjects concerned.

In 1902 at the request of the Indian Tea Association, Mann put up proposals for expanding the scientific department. They are best described in his own words:

(a) The present central department and laboratory in Calcutta must remain.

It is impossible to do work adequately unless one is in touch with those who control the industry, has access to libraries and to the Government Consulting Officers; and in the Tea Industry this is the more essential as the enormous and widespread area under tea renders it difficult, if not impossible, to find any other spot of easy accessibility from all parts of the area. The fact that the Government have allowed me to utilise to the full the laboratory of the Reporter on Economic Products at the Indian Museum – a most convenient arrangement – renders this aspect of the case doubly impressive. The enormous amount of routine work in such a laboratory would render the employment of a Babu assistant – properly qualified – of great advantage.

(b) An assistant should be engaged from England who should primarily be an agricultural and organic chemist, if possible, possessing a university degree who would be capable of taking up more especially the manufacturing problems and working them out under my supervision. His centre of work would hence be in the tea districts. By the engagement of such a man the continuance of the department would be assured, as he would gradually get the track of all the investigations now in my hands alone, and in case of any break-down in health there would be one, already in harness, capable of taking hold of the subject. Such an assistant could be obtained, I think, properly qualified and capable of becoming an authority on the problems relating to tea for a salary of say Rs 400 per month rising by annual increments to Rs 600 per month – passage out being of course paid, and travelling allowance on the usual scale being allowed.

(c) Involved in the appointment of such an assistant is the question of the establishment of a central station in the Tea Districts. This would partake of the character of an American Experiment Station – where a few acres, say not more than fifty, would exist for purposes of experiment, and where any immediate commercial consideration would be excluded. Here, for instance, experiments on pruning, on various methods of plucking and their effect on bush and on quality, on improvement of quality by manuring etc, etc, could and would be carried out. Such an area, already in tea, capable of being extended by experiments in planting, and containing old second-rate tea as well as that of the first class, could doubtless be obtained sufficiently near to a factory to allow of work being done on a large scale as well as on a laboratory scale. Such a place has a tendency, I know, to degenerate into a so-called 'model' garden, but this is absolutely the opposite of what I now suggest, for a large part of the experiments would not be directly useful or effective, and it would have to be recognised that such would be the case. A station like this should be placed in the most accessible position, and now there is early prospect of the completion of the Assam-Bengal Railway it would seem that a man placed in touch both with rail and river in the Brahmaputra Valley would be within two or three days' journey of any part of the more important Tea Districts of North-east India. Jorhat would be such a place – or somewhere in the neighbourhood – or failing this Dibrugarh, though the former would be decidedly preferable, and areas of tea suitable for the purpose are probably obtainable.

(d) It might be asked whether an entomologist or mycologist to study the pests and blights of the plant is not more urgently needed than the above sug-

gested chemist. I think not, but nevertheless their presence on the spot would be essential to a complete scheme.

Mann estimated that, with this expansion, the total cost of the scientific department would be Rs 27,000 per annum. Applications for financial aid made by the Association to the Governments of Bengal and Assam received strong support from J.E.O'Connor, the Director-General of Statistics, in his review of the trade of India in 1901–2. The Governments of Bengal and Assam agreed to raise their annual contribution to Rs 7,000 and Rs 3,000 respectively, though they contended that expenditure on scientific research should be met from the proposed tea cess. This view was opposed by the Indian Tea Association, who argued that the cess would be inadequate even for its proper purpose of tea propaganda. The Association's view prevailed and the Governments of Bengal and Assam continued to make their contributions from general revenues. The Government of India also sanctioned a grant of Rs 5,000 per annum. The various planters' associations agreed to contribute as follows: –

	Rs
Assam Branch	3,000
Surma Valley	1,750
Dooars	1,250
Terai	300

The balance was to be met from the funds of the Indian Tea Association. Claud Hutchison was appointed as Mann's assistant in Assam and joined him in 1904.

In the meantime it had been decided that the Jorhat area would be the most suitable for the location of the Assam station and the Scottish Assam Tea Company Ltd had offered to provide a small bungalow, some old tea for experiment, and additional land as required. The station was established in 1904 at Heeleeka near Mariani under the charge of Hutchison, and at the end of the first year Mann reported as follows:

This station has been founded, as you know, in order to make experiments on the spot primarily into two points. Of these the first is the prevention of the deterioration of old tea, whether by manuring methods or by changes in the system of treating old bushes. The second, and to me (as well as, I think, to your Committee) what is even more important, is the investigation of the relation between the quality of tea and the method of growth. The principal series of experiments which has been laid out, deals with the effect of various types of manurial treatment on old tea, both in respect of healthiness and yield, and more importantly on quality. I have during the past year devised a method of measuring chemically, I will not say the quality of tea, but certain of the more important elements of the quality, and this places us considerably in advance of anything which has been hitherto possible in this direction. I

say this because a chemical method of testing the leaf allows of the use of smaller and more manageable plots than is possible when every sample of leaf plucked from every differently treated area has to be separately manufactured, and at the end of the present season I hope that my department will be able to place before you results considerably more definite than has hitherto been possible.

This report is of particular interest, inasmuch as the scientific department of the Indian Tea Association is still carrying out experiments in the hope of devising a method of chemically measuring certain elements affecting the quality of tea.

By the end of 1905, thirty-two acres of land had been taken up at Heeleeka, for the purpose of carrying out experiments to determine:

(1) the manurial requirements of tea, and the most economical methods of satisfying them to improve the quality as well as to increase the yield; (2) the most valuable plant to use for the green manuring of tea; (3) the most satisfactory method of light pruning; (4) the advantages of different systems of plucking the bush.

A chemical laboratory was established in the experimental area and operations were supervised by a local advisory committee of planters. Mann himself attached great importance to the study of fermentation and of the relations between the temperature at which that process was carried on and the quality of the made tea. Attention was also given to research on mosquito blight and red rust.

It had now become clear that the scientific department must be expanded further and Mann proposed, in particular, the appointment of an entomologist in Calcutta with an assistant in the tea districts, and also a qualified chemical assistant in the Calcutta laboratory. It will be noted that the main headquarters of the department were still to be in Calcutta. In supporting the proposal for an entomological department, Mann pointed out that the annual loss to the industry on account of mosquito blight alone was Rs 7 *lakhs*.

It was estimated that after the proposed expansion the department would cost between Rs 40,000 and Rs 48,000 per annum. The Government of India agreed to give Rs 15,000 annually for five years from 1 April 1905, while the grants from the Governments of Assam and Bengal were fixed at Rs 10,000 and Rs 3,500 respectively. In view of the many discussions in recent years as to the advisability or otherwise of financial participation by Government in the work of the research stations of the Indian Tea Association and the United Planters Association of Southern India, it is interesting to note that in the early days the Central and Provincial Governments bore the major part of the expenditure and were constantly pressed by the Indian Tea Association to increase their grants.

The new scheme came into force on 1 April 1909, when C. B. Antram joined as entomologist, with his headquarters in Cachar. A bungalow and laboratory site, about four miles from Cachar, were made available by the Dudputtlee Tea Company. The laboratory was erected during the year, and attention was immediately given to three serious caterpillar pests of tea.

Hutchison at the Heeleeka Station continued to concentrate mainly on manures, and Mann reported on this subject as follows at the annual meeting in 1907:

I have already written about the discovery of the '*dhaincha*'* plant as a green manure for tea. During the last year it has maintained its reputation not only at Heeleeka, but in the hands of quite a number of planters, and the trouble now is to procure enough seed to satisfy the demands of the industry. The second matter is the proof of the extreme value of very small quantities of manure to tea. We have got almost equal results by the use, for instance, of five maunds of oilcake per acre as with fifteen maunds in the first year, and so far it seems very decidedly preferable to apply much smaller quantities of these concentrated manures than has hitherto been the custom, and to apply them more often. This result has also been confirmed by the experience of quite a number of planters acting on our advice, and in a short time I expect to see a much larger acreage of tea annually manured than has hitherto been the case, with very little, if any, increased expenditure of money. The third point which has become clear from the Heeleeka experiments, is the fact that none of the manures, which we have applied in small quantities, have had any appreciable effect in causing the deterioration of the quality of the tea, an effect hitherto always feared by planters in districts producing high quality tea.

In this year Mann had to interrupt his main work on the chemistry of tea to study the most serious attack of blister blight yet known in Assam. He nevertheless regarded his investigation into the fermentation of tea as his most important activity, and in view of his great contribution to knowledge of that subject, his report regarding it at the 1907 annual meeting deserves quotation.

In the early days, I was able to ascertain the cause of the changes which occur during this operation, to isolate the ferment, and ascertain its properties. At a little later date it was shown that one of the chief functions of the process of withering the leaf was to cause a large increase in the amount of this ferment. Again, this increase was found to require a definite time to be complete, and if this time were exceeded the quantity again decreased. The result was to explain why all methods of rapid withering have failed, and also why leaf, much over twenty-four hours in the withering racks, nearly always produces inferior tea. Proceeding beyond this, I have been able to show that the correct fermentation process which follows depends on this ferment, but that,

* *Sesbania aculeata.*

if the temperature is raised about 82 to 84° F, other actions unconnected with ferments of any kind, interfere with the process and spoil both the pungency and body of the tea produced. So far I was able to go a year ago. Now in this matter I can take a further step. Not only does a high temperature interfere with the reaction we desire, but so does a low temperature also. In this case it is not, however, owing to the existence of a second and undesirable reaction, but to the fact that the reaction appears never to become complete, and that before the fermentation is finished, microbes and other organisms have so much time to grow that they are able to seriously damage the class of tea produced. Hence we are now able to say with some amount of confidence that, having regard to the pungency and body of the liquor alone, the best tea can only be produced when the fermentation takes place between 77 and 82° F or an extreme of 75° F and 84° F.

During the past season, for the first time, I have been able to elaborate a method by which I can follow, at least approximately, the development of the essential oil which is the principal cause of flavour in tea. Applying this method to the actual process in vogue, it immediately becomes clear that the flavour is not at all developed during withering, for the essential oil remains nearly the same during the whole of this operation. But as soon as the leaf cells are broken in the rolling, development of such flavour as is possible takes place with extraordinary rapidity. In half an hour nearly all is developed; after one hour (taking a temperature of 80° F as a standard) very little further change takes place, while after three hours from the commencement of rolling, there is usually a gradual loss of the flavour produced up to that point. In fermentation we have, therefore, two apparently inconsistent objects to attain. First, we have to give time enough to complete as near as may be the fermentation of the tannin and development of body of the liquor, and we must not give more than three hours, or the flavour will begin to decline, all being between temperatures already indicated.

The best result which can be obtained hence varies with the tea which it is desired to produce. But it is perfectly clear that the best flavour from leaf cannot be obtained if more than three hours' fermentation is given, nor the best liquor if less than about four and a half to five hours, are employed.

Much of this is commonplace today, though at that time the scientific establishment of these facts represented a great step forward in technical knowledge. Unfortunately for the industry, in 1907 Mann left it to become Principal of the Government Agricultural Training College at Poona. It is not too much to say that in seven busy years, Mann revolutionized the state of knowledge of tea cultivation and manufacture, and it was not without justification that at an annual meeting four years after Mann had left, the chairman stated that 'since its inception ten years ago under the able guidance and quenchless enthusiasm of Dr Mann, there can be little question that the industry has received excellent value for its share of the money spent'. Mann never forgot that if the scientific department was to be of value to the industry, its results

must be published, and by the end of 1906 a considerable number of pamphlets had been issued.

Hutchison succeeded Mann and was replaced as assistant scientific officer by Dr D.G.Hope. Hutchison soon fell ill and had to retire in 1909, and at the annual meeting in that year T.McMorran justly complained that Mann's inquiry into the chemistry of tea manufacture was not being followed up. Hope succeeded as chief scientific officer and P.H.Carpenter was appointed assistant scientific officer with his headquarters at Heeleeka. At this stage important research work was done on mosquito blight, which was recognized as 'the most injurious pest which tea has to contend with', but adequate steps to deal with it could not yet be devised. Research into manures also continued to yield useful results.

In 1910 more attention was given to the dissemination of scientific information amongst tea planters, and it was decided that during future tours scientific officers should deliver addresses to planters in convenient centres. It was also agreed to publish a quarterly journal 'containing short articles and notes such as are more suitable for publication in this manner than in that of the usual pamphlets issued by the department. It will be possible to outline the progress of current investigation and to draw the attention of garden managers to the scientific aspect of the cultivation falling to be undertaken at the time of publication of each issue'. Publications continued to issue from the department at a rate which is astonishing in view of the small staff employed and the time spent on touring. No fewer than twenty pamphlets were issued between 1906 and 1910.

The Government of India, which took a more informed interest into research of the tea industry at this time than in later years, were indeed afraid that pure research might suffer as a result of the time spent on disseminating information. They opined that:

> more benefit to the industry – and especially the manufacturing branch of the industry – would be likely to accrue from the operations of the Department, if the officers were relieved of much of the touring and miscellaneous duties they are now required to perform, and were thus placed in a position to devote more time to investigation and pure research work on the gardens.

The help given by the Government was not confined to advice. In 1910 the Imperial economic mycologist investigated the canker of tea and also a common but mysterious disease of tea seed, while the mycologist to the Government of Madras wrote an important article on blister blight in Darjeeling.

At this stage, the Indian Tea Association took stock of its achievements and requirements in the field of scientific research. In his speech at

the annual meeting of 1911, the chairman of the Indian Tea Association pointed out that the average annual yield per acre of tea in India had risen steadily from 400 lb in 1903 to 487 lb in the three years ending 1909 and claimed it 'as beyond question that a substantial part of this increase in productivity is due to the improved methods of working which have been popularized by the Scientific Officers'. He also stated that the work of the scientific department had led to important improvements in manufacture which had resulted in a material improvement in the quality of tea.

Hope now considered that it was necessary to engage a mycologist 'whose energies would be largely devoted to the systematic working out of the conditions and causes of plant diseases of tea and the study of remedial measures for them'. He proposed that the mycologist should be located in the Dooars, the entomologist in Cachar, and the assistant scientific officer in Assam, so that there would be a representative of the department in each of the larger tea districts. The department would then be consistuted as follows:

	Salary		
	per month	*per annum*	
		min.	max.
	Rs	Rs	Rs
1. Chief scientific officer	800–1,000	9,600	12,000
2. Calcutta office staff, laboratory rent expenses, etc		3,000	3,000
3. Travelling expenses (chief scientific officer)		2,000	2,000
4. Laboratory assistant	100– 150	1,200	1,800
5. Assistant scientific officer	400– 600	4,800	7,200
6. Cost of experimental station and laboratory in Assam	3,000–5,000	3,000	5,000
7. Assistant scientific officers' staff and establishment		1,800	2,400
8. Travelling expenses		1,000	1,000
9. Entomologist, staff, establishment and travelling allowance		12,000	14,000
10. Mycologist, staff, establishment and and travelling allowance		11,120	14,600
		49,520	63,000

Dr Hope also expressed the opinion that Heeleeka was not now proving satisfactory as a research station, and he proposed to move operations to another area not far distant.

The progress of these investigations has unfortunately been hindered by

the impossibility of obtaining at Heeleeka a supply of labour sufficient for the conduct of experiments and it has been reluctantly recognised that, as this militated very considerably against the accuracy of results, it was not justifiable to continue the experimental station under such conditions. There were moreover, other reasons which were of weight in making this decision. As has been stated above at the time when the Heeleeka Experimental Station was founded, a question of pressing urgency was the renovation of deteriorated hybrid bushes and the tea at Heeleeka was particularly suited to the study of this question. At present, however, much of this type of tea has been abandoned and still more has been brought back by the correct use of manures to a profitable state of growth. Field experiments on a different type of bush are now required and the necessity of the removal of the station gives us the opportunity of selecting the type of bush most suitable for the purpose. There is another reason also. The Heeleeka experiments were carried on for five years. The scheme of manurial investigations laid down at the beginning of that period was fairly closely adhered to throughout and a series of important generalizations with regard to the action of manures on this type of soil has now been obtained. It seems then a fitting opportunity to choose a new area of suitable tea on which to carry to a more detailed issue; investigations of those manures and those methods of manuring, which have shown themselves to be suitable for tea.

Before these plans had been put into effect, the Indian Tea Association committee had come to the conclusion that the assistant scientific officer, the entomologist, and the mycologist should all be in one common headquarters, preferably in the Sibsagar District. In 1911, negotiations were successfully carried through with the Jorehaut Tea Company for a site at Tocklai. Two bungalows and a laboratory were erected and work began there in 1912. In addition to the area on which the station stood – a part of which was laid out for experiments – an area of over a hundred acres of land in the neighbourhood was acquired from the Government for further experiments.

The capital expenditure involved in establishing a scientific research station at Tocklai proved heavier than had been expected and at the end of 1913 it was reported that it amounted to Rs 86,000 odd, and that Rs 5,000 was still to be incurred. The Governments of Assam and Bengal contributed Rs 10,000 and Rs 5,000 respectively towards this sum, and the balance was met by the industry. Of the recurring cost, the Central and Provincial Governments gave grants totalling Rs 31,000 annually for five years from April 1911. Support from some of the branches of the Indian Tea Association was somewhat grudging. The Surma Valley Branch only decided in favour of the new scheme by a majority of eight to seven and the Dooars Branch, while agreeing to the proposal, opined that 'the Dooars had not so far profited by the advice and presence of the Scientific Officer to the same extent as other districts'.

This complaint was to continue for many years and it was not altogether unjustified. Nevertheless district associations and branches contributed Rs 7,700 annually and the balance was met by the Indian Tea Association.

A. C. Tunstall joined as mycologist in December 1911, and at the same time E. A. Andrews succeeded Antram as entomologist. Both were stationed in Tocklai, though the chief scientific officer continued to have Calcutta as his headquarters.

The new plan for centralization of the departments did not mean that its officers would be together for most of the year. In 1912, for example, Andrews, the entomologist, spent most of his time in the Dooars; Tunstall was mainly in Darjeeling studying blister blight; and the assistant scientific officer spent most of his time on tour in Cachar, Sylhet, and Upper Assam.

In 1913 the perennial question as to the respective claims of research and advisory work was carefully considered, and the problem was thus analysed in the Report of the Indian Tea Association for 1913:

> The Department may be either advisory or research or it may combine advisory with research work, that is to say, it may be decided that the Department exists primarily for the purpose of giving advice on manurial and other questions to individual estates – involving personal visits from the officers qualified to advise on such questions; or it may be laid down that research work is the principal object of the department. Indeed, while research work can be carried on without any advisory work being done – in which case the officers would make only such visits to gardens as might seem to them necessary in connection with the problems being studied at the time – it would not be practicable to confine the work of the officers to personal advice, for it will be recognised that the time would soon come when research work would be necessary in order that such advice would be of real value. It is obvious that a combination of the two alternative courses – advisory and research work – is the most satisfactory course to adopt. The difficulty is that the staff of the department on its present basis is too limited to allow of as much advisory work being done as is wanted. For at present the demands on the time of the Chief and Assistant Scientific Officers are so great that it is not possible for them to visit all the gardens in Assam and Bengal within a reasonable period. The whole subject has, as is indicated above, been very carefully investigated by the Sub-Committee, and they have come to the conclusion that for the present year at any rate it is perhaps desirable that no radical change should be made. They feel, however, that it may be necessary in the immediate future to augment the staff so that it may be in a position to do more advisory work, and they desire to commend this suggestion to the very careful attention of the incoming Committee. It occurs to them, for example, that an officer might be engaged to take over from the Assistant Scientific Officer the charge of the experimental station: this would relieve him of a great deal of routine work which now occupies a considerable part of his time, and would leave him more free to tour. The additional expense involved by this appointment would not be heavy, and it would probably be found that it was fully justified.

In the same report, the Tocklai station was thus described:

In the first place there is a Research and Analytical Laboratory, carefully planned so as to make it in every way suitable for scientific investigation. The Laboratory is fitted with bench work, etc, and all the necessary chemicals and apparatus, the total cost of these items alone being nearly Rs 10,000. Apparatus for heating and lighting the laboratory has also been installed. The other buildings include two bungalows for the European officers – the smaller of these being occupied by the Assistant Scientific Officer, who is in immediate charge of the station, and the larger containing accommodation for the Chief Scientific Officer (whose headquarters, however, are in Calcutta), for the Entomologist and the Mycologist of the Department, and for visitors to the station. These bungalows have been partly furnished at the cost of the Department. There are also two bungalows for Indian Assistant Chemists, houses for labourers, stables and *godowns*, and the area occupied by the buildings, and the adjoining area leased from the Jorhat Tea Company, have been fenced.

The experimental station has been fitted with a complete water supply system, which includes an elevated tank on a tower (to provide the necessary pressure in the laboratory) filter, and pumps. The cost of this installation is approximately Rs 5,000.

In the last year before the First World War, the work at Tocklai continued to be mainly concerned with the influence of fertilizers, while a classification of the soils of the tea districts was also undertaken in the hope that it might assist in the formation of manuring programmes in different soils. Chemical investigation into quality factors continued, but its results were limited and this problem was indeed to baffle the industry for forty years more. The entomologist at this time had to concentrate largely on mosquito blight, while the mycologist dealt mainly with 'the life histories of several of the most important root fungi of tea'. In 1912 an analytical chemist had been appointed to provide planters with facilities for obtaining analyses of soils and advice on fertilizers. The demand for this service had seemed to exist, but it was soon found that 'outside chemists were prepared to undertake the . . . analyses on the same lines as those which they were carried out by the Branch'. It was therefore decided to close this branch.

In 1914 it was decided to appoint a second scientific advisory officer so that the assistant scientific officer might have more time for touring. H. R. Cooper was engaged for this purpose, but Carpenter went on military service and the strength of the department thus remained as before.

During the war years, the work of the scientific department was necessarily curtailed. Two senior officers were away on military service and although planters showed eagerness to help, the depletion of their own numbers made it impossible to organize experiments on estates on

any large scale. Equipment and machinery were difficult to obtain and systematic spraying experiments therefore became impossible. The inquiry into factors effecting quality was more or less suspended, and although experiments on manuring occupied much time and field work at Borbhetta was developed rapidly, in many respects the station was on a care and maintenance basis. In the last year of the war, the chief scientific officer, Hope, had a breakdown, and in 1919, Carpenter, who had just returned from the Army, took charge.

CHAPTER TWENTY-NINE

SCIENTIFIC RESEARCH: THE SECOND PHASE 1919–39

Under Carpenter's guidance, Tocklai rapidly got under way again after the First World War, and it can fairly be said that the modern principles of tea culture were established in the periods between the wars. A powerful new instrument was to hand in Fisher's statistical technique for planning and interpreting field experiments and the application of that technique to experiments on tea gardens, as well as at Tocklai, led to a rapid advance of knowledge regarding manuring, plucking, pruning, and cultivation. Plots for experiment were available in Tocklai itself, but there was also a separate area at Borbhetta, a few miles away, which formed an outstation of Tocklai. The functions of the plots at Tocklai and those at Borbhetta were now clearly demarcated, the former being intended primarily for demonstration purposes and the latter for experiment. At the same time a good deal of attention was given to research on mosquito blight in which the chemist and the entomologist combined.

The industry was now beginning to merge from war conditions and quality again began to be of importance. A good deal of attention was therefore given in Tocklai to problems of tea manufacture. Fresh leaf was analysed at weekly intervals throughout the season for tannin and moisture content and it was discovered that the total amount of tannin in the leaf did not change in the twenty-four-hour period of withering. Other cognate discoveries were made, but as some of the results could not be explained, it was decided not to publish them.

This was the period, too, of much of the valuable work of A. C. Tunstall, the mycologist, on the various diseases of the tea bush and their treatment. Altogether it was a lively stage in the history of Tocklai. The need of better laboratory facilities was still felt, and in 1922 a new entomological laboratory was soon built, followed in 1923 by a mycological and bacteriological laboratory. At the same time, a policy of posi-

tive encouragement of experiments on tea gardens was adopted and it was partly as a result of these experiments that, in 1923, doubt was cast on the wisdom of deep hoeing. By this time lecture courses for planters had been started and proved very popular, and the newly acquired knowledge was thus disseminated rapidly.

Two important steps forward were taken in 1924. In the early days of Tocklai, planters had been advised to use lime, but in 1924 for the first time it was possible to state with certainty that unlike most crops tea required a soil of fairly high acidity. In the same year Carpenter was able to announce the publication of a pamphlet on the control of the tea mosquito bug, which marked the end of the first stage of the investigation into mosquito blight.

The industry had spent considerable sums on Tocklai since the war, and in 1926 the chairman of the Indian Tea Association, Calcutta, felt able to state that the Association had reached the end of heavy capital expenditure. The industry had taken full advantage of the period of prosperity to build well for the future, in spite of the reduction of the Government of India grant soon after the war.

One continuing difficulty was that planters periodically demanded help on the spot and men in the Dooars, for example, were always prepared to believe that a laboratory in that area must be of more use than experiments conducted in Tocklai. In 1925 a temporary sub-station was established in the Dooars with C. R. Harler in charge, but it did not fully meet the need felt by Dooars planters and five years later it was closed on account of financial stringency. Carpenter strongly favoured the appointment of additional scientific officers to reside in the districts, but rightly resisted the temptation to let Tocklai officers themselves do so much touring as to make research impossible. The proposal to appoint officers to the districts was again considered and turned down in 1928, and though Carpenter continued to press for it, the financial difficulties that developed from 1930 onwards made it for the time being out of the question.

Attempts were also made to obtain factory experience of changes occurring in the leaf during manufacture. They were infructuous and led Carpenter to the conclusion that there must be a small factory at Tocklai.

> Tea can be made in the small scale in the laboratory but the results are a tea that may be good or bad but it differs so considerably from the tea produced by ordinary factory conditions that it is difficult to obtain any real comparison. It is in order to adjust this difference that the experimental factory is so necessary.

It was not until 1928 that such a factory was established at Tocklai. Withering experiments occupied much of the time of the Tocklai staff and in 1927 they set themselves specifically to study such problems as:

the rate of physical wither under different climatic conditions; the nature of the chemical wither; means of determining its state at any particular period; methods of inducing chemical wither; effect of heat and other conditions on chemical wither; interdependence of chemical and physical withers; artificial methods of withering.

The questions then raised have still not been fully answered, but the first steps towards finding the answers were well taken. The chemistry of the tea leaf was also systematically studied and much valuable information about the tea tannin was obtained. Rolling, fermenting, and firing were the subjects of many experiments, and in the third decade of the century a good deal of fresh knowledge about methods of manufacture was obtained.

In 1930 the industry succeeded in obtaining a grant from the Empire Marketing Board towards a plant physiology research scheme. Dr Wight was appointed as botanist and in 1931 a botanical laboratory and a bungalow were constructed. The total cost of capital construction, together with five years' recurring expenditure for this new department, was estimated at £12,155, of which the Empire Marketing Board paid half.

Mosquito blight continued to be a cause of anxiety and in 1930 W. Y. Wyndham, a well-known Terai planter, complained bitterly that not enough was being done to study it. He stated that, in the Terai, losses from that cause varied from ten per cent to thirty per cent per annum and asserted – rather unfairly, in view of the valuable pamphlet referred to above – that no adequate research had been done on the subject since 1919. He contended that field experiments in the affected districts were essential and he not only supported Carpenter's plea for resident district officers, but he offered twenty acres of mosquito-affected tea on his estate for experiment. This led to an examination by the scientific subcommittee of the Indian Tea Association of the comparative severity of the blight in different parts of the tea districts. Wyndham's own offer was not accepted, since it was considered that the Tulsipara Garden, the proprietors of which had also offered facilities, would be the better place for the experiment. In 1932 Carpenter reported that the experimental area of Tulsipara had given results of considerable interest, although they were not the results for which the experiments were designed. They had indeed provided valuable information about the beneficial effects of shade. Soil studies were carried on intensively and much was learned about the effects of acidity.

It is not possible here to discuss all the important experiments carried out by the scientific research staff in these years. One cannot read the annual reports without realizing that at this time, Tocklai was a go-ahead concern and that scientific knowledge essential to the welfare of the industry was being acquired and disseminated rapidly.

The year 1931 brought this progress to an abrupt halt. The industry

was in serious financial difficulties and drastic retrenchment at Tocklai as elsewhere was effected. At the same time, financial stringency throughout India compelled the curtailment or abolition of the various government grants, while the United Planters Association, which had been contributing Rs 10,000 per annum to Tocklai, had to reduce its grant to Rs 2,000. As a result of these reductions in the available finance, the Calcutta laboratory was closed, the entomological branch was put on a care and maintenance basis, and the staff of the chemistry and mycological branches was seriously reduced. The employment of Harler, who was clearly an outstanding officer, had to be terminated, while qualified Indian assistants and fourteen unqualified Indian assistants had to be discharged. The whole effect on Tocklai must have been most demoralizing and it is a great tribute to Carpenter that the Department retained its enthusiasm.

Tocklai also had to face the fact that many estates were compelled to live for the present and that even such elementary operations as manuring had in many cases to be abandoned. Carpenter spoke interestingly on the subject at the annual meeting in 1932.

Owing to the present condition of the Tea Industry many gardens have stopped the use of manures. The result of this is likely, in many cases, to be a falling off in the crop obtained. Last year at Borbhetta an experiment was carried out in this direction, and the results obtained will be found in the Annual Report for 1931. The cessation of manures for one year resulted in approximately 2½ maunds per acre loss in crop; the manured area giving 14·2 maunds per acre, whereas the tea which was not manured in 1931 dropped its crop to 11·5 although it still maintained a considerably higher crop 1·5 maunds per acre more than that receiving no manure. It must be borne in mind in considering these results that the tea under experiment was in the open, and I think the experiment gives an idea of what may be expected to happen on many unshaded areas if manuring is stopped. On areas that are shaded by trees, the loss in crop is not likely to be so big and may be of small dimension. This at once raises a commercial aspect, and in gardens, that are making even medium quality tea, it is in my opinion extremely doubtful whether the cessation of manuring affects any economy at all. In some cases it may indeed result in increasing the cost per lb of tea. The whole problem of manuring must be considered in relationship to the labour available and the factory capacity. It is not economic to manure a garden so that it produces a crop of tea that cannot be properly plucked by the available labour or correctly manufactured by reason of inadequate factory equipment. Whilst this is a sound general principle yet it must be realised that if the crop gathered over a number of years takes more food out of the soil than is put back into the soil, deterioration is certain although it will be slow if the crop taken is less than the bushes are capable of giving. Today with increasing costs especially in regard to labour, it requires the most careful consideration to determine whether a crop figure such as would be thus obtained constitutes a satisfactory commercial condition.

Carpenter then laid down the proposition which has been generally accepted since, that it is cheaper to produce a certain weight of tea from a higher yielding area than from a bigger area giving a smaller crop per acre. It was fortunate for the industry that at this time the Tocklai scientists had a sound commercial outlook and directed a good deal of attention to the possibility of avoiding unnecessary expense. In particular, they rightly emphasized the results obtained by reducing cultivation to a minimum.

By 1935 the industry had recovered from the slump and in that year the first real attempts at co-ordination of research between the different tea-producing countries were made. Carpenter, together with Norris, the director of the Tea Research Institute in Ceylon, and J. Forbes, the chairman of the Tea Research Committee, Ceylon, visited the Java Tea Research Station at Buitenzorg. Carpenter at once realized that 'the Dutch consider the factory of a tea estate of far more importance than do the tea companies operating in North East India' and he also noted that greater use of electricity was made in Java than in India. The conference was of value and did much to lay the foundations of future collaboration.

Much the most important event of this period in the field of tea scientific research was the appointment of the Engledow Commission of Inquiry into the working of the scientific department of the Indian Tea Association. The Association was fortunate enough to secure the services of Professor F. L. Engledow, Professor of Agriculture at Cambridge University, as leader of the Commission in an honorary capacity. The other members were James Insch of Walter Duncan & Company, J. M. Kilburn of the Makum (Assam) Tea Company, and R. B. Lagden representing the Indian Tea Association, Calcutta. The terms of reference of the Commission were: 'To make a full enquiry into the constitution, administration and working of the Tocklai Experimental Station and to indicate any changes that may be desirable in (a) the constitution and governance; (b) the orientation of the research work of the Station.'

These terms of reference were amplified in a circular issued by the Indian Tea Association (London) on 12 September 1935; the most important paragraphs of which were as follows:

> It is desired to ascertain in the interests of the industry, whether the work which is in progress is best calculated to produce results which will be of commercial benefit to the industry when applied. Also whether the organisation of the present Station calls for any alteration and generally whether results are likely to be commensurate with the expenditure directed to research.
>
> It is also felt that, if possible, there should be international co-operation in research work, a full exchange of views and results and an endeavour to avoid overlapping in the activities of the different scientific stations maintained

by producers in North and South India, Ceylon, and the Netherlands East Indies.

A questionnaire was circulated and it is a little surprising to note that only four out of twenty-four agency houses replied to it – though some of them no doubt replied in fact through particular companies. After preliminary work in London and a visit by Engledow to tea areas and research stations in Ceylon and Java, the Commission assembled in Calcutta on 6 January 1936 and laid down certain basic principles which, modified from time to time in the light of experience, guided its work. They were:

(i) The purpose of the Tocklai Station is twofold; first – to employ the sciences for the economic betterment of the tea growing industry; next – by appropriate advisory work to help planters to use fully all the assistance the sciences can offer.

(ii) The constitution and administration of a research station should be primarily designed to promote the scientific work of the station and must, therefore, sub-serve it.

(iii) Policy in applied research must be determined by the economic circumstances of the industry concerned. It must consequently take the form of attacking the chief problems of the industry.

(iv) It is the duty of the research station to formulate these problems for itself, keeping, for that purpose, in very close touch with all sections of the industry.

(v) As the number of problems in an industry such as tea production is unlimited, those to be studied must be very carefully selected. They must be clear and tangible and not as a whole beyond the research station's resources. The transient difficulty must be distinguished from the enduring problem.

(vi) In attacking a problem of industry the relevant economic and practical circumstances should first be fully studied. The scientific problems involved in the industrial problem should then be identified.

(vii) In the next stage, which is to study these component scientific problems, the research worker must have the full freedom which general experience shows to be essential for all original investigation. But he should, at all times, remember that the one aim of his work is to advance the industry.

(viii) For success in translating experimental results into commercial practice, action on two sides is required. The investigator must fully work out the practical implications of his results and test their validity under the varying conditions of the industry. And for their part, practical exponents must recognise that the final test of the practical value of any new method can be obtained only by widely arranged practical trial, so that the research worker cannot always, in the early stages of a possible new development, be in a position to speak with complete certainty. And in the broader field of their terms of reference the Commission adhere to the further principle: –

(ix) That in so far as it is practicable, it is in the ultimate interest of all tea producing countries to join together in advancing knowledge of the tea plant and of tea making.

The Commission toured extensively, heard a considerable number of expert witnesses and signed its report on 3 March 1936.

The first task of the Commission was to judge the value of existing research work at Tocklai and to advise as to the desirability or otherwise of its continuance. The Commission's conclusions were well summarized in the report of the scientific department sub-committee of the Indian Tea Association, Calcutta.

> Having heard the views of planters and other members of the industry, having seen and studied first hand the past and current work at Tocklai, the Commission said that 'The Industry, and especially the planting community, undoubtedly appreciate what the Department has done and credit it with substantial helpfulness in many directions. We ourselves judge the Department first as a scientific institution and find in its achievements sound warrant for the money spent on it.' The Commission examined and reported, in particular on the matters which led them to such a conclusion, discussed the assistance which the Department had given in many directions to the industry and stated, 'We, representing a diversity of experience and interest, set it down as our firm opinion that what has been spent on the Scientific Department has been well spent.' Further they express it as their belief that: 'increased expenditure, conformably with the principles and the specific ideas we have expounded, will be handsomely returned'. On the question of research on tea quality and manufacture the Commission stated that the Tocklai Station had made great progress, deserving of commendation in the last few years and after discussing and explaining the many difficulties with which the Department has had to contend, concluded that the money spent on this side of the research work had been well spent. In paragraph 20 they stated that the needs of the industry not only justified but dictated a substantial outlay and a bold attitude in research on quality; and they strongly advocated the continuance of this work at Tocklai as they were convinced of its promise.

The Commission, nevertheless, had certain broad criticisms to make. In the field of agriculture they expressed the view that curtailment of touring on account of inadequacy of the staff at Tocklai had resulted in insufficient contact between the department and the industry. In order to correct this defect they recommended the appointment of six advisory officers who were to reside in the tea districts. Again, they criticized the tendency to dissipate effort over too wide a field and the occasional failure to choose the problems to be tackled in relation to the economic means of the industry. This was largely a matter of organization and the Commission recommended, first, the establishment of a London Advisory Committee, which would particularly have in mind the need for settling research programmes in the light of consumption trends; second, the more systematic examination in Calcutta and London of annual research programmes; and third, the institution at Tocklai of annual conferences of planters. The committee also felt that the results

of research had often been presented to the public in an unsuitable form and they made certain specific suggestions as to the issue of simple practical publications from Tocklai.

The Commission dealt at considerable length with the problem of quality which they felt 'constituted the greatest challenge which the tea industry can make to science'. They made important recommendations for specifying and judging the quality of experimental teas and they suggested lines of inquiry into factors affecting quality. They went on to state that the existing manufacturing plant at Tocklai must be greatly improved and they recommended a survey by the proposed residential advisory officers of tea-making in North-east India. They also recommended that the study of the fundamental chemistry of tea should be resumed. They turned down, after very careful consideration, the suggestion that there should be a large-scale factory at Tocklai – they wholly rejected the argument that Tocklai would carry more weight in the industry if it showed its ability to grow leaf and make tea on a commercial scale and at a profit. They also expressed the view that the reduction of Tocklai staff during the recent financial crisis was ill-advised.

The many technical recommendations of the Commission need not be discussed here, but it is sufficient to say that the Commission, while expressing a good deal of satisfaction at what had been done, drew up a blue-print which was to guide the future activities of Tocklai for many years. The Commission's appreciation of past work must be regarded as a particular tribute to Carpenter, much of whose work had been done under circumstances of great difficulty.

From 1936 onwards Engledow – now Sir Frank Engledow – has unsparingly made his scientific knowledge and wisdom available to the Indian Tea Association and it is in no small degree due to him that the industry is today so well equipped scientifically to face the future.

The industry lost little time in implementing the recommendations of the Commission. In 1936 it was agreed to accept immediately the proposals for the creation of an advisory committee in London; the appointment of additional staff at Tocklai; the restoration of the full lecture courses; the resumption of touring by the scientific staff at Tocklai; and the organization of an annual conference between the scientific department and senior delegations from the Tea districts. The London Advisory Committee was duly constituted from 17 April 1937 and from that date onwards the Indian tea industry has had the benefit of advice from distinguished scientists, who act in an honorary capacity and devote a great deal of time and thought to the industry's scientific problems, in collaboration with leaders of the industry.

In 1937 an additional chemist was appointed and entomological and

mycological scholarships were granted for the training at Cambridge of young men whom it was hoped to recruit to the staff at Tocklai. In his address at the annual meeting in March 1938, Carpenter was able to report that of the thirty-odd recommendations of the Engledow Commission, twenty had already been adopted, and four were in process of adoption. Three others were awaiting the arrival of the new local advisory officers.

Tea-tasting for experimental purposes was also the subject of much thought and in 1937 a special form of tasting report expressed in agreed and defined terms was introduced. A team of tasters in Calcutta was enlisted and a similar team was set up in London.

The next two years were in the main a period of consolidation while the recommendations of the Engledow Commission were being implemented. It was recognized that those recommendations must involve increases in both recurring and capital expenditure and the need to create a reserve for this purpose was a factor in determining the Association's subscription for 1939, which might otherwise have been reduced.

In view of the continuing emphasis of the trade on quality, the research into the chemistry of made tea recommended by the Commission was logically inescapable. The matter was thus stated in the Indian Tea Association's Report for 1938.

> The Commission of Enquiry on the Scientific Department recommended co-operation in research among the tea industries of Ceylon, Java, South India and North East India and suggested that this co-operation might take the form of voluntary allocation of the main fundamental scientific problems of tea among the tea research stations of the four areas. One of the subjects which it was suggested might be suitable for allocation in this way was an investigation into the chemistry of made tea and during the present year the London Advisory Committee have had under consideration the question of receiving the support of India, Ceylon, and the Netherlands Indies to the carrying out jointly of a fundamental investigation of the chemistry of made tea.
>
> The subject is one of considerable complexity and it is understood that although a little work on the chemistry of tea has been done, it represents for the most part a virgin field for research. Its objects broadly will be to enable conclusions to be drawn as to the reasons why one tea is better than another, but it has been emphasised that in the first place the investigation will be a purely scientific study of the chemistry of made tea, that it might be necessary to extend it over a period of years and that at the outside economic questions will not be the prime consideration. It has been agreed however by the Advisory Committee to proceed with the proposed investigation and as a result of discussions which have taken place in London, Ceylon and the Netherlands East Indies have decided to contribute towards the expenditure in the scheme of research and negotiations are being undertaken with the United Planters Association of Southern India on the matter.

In 1939 Dr A. E. Bradfield was appointed to undertake this investigation into the chemistry of made tea, and the Tea Associations of Ceylon, the Netherlands East Indies, and South India agreed to share in the cost of the inquiry.

No less important than this research was Dr Wight's work on plant breeding, selection and vegetative propagation, which began to gather momentum from about 1937. This work is too technical for detailed discussion here and it need only be recorded that it has made it possible for yields to increase beyond the wildest dreams of planters of a generation ago.

The year 1939 was also characterized by considerable development of experiments on commercial tea gardens. The outbreak of war naturally put a stop to further progress in this direction, but it was agreed not to discontinue the work already started. Fifty-two experiments on estates were in fact being conducted when war broke out and in his address to the annual meeting of the Association in March 1940 Carpenter summarized them as follows:

> The experiments on estates in general have shown that manuring with nitrogen results in crop increase corresponding with the amount of nitrogen applied, but that potash and phosphate give but little response with mature tea and not sufficient at present to be considered of commercial value, except in the case of young tea at Tocklai where we have had a good response from potash manuring. It is therefore advisable when replanting and infilling to use a mixture of nitrogen and potash in equal proportions for tea that is under six years old.
>
> The other experiments that are being carried out on commercial estates are to determine the value of:
>
> (1) Shade and its interaction with manuring
> (2) Composts
> (3) Sulphur
> (4) Autumn vs. Spring manuring
> (5) Potash to young tea
> (6) Hard and light plucking
> (7) The two stage top prune
> (8) Light and heavy medium prune
> (9) Biennial and triennial prune
> (10) Different heights of pruning young tea
> (11) Manuring tea seed trees

It can fairly be said that the North Indian tea industry had taken research seriously since early in the century, had systematized it and intensified it in the twenties, had taken outside opinion on this research in 1935–6, and had conscientiously sought to carry out the advice received before war broke out.

CHAPTER THIRTY

SCIENTIFIC RESEARCH: THE THIRD PHASE, 1940–60

A. WORK AT TOCKLAI

Almost as soon as arrangements for the implementation of the Engledow Commission's recommendations had been completed, war-time difficulties supervened. One of the most important proposals had been that for the appointment of district advisory officers who would make scientific knowledge and advice readily available to planters. Three scientists were appointed to these posts in 1939, but by the time their training at Tocklai was completed, two were about to be called up for military service, while the ill-health of the third officer made it inadvisable that he should remain in India. The advisory scheme thus had to remain in abeyance. By the end of 1940 four officers from Tocklai had joined the Forces. Fortunately, the wives of two of them volunteered to fill the vacant posts. Mrs Tunstall had been in charge of the agricultural work at Borbhetta during the First World War and she again assumed charge of that department. Mrs Wight, a qualified botanist, undertook to assist in running the botanical laboratory and to continue her husband's researches.

In 1941 two more officers from Tocklai went on war service and work had to be seriously curtailed. Long-term experiments, such as those on plant breeding, in which an interruption would have involved the waste of all the time and money previously spent on them, were carried on with difficulty, but others were put aside for the period of the war and the annual conferences were also suspended. For a second time, Carpenter had to face the discouragement of having much of his work put on a care and maintenance basis. Fortunately it was found possible to continue work on the vegetative propagation of the tea bush, and in 1943 a new experiment in the planting of a clonal seed *bari** was started.

At this stage the war made direct demands on the remaining resources of Tocklai. The supply of uncontaminated drinking water at the various

* *bari* = seedbed.

military projects on the Eastern Frontier presented serious difficulties. Two members of the Tocklai staff undertook research into the purification of water by the silver process, and subsequently put these methods into practice at the sites of the various projects. At the same time, F. S. Benton, the Association's bacteriologist, at the request of the Government of India, successfully developed a process for the cultivation of yeast in molasses. The resulting product known as *Itamite*, was in due course patented, but it does not appear that any use was made of it.

In 1945 plans for a full resumption of the work at Tocklai at an early date were prepared. Carpenter retired after thirty-six years' loyal and efficient service, and C. J. Harrison became chief scientific officer. Two important changes were at once made. The bacteriological, entomological, and mycological branches were combined under a plant pathologist, with a highly qualified Indian specialist in charge of each sub-branch. At the same time the chemical branch was split up into an agricultural sub-branch under an agricultural chemist and a tea technology sub-branch under a biochemist.

At the beginning of 1946 Harrison had a difficult position to face. The resignation of the deputy director and two other members of the staff, the death of another officer, and the necessity for sending demobilized staff on leave, left the chief scientific officer – now known as the director – to cope, without adequate assistance, with the problem of post-war rehabilitation. Two Europeans were appointed to fill vacancies at Tocklai, but they had to complete their specialist training in England before joining. An Indian scientist was appointed to the executive staff and the attempts made to recruit Europeans for the posts of advisory officers – since Indians with the right background and training for these posts were not then available – were not immediately successful.

The only bright feature was the fact that, in London, Bradfield had been able to continue his work on the chemistry of made tea. The expense of that work before the war had been shared between India, Ceylon, and the Netherlands East Indies, but from 1942 onwards the Netherlands East Indies had been unable to contribute.

The first two years after the war were a period of consolidation. Staff vacancies were filled, the remuneration of senior staff was increased, two advisory officers were recruited, and the annual conferences were resumed. Tocklai was ready to take up again the progress which the war had interrupted and it was, therefore, thought desirable for a delegation representing the London and Calcutta Associations to visit Tocklai and take stock of the position. Messrs A. N. Stuart, E. J. Nicholls, and R. L. Hards accordingly visited Tocklai in December 1947. Incorrect rumours as to the purpose of the visitation had been received in Tocklai, and the first task of the delegates was to convince the staff

that retrenchment was not the object of their inspection. In the event the delegation formed the view that there was no scope for further economy and that the scientists were fully aware that their work must be permanently directed 'towards assisting the industry to increase its profit making potentialities, either by fostering means of providing larger and more valuable crops, or by reducing expenditure on labour in the field or in the factory and losses by disease'.

The director then expected to be able to operate the station at a cost of about Rs 7¾ *lakhs* per annum – a figure which subsequent events have made meaningless – but the delegation decided against fixing a definite ceiling. The most important recommendation of the delegation was in the field of tea technology. They considered that the miniature factory at Tocklai should be put into running order without delay and they regretted that in spite of striking developments in other directions there had been little advance in methods of manufacture. They urged that there should be an investigation into the possibilities of cheapening manufacture by such means as the elimination of withering houses and the simplification of sorting and other machinery. They did not anticipate that this need involve heavy expenditure. In reality, they had started a train of thought which was to lead to the establishment of the engineering branch in London and Tocklai, and to perhaps the most striking developments of all time in tea technology. Those matters will be discussed in the next chapter.

It is not necessary to discuss in detail the developments of the next few years. The advisory services grew in importance and in the esteem of planters; the first steps were taken in the study of mechanization and more efficient methods of manufacture; work on vegetative propagation was continued; and arrangements were made for the distribution of clonal material.

Some difficulty was experienced in this period in finding suitable officers, particularly for advisory and junior scientific posts, and at the end of 1951 the station was five officers below sanctioned strength. Harrison who retired at the end of 1952, and was succeeded by Dr R. J. McIlroy, had displayed a particular flair for contact with planters, and liaison between Tocklai and the tea districts grew closer during his time. This involved the difficulty that the demands on the scientific department for advice and educational training increased considerably and the London Advisory Committee expressed the fear that these activities might encroach on the primary function of Tocklai, which was, of course, research. The obvious remedy was to appoint more advisory officers, so that the Tocklai scientists themselves could be left completely free for research, but it was not until 1953 that it was possible to find suitable candidates.

The greater emphasis now being put on research in connexion with

vegetative propagation as well as manufacture, made tea-testing at Tocklai of considerable importance. In 1950 R. C. J. H. Gilchrist, who had long been associated with the work of Tocklai, accepted a temporary post as tea-taster. On his retirement, J. M. Trinick was appointed to succeed him. His duties were twofold. On the one hand, he was to taste tea manufactured in the course of the experiments of the scientific department, and on the other hand member-estates were entitled to call on his services. The Indian Tea Association stated that Trinick was available to undertake the tasting and reporting on experimental teas from member estates, including:

(a) Single bush manufacture in connexion with selection and propagation work carried out on estates.
(b) Experimental manufacture samples of scientific interest.

He was not able to undertake routine tasting of regular muster or invoice samples, nor did his duties permit him to give commercial tasting reports or valuations.

During 1951 there was considerable divergence of opinion between tasters regarding the experimental teas manufactured at Tocklai. In the following year an arrangement was therefore made whereby three of the main Calcutta tea-broking firms would, in each year, nominate one representative each on a Tocklai tea-tasting panel. This arrangement has proved of value, though the problem of reconciling divergent reports has not yet been solved. Two separate problems are really involved. The first arises out of the inevitable, individual bias and an authority on this subject has stated that if three teas are sent to three tasters, no two of them will arrange the teas in the same order of priority – and moreover, it will be possible for one accustomed to work with these particular tasters, to predict the order in which each of them will classify the teas. These divergences mainly reflect personal predilections associated with the market sections with which different tasters are specially concerned. The second difficulty is that a broker is so accustomed to tasting with a view of estimating prices, that it is practically impossible for him to isolate particular factors, and to taste say just for briskness – and yet tasting for particular characters is often what Tocklai needs. This difficulty has not been overcome yet, in spite of the generous co-operation of brokers with the work of Tocklai. Nevertheless distinct progress is being made in tasting in correlation with analysis of made tea, on the basis of the measurement of the main significant constituents of tea, viz, theaflavina and thearubigins.

In 1953 a second Engledow Commission was appointed to review progress and make recommendations for the future. It consisted of:

Professor Sir F. L. Engledow, CMG, MA, BSc, FRS
Drapers' Professor of Agriculture, University of Cambridge.

Mr E. H. Adams (Planting Member)
Mr R. L. Hards (nominated by the Indian Tea Association, Calcutta)
Mr E. J. Nicholls, CBE (nominated by the Indian Tea Association, London)
Sir P. J. Griffiths, CIE, ICS (Retd): Adviser.
Mr H. J. Walsh, Additional Adviser to the Indian Tea Association, Calcutta, was appointed secretary of the Commission.

The Commission's terms of reference were: To carry out an investigation for the purposes of assisting the London Advisory Committee of the Indian Tea Association in making one of their periodical reviews of the major technical problems of the industry and of the research and advisory activities for dealing with them; and to this end:

(a) To review the work of the scientific research station at Tocklai to the present date and to assess the contribution made by it to the well being of the industry.
(b) To consider whether any reorientation of the station's work is required in relation to the present economic position and prospects of the industry – and if so, to make recommendations to that end.
(c) To examine the adequacy or otherwise of the present organisation of the station for the research work proper to it.
(d) To examine the adequacy or otherwise of the present organisation of the station for the advisory work (general and specialised) proper to it.
(e) To consider the possibility of so organising the finances of the station that its work will not be unduly dependent on fluctuations in the prosperity of the industry.
(f) To consider the relations between the London Advisory Committee, the scientific panel, the scientific sub-committee, the development panel and the director, Tocklai Experimental Station; and to consider if any simplification or other improvement in them is possible.
(g) To consider any other matters which may seem to the Commission relevant to the purpose of the enquiry.

Few men in modern times have contributed as much as Engledow to the development of the tea industry and the rare combination of the scientific spirit with practical understanding and knowledge of men that characterizes him, is evident throughout the report.

The Commission began by reviewing past progress and it will be convenient here to summarize the main facts recorded. Perhaps the most impressive of Tocklai's achievements has been in the field of agriculture and it is here too that the advantages of applying modern statistical methods have been most obvious. 'The first field trials at Tocklai were merely simple comparisons of different methods of cultural operations', but modern statistical technique has thrown a flood of light on many obscure problems of vital importance to the industry. The simpli-

fication of cultivation and the discontinuance of deep hoeing have reduced costs; the increase in the initial height of plucking has raised yields; while the abolition of collar pruning has considerably reduced the casualty rate of the tea bushes. In the Commission's opinion all these changes were the direct result of research at Tocklai. Equally important was the knowledge gained regarding the use of artificial fertilizers and their interaction with shade trees.

Almost equally spectacular has been the growth of knowledge regarding the suitability of particular soils for tea-growing and it is not too much to say that most managers today would hesitate to undertake planting on virgin soil without first asking the scientific department to make a soil analysis.

In the department of botany, Wight's studies of breeding are of international importance and years of patient work have led to the present methods of vegetative propagation and to the development of clonal work, which have ushered in an era of higher yields and better quality than would have seemed possible thirty years ago. In this field, Tocklai has exercised a wise self-restraint. The Association's scientists have steadily resisted the temptation to broadcast impressive discoveries until their implications are clear and have constantly warned managers against the hasty adoption of clonal developments with insufficient knowledge.

To the layman, plant pathology and entomology are perhaps less exciting subjects than those with which some of the other branches of Tocklai are concerned, but the department's work on fungicides and insecticides has been of great practical value. At times, the demands for the services of Tocklai in testing new commercial products in this field have been so great as to absorb an undue proportion of the time of the branch and definite rules regarding it have had to be laid down.

Biochemistry has become of increased practical importance in recent years. Much work has been done on the effects of variations in the time and temperatures of fermentation, the length of rolling and the degree of wither – as well as on the effect of omitting wither altogether. Perhaps some planters would say that this research has told them little they did not know before, but all would acknowledge the important work of the biochemistry department in connexion with the engineering developments and the inquiry into the chemistry of made tea.

One other important feature in the period concerned was the development of the advisory services. There is no doubt that Harrison and his advisers put Tocklai on the map, and when one discusses a tea problem in the tea districts today, it is very common to hear managers either quote Tocklai or say that they must consult the advisory officers.

Shortly after Harrison had been succeeded by McIlroy all these developments were reviewed by the Second Engledow Commis-

sion and with this impressive record in front of them, the Commission had no hesitation in coming to the conclusion that

great progress in output and efficiency has been made by the industry in North-east India since the visit of the 1935–6 Commission. It could not have come without the determination of estates, agency houses, and tea companies to put new ideas to the test and to adopt promising developments. Its true origin, however, is the research at Tocklai and on chemistry in London, supplemented by the district experiments and other activities of the Advisory Officers. The Indian Tea Association's support of scientific work has been impressively vindicated.

We can only mention here a few of the most important of the Commission's proposals for the future, but it will be noted that the economic difficulties of the industry in the post-war period gave to the report a strongly practical bias. At the outset the Commission recognized that although, under the circumstances then prevailing, attention to quality obviously paid, that might not always be so and they therefore recommended the systematic study of the relationship between price, cost of production and quality. They noticed that yield per acre and per labourer had risen steadily up to 1922, had remained stationary from that year until 1936, and had then resumed their upward trend. Data to explain these changes did not exist and this led the Commission to propose the introduction of regular production surveys, on lines similar to the farm surveys conducted in Britain in recent years. The Commission's remarks on this subject are of interest:

There is at present no systematic collation of information regarding some of the most important factors affecting the economics of individual estates. We have in mind such matters as the relationship between standards of plucking and crop production in the different regions, or the effect on cost and prices of different kinds of pruning, various types of cultivation, different styles of manufacture and machinery, and varying quantities and kinds of fertilisers. Some agency houses do collect such information, but it seems to us that it should be collected and correlated by the Industry on a regional basis.

More systematic information is also required as to the relationship between manpower and effective work done. It is not necessary to set forth the items to be covered by the studies we propose. Obvious items are – work done, a pound of tea made, and an acre of planted tea, as well as the variation between estates in labour costs a pound and an acre. There are, in fact, many matters such as cultivation, pruning, manuring, plucking, manufacture, fuel and transport which lend themselves to the treatment we have in mind. The information regarding these subjects would be of considerable value to individual estates, since it would call attention to particular items in their economies which departed seriously from the norm, and which should therefore be examined critically. It would in fact lead the individual planter to ask himself – 'why are my results different from those of my neighbours?' Moreover, the data collected would be of assistance to those who plan the industry's

research, when they are considering the lines along which research might be profitably undertaken or continued.

It is not suggested, unless the industry so wishes, that the survey to provide all this information, need cover all or even the majority of estates. It might deal with only a few estates in each Circle or Sub-District, as might be determined, in order to give representative cross-sectional information of the several main types of conditions. The identity of estates need not be revealed.

The Commission emphasized the importance of the adoption of a regular planting programme to the extent of 2–2½ per cent of the planted area, and they particularly advised that the programme should vary but little with the degree of prosperity of the industry. They also considered it necessary to conduct an investigation as to whether the high yields obtained in recent years from the tea bush would reduce its economic life. They went on to recommend that more knowledge should be obtained regarding variation of soil type and rainfall within each district and that the bearing of these variations on the choice of type of bush as well as on shade, manuring, and pruning policies, should be studied.

In the department of botany, the Commission attached great importance to the publication of the results already obtained, so that the criticism of scientists throughout the world could be brought to bear on them. They also stressed the need for a sound policy governing the distribution of clones – a need which had not yet been completely fulfilled at the end of our period.

Attention was drawn to the need for further experiments regarding the interaction of shade and manuring, with somewhat closer collaboration between the departments of agriculture and botany and soil science than had hitherto obtained. The section of the report dealing with shade is of absorbing interest.

The Commission's remarks in connexion with the engineering department will be considered later and it only remains to note their recommendations regarding organization. They proposed the augmentation of the advisory staff, they stressed the importance of the stabilization of financial resources from year to year, and they suggested some modifications in the scope of the annual conferences. They did not support the proposal for an outstation in the Dooars, and they were definitely of opinion that the work of Tocklai would not be assisted by having a commercial factory at the station.

The Commission's report was issued towards the end of 1954 and sub-committees were set up in London and Calcutta to study it.

In general the proposals of the Commission were accepted by the Indian Tea Association. The recommendation which gave rise to most discussion was that relating to the organization of regional production surveys. Some agency houses considered that they already possessed within their own organization all necessary comparative data and that

there was no need for the surveys proposed. The coincidence of these doubts with a period of financial anxiety, resulted in the dropping of this particular proposal – an abandonment which the present writer has always regarded as a serious mistake.

By the time that the examination of the Commission's recommendations had been completed, the economic condition of the industry had again begun to be a cause of anxiety. It was therefore decided to proceed in phases. The brake which had to be put on expansion of research for a time must have been galling to H. Ferguson, who had succeeded McIlroy as director in 1955, but by the end of the period with which this book is concerned, most of the proposals had been implemented. Matters were at times complicated by the fact that the *Ad Hoc* Committee on Tea Research, which had been set up by the Tea Board in 1954, pressed the Indian Tea Association to adopt particular lines of research policy some of which were not considered sound by the London Advisory Committee and the Association. Fortunately, Tocklai was entirely financed by and wholly under the control of the Association, and the London and Calcutta committees were not deflected from what they considered to be the right lines of development.

Altogether this period was one of great progress. Apart from the engineering developments, which will be discussed later, the most important features of progress were the strengthening of the advisory services, the establishment of a satisfactory statistical branch, and the success of the Tocklai staff in convincing planters and agency houses of the great possibilities of clonal planting. So much interest had indeed been aroused in these possibilities, that certain companies appointed scientific officers for clonal development. The results obtained are full of promise.

B. THE CHEMISTRY OF MADE TEA

We have already seen that in 1939 Bradfield was appointed in London to carry out an investigation into the chemistry of made tea. Collaboration between London and Tocklai was obviously important, but, unfortunately, though Bradfield's work was not seriously interrupted by the war, Tocklai had to be put more or less on a care and maintenance basis. After the war, Dr E. A. Houghton Roberts undertook research at Oxford into the chemistry of made tea, and his return to Tocklai in 1948 would have been the starting point of the necessary collaboration, but for the fact that Bradfield had to retire in 1949 on account of ill-health.

Considerable discussion then took place in London as to whether this work should be continued or not. It was contended in some quarters that no results of practical economic value were likely to be achieved – a planter could, it was said, estimate the quality of his tea without the aid of chemistry – and there was also the fear in the minds of some

tea-garden proprietors that the research might lead to the production of synthetic tea, perhaps of an unsatisfactory character. The Association, nevertheless, took the broad view that an increase in knowledge as to what determined the quality of particular teas must be of value, and when the difficulties of finding laboratory facilities had been overcome, Roberts was appointed to the London post. Wood, who had been Robert's assistant since 1948, succeeded him at Tocklai and collaboration in this field between London and Tocklai for the first time became effective. The work in London was carried out in laboratories established by the Association in Butler's Wharf and was rendered more fruitful by the constant discussions between Roberts and the London Advisory Committee. Dr Lampitt and Dr Hughes, members of that committee, took a lively interest in Roberts's work from the outset and much of its success was due to their help and advice.

By 1954 sufficient progress had been made to justify the issue of two pamphlets by Roberts – one in technical language and one for the layman or planter – dealing with the results so far attained. These documents must have removed any lingering doubts as to the potential practical value of this research. Roberts began from the facts established by Bradfield and others that a class of chemical substances contained in the leaf of the tea bush, and known as flavenols, undergo chemical changes during the manufacture of tea and that there is some correlation between these flavanols and certain characteristics of tea. Roberts's first step forward was to show that the chemical changes which occur during manufacture are, in effect, the enzymic oxidation of flavanol substances (later shown to be chiefly three of the several flavanols in green leaf juice) and coincident polymerization of these to much more complex molecules which are main constituents of made tea. Nothing was known at this stage as to the chemistry of the polymers, but Roberts began to look empirically 'for a relationship between the liquoring characteristics of a tea and the extent of polymerization of the flavanol oxidation products'.

In the next stage he studied and extended the work which had shown that the polyphenolic oxidation products present in an infusion of tea could be divided into two portions by extraction with ethyl acetate, the portion soluble in this solvent being of a bright orange-red colour and that not extracted being dull brown and much greater in amounts. It was then discovered that the distribution of the polymers soluble and non-soluble in the solvent was affected by the length and temperature of fermentation and had a relation to changes in colour, strength, quality, and briskness of tea.

The next line of study was a development of Bradfield's suggestion that the best teas were those with the highest proportion of polyphenolic oxidation, later described as theaflavin products, and

examination of this theory occupied much of Roberts's time in 1953 and 1954. It was soon established that 'colour of a liquor is obviously determined by the relative proportions between the ethyl acetate soluble and insoluble polymers, the former being a bright orange-red in colour and the latter a dull brown'. It also seemed possible, at this stage of research that the 'strength' of the tea depended on the ethyl acetate insoluble polymers and that the 'briskness' might vary inversely with the amount of soluble flavanol polymers.

There are other solvents that could be used in place of ethyl acetate and, after investigation, Roberts decided upon isobutyl methyl ketone. He then elaborated an analytical procedure for the separation and measurement of the two fractions; the soluble orange-red fraction he designated, theaflavins, and the brown insoluble fraction, thearubigins. These two fractions of the oxidized polyphenolic substance of made tea characterize the general quality of tea – strength, colour, brightness, and the like – and consequently this analytical procedure for their measurement provides a quantitative assessment of general quality in terms that have an unequivocal meaning and that can be recorded for reference. Tea-tasters' opinions have contributed to the interpretation of analyses. Roberts states that 'a high thearubigin value is preferred so long as the theaflavin content is high. If the thearubigin value is high and the theaflavin value low, the tea is considered dull and common or even soft. With low values for both theaflavin and thearubigins the tea is thin and grey.' Theaflavins in adequate amount were in fact essential to a good tea and provided there were enough present, higher thearubigins would improve it. It was also established by Roberts that the known adverse effects of fermentation at excessive temperatures or for unduly prolonged periods, were the result of a resultant fall in theaflavin content of the tea and the higher thearubigin content.

Roberts and his colleagues then began to look for methods which would enable the planter to determine the theaflavin and thearubigin content of each tea that he makes. At the end of our period it seemed probable that methods by which the planter could confirm or correct his own judgement of his tea and could say how far conditions of fermentation had contributed to the result, would shortly be available.

Though theaflavins and thearubigins (with caffeine also) contribute the main or basic characteristics of tea, there are many other constituents which may have some bearing on taste. Roberts turned his attention to this aspect of the problem and contributed much useful information.

During his eleven (or twelve) years in the London laboratory his published work on the chemistry of made tea was extensive and of the order of some twenty papers. The most conservative planters will probably scoff at these new fangled methods, but it is possible that

scientific measurement will before long reinforce – or even supersede – the skilled personal judgement of the planter or the *tea house babu*. Roberts's contribution to the tea industry will in due course prove to have been notable, and the kind of analysis conducted by him may eventually lead to an understanding of the elusive factor of aroma.

C. ENGINEERING DEPARTMENT

Before the Second World War, wages in India were relatively low and in a seasonal industry like tea, it was considered an advantage to have a fairly large labour force, so that the plucking round could be short in the period of rapid growth. By 1946 labour costs had increased considerably and methods by which labour forces could be reduced began to receive consideration. In one of a series of post-war planning notes, the Adviser to the Indian Tea Association, Calcutta, referred to the desirability of examining the possibility of mechanical plucking and so saving labour. The subject of mechanization generally received more serious attention in 1947 when the delegation led by A. N. Stuart studied the working of the Tocklai station. By this time the cost of erecting a withering house had risen considerably since 1939, and the possibility of being able to eliminate withering required more urgent consideration than mechanization of plucking. The delegation observed that for many years there had been little advance in tea machinery and they requested that the Association's scientists should pay particular attention to this aspect of their work.

Moreover, in the period of cheap labour, factories had been constructed with little regard to modern ideas of labour saving and tea might well be taken backwards and forwards unnecessarily three or four times during the various processes of manufacture. Even if no fresh methods of withering were discovered, much could be done by proper factory design and the use of conveyor belts or other handling devices. Progressive and mechanically minded planters were already experimenting in these directions, but it soon became obvious that there was need for a fully qualified engineer who 'by working in co-operation with planters and with the manufacturers of tea machinery could test and suggest improvements to any equipment which might be marketed'.

Fortunately, in 1949, the Association was able to secure the services of D. W. Tull to advise it as to the establishment of an engineering branch. His terms of reference were as follows:

1. Generally to report his conlusions as to the shortcomings and the possible development of existing factory methods, factory machinery and field machinery so that the survey may be used to determine the desirability or otherwise of establishing a permanent department at Tocklai Experimental Station to deal with these.

2. To examine existing withering methods and the question of any alternative methods, particularly with regard to machinery to improve them by controlled withering or otherwise. Also in the event of the non-wither system of manufacture being extended, to report on the present machines used to cut leaf and any improvements or adaptation of them to fit them better to the needs of the industry.
3. To report on the progress made with regard to mechanical plucking and to suggest improvements.
4. To report on the number and type of engineers in his opinion required for further research in the event of the department suggested in Clause (1) being proceeded with.
5. To report on the methods of producing and testing any prototype machines which may eventually be evolved.

Tull visited the North Indian tea districts towards the end of 1949 and submitted his report in February 1950. An *ad hoc* sub-committee, under the guidance of Nicholls, examined the report and expressed the view that the matters in regard to which research was most urgent were mechanical plucking, the problem of withering and non-wither manufacture, continuous rolling, sorting, and packing. They recommended the appointment of an engineer at Tocklai and the construction of suitable workshop facilities. These proposals were accepted by the Indian Tea Association in London and Calcutta and a permanent committee known as the development panel was set up in London to consider the proposed activities. Nicholls, whose experience of the engineering problems of the tea industry was perhaps unrivalled, and to whom post-war developments in manufacture owe a great deal became the chairman of this body and Tull agreed to become part-time consultant to the Development Panel. Tull's mental gifts included the unusual combination of enthusiasm and accessibility to new ideas, with a strong critical faculty – a capacity in fact for putting up plans which seemed promising and then, after much thought, if necessary pulling them to pieces. This, of course, was exactly what was required and Tull's first task was to examine and rule out attractive, but impracticable, propositions. He had already begun to do this in the course of his preliminary survey and the problems involved were set forth with lucidity in his report, published in 1951 by the Indian Tea Association under the title *Tea Looks Forward.*

It soon became clear that if progress in this field were to be rapid, Tull must have an opposite number in Tocklai. Fortunately the Association was able to secure the services of I. McTear, who had for some time been James Finlay's headquarters engineer in the High Range, as head of the Tocklai engineering department. McTear proved to have a remarkable flair for this kind of work, and the Nicholls-Tull-McTear combination was destined in the course of a few years to make possible a

complete revolution in the process of manufacture. Its practical results will be summarized in a later chapter.

CONCLUSION

The tea industry, indeed, may be said to have been very progressive in its post war outlook. Work at Tocklai has been expanded considerably, great progress has been made in the chemistry of made tea and engineering developments have been remarkable. Steps have in fact been taken which may revolutionize the technique and economy of the industry, and it is a far cry from the days when old-fashioned Darjeeling planters used to say that a dirty fermenting floor encouraged bacteria and so gave a fine flavour to tea!

CHAPTER THIRTY-ONE

SCIENTIFIC RESEARCH: SOUTH INDIA

From early days South India planters had felt the need for greater scientific knowledge regarding such factors as quality in coffee, but the main practical stimulus towards research came from anxiety to reduce the damage done by leaf disease and to know if particular soils were suitable for coffee or other crops and how they should be manured. In 1894 the United Planters Association of Southern India enquired if one D. Hooper, a botanist, would do soil analysis and advise on manures at concession rates for the Association, but the negotiation fell through. In 1897 the problem of the quality of artificial fertilizers troubled planters considerably, since, although suppliers issued analyses of the fertilizers, they were not able to guarantee the supply in bulk. Planters began to suggest that such guarantees should be made compulsory and this led the United Planters Association to consider the possibility of employing an agricultural chemist on a salary of from £400 to £500 a year. At the same time the Association allotted Rs 2,000 for the purpose of introducing Coccinellidae (ladybirds) to assist in controlling scale pests in coffee. H. O. Newport, a planter and enthusiastic entomologist, effected the introduction, but without practical success.

In 1898 it was stated in the annual conference that some districts were apathetic towards scientific research and that the Government of Madras and some native states showed a lack of interest in the proposals made. Fortunately the Mysore Durbar decided to create a post of agricultural (chemist) and in 1899 Dr Adolph Lehmann was appointed to that post for five years. His scope was not confined to plantations, but it was agreed that he would work for planters on a fee basis.

The Madras Government at this time employed a botanist C. A. Barber, but he was too fully occupied to be able to help the Association, and the United Planters Association therefore applied to the Government of India for the services of Dr George Watt to investigate plant disease and pests on plantations. He could not be spared, and in 1902

the Government of India therefore suggested that an approach should be made to Mr de Nicéville, the entomologist at the Imperial Museum, Calcutta. He unfortunately died just after agreement had been reached. Efforts by the Madras Government to obtain from the Government of India the services of an assistant botanist, so that Barber could devote some time to plantation work, came to nothing. However, Dr E. J. Butler, the Imperial mycologist and Mr M. Maxwell-Lefroy, the Imperial entomologist, both visited South Indian plantations in 1903–4.

South Mysore planters then proposed the establishment of an experimental farm in South India, provided that the various State Governments would place the services of their scientists at the disposal of the farm manager from time to time. No response was forthcoming.

In 1905 Lehmann, who made a practice of addressing the annual conferences of the United Planters Association of Southern India, described twelve experimental blocks in Mysore which were, he said, yielding useful results. In the meantime, Mysore planters had gone ahead with their own plans for an experimental farm, and they suggested that the United Planters Association should administer it. Parochialism now obstructed progress. The Kanan Devan Association stated that they would not contribute since conditions in Mysore were radically different from those in Travancore – and they maintained that every planting district should have its own local farm. The Wynaad objected on financial grounds and the Anaimalais Association, while approving of the proposal in principle, could not see their way to guaranteeing continuity of subscriptions for five years.

Eventually it was agreed in principle that the United Planters Association should have an experimental farm and a committee was formed to work out a scheme. Attention was now diverted to the idea of appointing a scientific officer. It was decided to ask for government assistance, but annual contributions were promised by district planting associations as follows – Mysore Rs 635, Nilgiris Rs 801, Shevaroys Rs 95, Wynaad Rs 538. The Kanan Devan Hills planters were not interested as they had their own scientific officer.

The various governments were sympathetic, but the scheme was hung up for a time, since the United Planters Association thought it must limit its guarantee to three instead of five years. This difficulty was in due course overcome and in 1909 the Government of India appointed R. D. Anstead of the Imperial Agricultural Service to work as planting expert on tea, coffee, and rubber under the United Planters Association of Southern India.

Anstead had an office and laboratory at Bangalore, but he spent a good deal of time on tour, and his experimental work was of an elementary character carried out in co-operation with estates. His organization was correctly described in the Annual Report for 1912–13 as a 'bureau of

general agricultural information'. The expenditure on it was estimated at from Rs 12,000 to Rs 15,000 per year, of which Rs 7,500 was to be contributed by the Mysore, Cochin, and Travancore Governments, the Coorg Administration, and the United Planters Association. The Government of Madras undertook to supply the balance and also contributed towards office expenses and the cost of touring.

In the course of the next few years two European assistants to the planting expert were engaged, but in 1914 the United Planters Association considered that a substantial expansion of work was necessary and they approached the Government of Madras for an increased grant. The expanded programme, including the salaries of a mycologist and a scientific officer, and the cost of an experimental station, was estimated to involve annual expenditure of Rs 30,500. The United Planters Association were to contribute Rs 10,000 of this, and the Government of Madras were to find the balance. A fierce battle ensued as to the location of the experimental station. According to Mayne – to whom this chapter owes much – Anstead favoured the Nilgiris, while Barber (later Sir Fairless Barber) of the English & Scottish Joint Co-operative Wholesale Society argued in favour of the Anaimalais. Chadwick, the Director of Agriculture with the Madras Government, took quite a different view. He is recorded in the United Planters Association proceedings of 1914 as saying:

> 'He doubted very much if they wanted an agricultural station immediately but if they were given another officer such as the Mycologist the matter would require further thought. As regards his being stationed at the agricultural research station, he had no doubt that the man would be able to manage from Coimbatore.' Anstead disagreed and stated that 'they wanted a practical method of working and unless the Mycologist was living with the crop, he was going to be of little use to them'. Anstead's preference for a station in the Nilgiris was perhaps not entirely technical. He remarked, 'the Anaimalais had been suggested as the best place. He would be very sorry to have to live there; still it did not matter as long as he had an agricultural station.'

The scheme was put into operation in 1919. Four experimental stations were established and the Government of Madras absorbed the planting expert – who was to be responsible for all four stations – into its own service. There was, however, a degree of decentralization which had not been contemplated in the original scheme. Government had not been able to produce the promised mycologist and the rubber interests in the United Planters Association therefore appointed their own mycologist and set up their own experimental station. The coffee interests followed suit a few years later, partly because of their close links with Dr L. C. Coleman, the Director of the Mysore Agricultural Department.

In 1927 three of the four original experimental stations were aban-

doned, but a year or two before this a tea experimental station had been set up at Devarashola. The Government of Madras ceased to be connected with the administration of this station, but undertook to subscribe Rs 28,000 a year for five years to the United Planters Association of Southern India for scientific research. The United Planters Association then introduced a scientific cess, which in the case of tea was fixed at 8 annas per acre. The total revenue from these cesses on all products amounted in 1927 to Rs 71,000.

Dr W. S. Shaw, a chemist, appointed in 1925, was in charge at Devarashola as chief tea scientific officer and in 1927 another chemist, Dr K. B. W. Jones joined him. Work continued to expand and in 1931 the staff engaged on tea research was expanded to include an entomologist and a mycologist, those posts being filled by S. Ananda (Rau), and M. K. (Subba) Rao.

In 1931 the United Planters Association decided to seek affiliation with the Tea Research Institute of Ceylon, but the governing body of that Institute decided that in view of the uncertain position of tea in Ceylon and South India the time was inopportune for such an arrangement.

Serious financial difficulties then led to a proposal that the tea scientific department should be closed, but this was rejected, partly on the ground that the Madras Government were contributing Rs 28,000 to the Association's scientific research. In 1933 the same drive for economy led to the discontinuance of the Association's contribution to Tocklai and a little later the contribution of the Madras Government to the United Planters Association was reduced to Rs 21,000.

Considerations of economy necessitated some curtailment of touring and field-work, but as the Chief Tea Scientific Officer pointed out, this made it possible to devote more time to chemical investigations in the laboratory and useful progress was made in the analysis of the theatannins.

As soon as the market depression passed, research work on tea was expanded. An additional Indian officer Mr V. Jayaraman, was appointed as a soil chemist and the tea acreage cess for research was increased by twenty per cent. The department soon resumed its full earlier activities and in 1936 a book on tea manufacture in South India by the assistant scientific officer, K. B. W. Jones, who had been with the United Planters Association since 1927, was highly commended by planters.

Nevertheless, in 1937 the South Indian Association in London stated that they were not prepared to agree to a continuation of the tea scientific department in its present form. They were of the opinion that it was too small to carry out experimental work and that the staff should be reduced to provide merely an advisory service. The matter was examined by a sub-committee of the United Planters Association, and the conclusion was reached that because of the decline in support, the tea scientific

department was not large enough to carry on research and that its future work should be mainly advisory. This recommendation was accepted, and Shaw and Jones resigned, being succeeded in 1938 by F. J. D. Manning. The staff then consisted of one chief tea scientific officer, one entomologist, one mycologist, and one soil chemist. Research on the chemistry of tea was discontinued.

Manning's attention was largely concentrated on field experiments on pruning and manuring. In 1941 he was called up and Mayne who was the coffee scientific officer took charge of the tea experimental station.

Subscribers had undertaken to guarantee their payments until 1941. In that year the tea research cess was raised to 4 annas per acre, but unfortunately in 1940 the Madras Government grant to the United Planters Association had been further reduced to Rs 12,000. In 1941 it was raised to Rs 16,500 of which Rs 5,000 was allotted by the United Planters Association to the tea section.

In 1939 the United Planters Association decided to contribute Rs 500 towards Bradfield's investigation in London into the chemistry of made tea, and the payment was continued in the following year.

In the next few years work naturally suffered as a result of the departure of officers on military service, while Mayne was asked to devote himself largely to the Grow More Food Campaign. Nevertheless, plans for the development of research after the war were drawn up and in 1947 Mayne, who had by then left the United Planters Association and joined the Kanan Devan Hills Produce Company, put up proposals for a considerable expansion of the station, particularly to deal with blister blight (which had arrived in South India in 1946), helopeltis, tea selection, and manuring. They were accepted and resulted in a strengthening of the organization and a considerable increase in experimental work.

In 1948 the Association decided, in view of the financial difficulties of the Madras Government, not to ask for the usual grant. The tea product cess was raised to 8 annas per acre. The new chief scientific officer – de Jong – was stationed in Coonoor and was intended to be primarily an advisory officer, while Ananda Rau the entomologist was put in local charge of the Devarashola Research Station. It was generally felt that the research organization was inadequate, but although the idea of asking for help from the Central Tea Board had been mooted the time was not considered ripe for any major change.

In 1951 the Central Tea Board offered help with the improvement of the Devarashola Station or towards building a new station elsewhere, provided the United Planters Association undertook to meet the resulting annual expenditure. This condition was accepted on the understanding that the management and control of the station remained entirely with the United Planters Association. Plans were

drawn up for acquiring seventy-five acres of jungle land adjoining the Devarashola Station, opening up forty acres of tea and erecting new buildings. The capital cost was estimated at Rs 7,46,000 and the annual recurring cost at Rs 1,66,900.

The wheels of all governmental machines grind very slowly and it was not until May 1954 that an *ad hoc* tea research committee of the new Tea Board considered these proposals. In the following year it was decided that a central laboratory and field station should be established in the Anaimalais, with a sub-station in Central Travancore, and it was agreed that when that had been done the Devarashola Station could be discontinued. The Association therefore acquired 156 acres of land in the Anaimalais from the Government of Madras, the purchase price of nearly Rs 93,000 being paid by the Tea Board, while 11½ acres of land in Central Travancore were purchased from the Malayalam Plantations Company.

The matter still dragged on through seemingly endless discussions between the Tea Board and the United Planters Association. Plans and estimates changed considerably and it was not till 1960 – the last year with which this book is concerned – that preliminary work on the sites began.

Within the limited resources available to it the United Planters Association of Southern India had fully played its part in scientific research – in particular, in relation to the control of helopeltis, blister blight, and the efficient use of fertilizers – for some decades. It was now enabled to go ahead rapidly and to carry out projects which had long been in the minds of progressive planters.

Section 5

TECHNICAL DEVELOPMENTS

CHAPTER THIRTY-TWO

TECHNICAL DEVELOPMENTS : I. AGRICULTURE

The processes involved in the cultivation of the tea bush do not differ greatly from those applied in other forms of agriculture and the technical developments in the field have, therefore, not been as spectacular as those in the factory. Nevertheless considerable changes of practice have resulted from the accumulation of knowledge regarding every one of the stages of agriculture – site selection and clearance; production of seed; the establishment of nurseries or the use of vegetative propagation; weeding and hoeing; the use of shade; the application of fertilizers and manure; pruning; plucking; and the treatment of blights and pests. In examining these developments we have several useful guides. First there is Money's prize essay written in 1870, followed closely by the *Tea Planter's Vade Mecum* compiled in 1885; the next guide is Claud Bald's *Indian Tea*, the sixth edition of which appeared in 1953; fourthly, we have Harler's book *The Cultivation and Manufacture of Tea* which contains a lucid account of modern theory and practice; and more recently T. Eden's *Tea* has set out the main accepted modern principles.

LOCATION OF GARDENS

We have already seen that when the first proposals for the cultivation of the tea bush in India were made, the thoughts of some of those concerned turned at once to the foothills of the Himalayas, and even when the suitability of Assam had been realized, it was long before planters really accepted the idea that flat land would serve their purpose well. Money wrote interestingly on this subject.

> The first idea prevailing about Tea was that it should be planted on slopes. It was thought, and truly, that the plant was impatient of stagnant water, and so it is, but it is not necessary to plant it on slopes in consequence. Pictures of Chinese, suspended by chains (inasmuch as the locality could not otherwise

be reached) picking Tea off bushes growing in the crevices of rocks, somewhat helped the notion; and when it was stated, as it was, that the Tea produced in such places was the finest and commanded the higher price, which is not true, intending Planters in India went crazy in their search for impracticable steeps! Much of the failure in Tea has risen from this fact, for a great part of many, the whole of some gardens, have been planted on land so steep that the Tea can never last or thrive on it . . .

A great many gardens in India, indeed the majority, are on slopes; a few in Assam, the greater number in Cachar, some in Chittagong, and almost all the Himalayan plantations. Such of these as are on *steep* slopes will, I believe never pay, and instead of improving yearly (as good gardens, highly cultivated should do even after they have arrived at full bearing) I fear, will deteriorate year by year.

Plantations on moderate slopes need not fail because of the slopes. The evils of slight slopes are not great, but the sooner the fact is accepted that sloping cannot vie against flat land for the cultivation of Tea the better.

The heresy as to the value of slopes would have been less harmful if the importance of choosing the right aspect of the slopes had been realized. Here Money tells us that:

In the Himalayas moreover, the warmer aspects are, as a rule, the most fertile; *vice versa* in warmer localities. Many a garden, which would have done very well on the moderate slopes chosen had only the proper aspects been planted, has been ruined by planting all sides of hills or teelahs indiscriminately. The southern and western slopes of plantations in warm sites are generally bare of plants. Not strange that they should be so, when the power of the reflected rays of the afternoon sun is considered. Again, in cold climates plants cannot thrive on northern aspects, for their great want in such climates is heat and sunshine. Let the above faults then be avoided in both cases, for though, doubtless, a garden is more handy, and looks better in one piece planted all over without any intervening jungle, even patches of jungle look better, and are decidedly cheaper than bare cultivated hills.

A man well known in the tea industry today comments that the present barren state of the south faces of *teelas* in Cachar which once carried tea shows clearly that those who planted them did not act on Money's advice.

Perhaps because of the harm done by planting on the wrong aspects of slopes, there was for a time a reaction against the hills as suitable places for tea gardens and Money went so far as to say that no garden in the Darjeeling or other hills had a chance in the race against plantations in the plains. In spite of the superb tea produced in small quantities in some Darjeeling gardens today, the economic condition of the tea industry in that district suggests that Money may have been right. His remarks could not, of course, be applied to the South Indian hill tea districts where temperatures are much higher than at corresponding elevations in North India, and where a combination of warmth and humidity

makes plucking possible almost all through the year and produces yields considerably higher than those in Darjeeling. In modern times the possibility of a high yield would perhaps be the main *desideratum* in choosing a site for a tea garden and, as Harler states, although tea will grow almost anywhere where it is wet and warm, the cost of labour is such that outstanding quality and flavour may not suffice to compensate for small yields.

SOIL CHEMISTRY

Soil chemistry is one of the departments of agriculture in which great advances have been made in the present century and those developments have been extensively applied in tea. When the *Vade Mecum* was published, it was not possible to specify in scientific terms what constituted a good tea soil. The most that could be said was that it should be loose and friable, that there must not be a clayey sub-soil, that land liable to become sodden must be avoided and that a light sandy loam was best, at any rate in the plains. Planters naturally developed a good deal of empirical knowledge on this subject, but even as late as 1922 when the fourth edition of Bald's book appeared, he could only say that 'in practice it has been found that the most flavoury teas have been produced from soil of a chocolate colour, or a mixture of red clay with a large proportion of organic matter'.

About that time the Tocklai scientists began to make a careful study of the chemical constitution of tea soils and they soon established the fact that an undue percentage of lime is harmful to tea. Their first conclusion was that tea needed an acid soil, but according to Harler neutral soils in Assam, South India, the Dooars, and Eastern Africa were occasionally found to grow good tea, and the idea developed that 'tea was perhaps a calcifuge, avoiding lime, rather than a plant seeking an acid soil solution'. A little later it was suggested that 'since acid soils contain much readily available aluminium and manganese, which the tea bush apparently consumes and stores in relatively large quantities, it is the need for these elements that necessitate an acid soil for tea'.

In the meantime a scale for the measurement of acidity based on pH values had been devised. In that scale '7 denotes neutrality whilst figures below 7 denote increasing acidity and values above 7 denote increasing alkalinity'. Harler correctly states modern practice when he says that if the pH value in Assam is about 5·4 there need be no anxiety on the score of acidity, but if the pH value is much higher than this the soil should be regarded with suspicion. No planter today needs to be persuaded of the soundness of this view, and it would be unusual for a tea company to embark on an important extension without first having the pH content of the soil tested.

LAY-OUT

When the climatic conditions and the constitution of the soil have been found suitable, the next steps in the establishment of a garden are drainage and its orderly lay-out in sections. There has been little change over the years in the principles involved here, but the pattern of planting has varied greatly from time to time and garden to garden. The advantage of geometrical planting, either square or diagonal was recognized at an early date, and at the time of the *Vade Mecum* the most approved spacing was four by five feet rectangular planting for hybrids and five by five feet square for indigenous bushes. On this point Swinburne, writing in the *Vade Mecum*, thus comments:

> The indigenous plant is supposed to grow larger and require more room than the hybrid, and no doubt it is a taller and larger tree in its wild state than the latter is capable of becoming under similar circumstances; but the chief reason that indigenous bushes under cultivation are usually larger than the hybrid is, that the first are expected to grow larger, and are more lightly pruned and plucked. It would be hardly profitable in these days to plant out places where, on account of the poverty of the soil, the bushes did not at their maturity meet across the rows at four by four feet; and there are very few plants where the soil is rich enough for a reasonably quick return from six by six planting; consequently, four by four feet and five by five feet are the distances now generally adopted under peculiar circumstances, such as hedge-planting, to avoid wash on slopes.

Not everyone agreed with Swinburne and Money refers to a variety of spacings, from six by six feet square to four by three feet hedge-planting. There is an interesting comment on this matter in a note written by the Superintendent of the Jorehaut Tea Company in the sixties of the last century.

> With regard to the difference of opinion of planting six feet by six feet or six feet by three feet, I am favourably inclined to the latter mode; it takes some years' growth for trees to occupy or fill up the space between the greater distance and when it is found that they are in each other's way the intervening tree can always be removed, in the meantime the produce of it is available. It is only, I think, in extraordinary cases, that trees of three years old would stand so much in each other's way as to prevent cultivation being carried on properly. It is a question of much discussion among planters, I think, however, the opinion is generally in favour of six feet by three feet.

Money maintains that provided the richness of the soil could be kept up by adequate annual applications of manure, the bushes should be planted as close as possible, though room must of course be left for labour to move in between them. He was one of the first to advocate allowing the bushes to meet when fully grown and so keeping weeds down to a minimum and saving costs. This is indeed accepted doctrine today.

After the First World War and before restriction came into effect, perhaps the commonest practice was to plant four feet by four feet square or four feet by six feet triangular, which meant 2,722 and 2,483 plants to the acre respectively. In the fifties the possibility that mechanical plucking might be introduced led many planters in Assam to undertake hedge-planting, five feet by two feet or five feet by two and a half feet, while for a time double hedge-planting with two rows of plants spaced two feet or two and a half feet apart, and with five feet between the hedges was also popular. In recent years there has been a considerable swing back to planting four feet by three feet, or sometimes four feet, by two feet.

At one time planters were inclined to believe that closer planting would necessarily result in higher yields, but though this is perhaps so in the early years, the modern scientific view seems to be that a mere change in planting patterns will not produce a bigger yield from a given area for an indefinite time beyond a certain limit.

SEED SUPPLY

Of greater importance than the planting pattern was the development of the technique of seed-growing. We have already seen that the Indian tea industry was started with China seed and it was a considerable time before this mistake was rectified. Money had to fight hard against the prejudice in favour of China tea. A few years before the publication of Money's admirable essay, the Superintendent of the government garden in the Kumaon had stated dogmatically that the Assam plant 'is a very inferior plant for making tea and its leaves are therefore not used'. Money commented acidly on this pronouncement: 'A little enquiry would have shewn that this was not true even when it was written. All tea planters, brokers and all interested in Tea know now (many knew then) that the *Assam species*, viz the indigenous, makes the most valuable tea produced.' Gradually, Money's view gained acceptance, though it was recognized that in the particular circumstances of Darjeeling the China hybrid had much to commend it.

One of the difficulties of the early planters, particularly in times of rapid expansion of the industry, was to obtain adequate supplies of tea seed. When the prejudice in favour of the China bush had died down, planters began to take seeds from selected wild tea bushes in Assam and from that seed to put out nurseries, where a further selection was made as the basis of a seed garden. That garden was generally located in an area well isolated from any other tea so that there might be no danger of external hybridization. Not all planters followed this method. Some preferred not to have a separate tea garden, but to gather seed from selected healthy plants throughout the garden. According to Bald, Sir George Watt, who advised planters on these matters in the last two decades of

the nineteenth century, favoured this method and even as late as 1922 it received Bald's powerful support.

No separate plot is allowed to grow specially for seed, all tea is pruned and plucked in the ordinary way, but seed is gathered from the best plots, and only from selected healthy bushes in those plots. By this system only a few seeds can be obtained from each bush, but, as with fruit trees, when the quantity of fruit is restricted by pruning, the quality is proportionately improved, so, in this case, the small quantity of seed obtained is robust, full, and healthy, and its germination can be depended upon. The seed from plants which have proved to be not only high class, but also blight-resisting, is sure to give the best results; and this is the only seed fit for propagation.

Gradually, however, the supporters of the separate seed-garden won the day and in due course certain companies began to specialize in producing and selling seed. Today many gardens in North-east India grow a little of their own seed, but obtain the majority of their requirements from the specialist tea-seed gardens.

Selection by eye of a bush from which to take seed was a rough and ready method, though it worked fairly well when the planter was an experienced and observant man. In the third decade of this century a study of the tea made from individual bushes led to the belief in a relation between hairiness of the undersides of the first and second leaves and the quality of the made tea. Harler, one of the leading authorities on this subject states that:

in fact the realization of the positive association between hair on the leaf and quality has proved to be a major factor in the problem of tea selection, for it is independent of leaf colour, leaf shape and other obvious properties. Any type of plant can give quality provided the leaf is hairy.

Since that was written, Tocklai scientists have shown that the association between hairy leaf and quality is not absolute and that exceptions occur.

In the first few decades of the tea industry in India tea was commonly planted 'at stake', that is to say stakes were put in lines to show where the bushes were to grow to maturity and the seed was sown at the places indicated. A disadvantage of this method was the difficulty of watering the plants in periods of drought before they had developed a root system, and it has now been generally replaced by transplantation of plants grown in nurseries, sickly plants being rejected. In this method there is always the risk that the roots may be damaged when the plant is lifted from the nursery, and to obviate this risk many planters now use polythene bags filled with specially prepared soil in which the seed is planted.

VEGETATIVE PROPAGATION

In general the individual tea bush is not self-fertile, but the flowers must be fertilized by pollen from another bush. Consequently tea seed obtained in the normal way is the result of cross-fertilization and the characteristics of the progeny therefore vary considerably. To meet this difficulty the technique of vegetative propagation – well known in general agriculture and horticulture – was tried in tea in Japan towards the end of the last century. Thirty years were to pass before any similar experiments were tried in India and it was not till between the world wars that this became the subject of serious study at Tocklai. It was well known that all cuttings from the same bush – collectively forming what is known as a clone – would be genetically identical and the practical problem was to build up suitably selected clones, or as Harler puts it 'to seek out the super tea plant, growing with vigour having the correct form and producing a large yield of high quality tea'. Harler thus describes this process:

> An area of about fourteen acres of fine, proven tea is taken for a start, comprising about 40,000 bushes. This area is cut across in October and the two hundred finest-looking bushes selected. They are chosen for vigour, density and uniformity of yielding wood, diameter of frame, size of flush and appearance of leaf. The two hundred bushes are allowed to grow up till the following April or May, when leaf cuttings are taken from each bush and planted in three different types of soil.
>
> After about six months, the poor rooting clones are noted and discarded, and this may leave fifty bushes for further consideration.
>
> These fifty bushes are then plucked the following year and the leaf manufactured separately. In this way it may be found that three to five bushes give tea preferable to the average and one is perhaps definitely better. This one may be used for breeding.
>
> The selected bush can be used for vegetative propagation or it can be crossed with another clone or clones, similarly selected, to give seed.

It will be realized that the production of high-quality bushes by this process is a lengthy affair, but it is already beginning to show results in India in high yields and improved quality. Tocklai (and some other tea research institutes) and some tea companies have now evolved highly efficient procedures for selecting parent bushes for making clones, and for reliable tests of yield, quality, and other characteristics of these clones. Polyclonal seed obtained by allowing two or more clones to pollinate one another offers a means of combining the merits of specially selected clones and so of getting populations of tea bushes with some variation but of high value, and also of retaining the advantages of propagating by seed. Important developments of such seed are now taking place in India.

CULTIVATION

Cultivation in the technical sense of the term in the tea industry means keeping the ground under the bushes free from weeds or vegetation likely to harm or weaken them. Practice in this department of the culture of tea has changed considerably in the present century. At one time it was believed that quite apart from the clearance of weeds it was important to disturb the soil, and for this purpose in North-east India deep hoeing was carried out every cold weather, while light hoeing to a depth of four inches or five inches was done frequently during the year. Even the enlightened Money wrote that 'the soil over the rootlets of the tea plant cannot be stirred too often. The oftener it is done, the oftener the trees flush'. He was, however, very conscious of the need to avoid any risk of cutting the roots and therefore recommended digging round the individual plants, making the *kodalli** follow round the tree. In North India this practice has now been entirely abandoned and cultivation today consists of *cheeling* or scraping with a hoe two to four times a year, besides weeding with a sickle. The South India practice is somewhat different, but there too it is recognized that there is no virtue in deep hoeing. The important thing in modern theory is to let the bush cover the soil and suppress weed by shading.

PRUNING

The growth of this belief in less drastic interference with the soil was part of a general tendency in modern times to treat the tea bush more kindly than was formerly the case. This tendency is well illlustrated by modern pruning practice. According to Bald the threefold objects of pruning are: (1) to change the form which the plant would take and so turn it into a bush instead of a tree: (2) to encourage the bush to produce leaves rather than wood; and (3) to cause it to spread into a ramification of twigs giving a large area from which leaf can be plucked, but not so dense as to obstruct the free passage of light which is essential to the healthy life of the plant.

In the nineteenth century and even later it was thought that these results were best achieved by a periodical severe pruning, and Money declared that 'of the two extremes, it is probably better to over rather than under prune'. There was a good deal of controversy on the whole subject of pruning at that time, but except for young plantations severity was the order of the day and an Indian agriculturist wrote in the *Vade Mecum* as follows:

> Were not our planters hounded on to get as much as possible off the gardens, there can be but little doubt that periodical 'cutting back', almost to the ground, of certain portions of the Concern, in rotation, would be beneficial,

* Hoe.

inasmuch as it would result in having fresh, straight, bearing stems, springing direct from the roots, with no knots in them to retard the circulation of sap. . . . The old, and all gnarled stems, must be thoroughly excised down to the ground, and all growth emanating from the old stem, systematically cut away and discouraged, the object to be kept in view being to evolve fresh upright growth direct from the roots. The crop meantime, would be considerably diminished, but it would possess uniform strength.

Collar pruning which was widely practised at that time meant cutting the bush right down leaving only the collar standing six or seven inches above the ground. Bald points out that it was often difficult to heal the resulting wounds and in many cases white ants got into the wood and destroyed the plant. A cure for this trouble was, says Bald, discovered by an Assam planter: 'Instead of leaving a collar of six inches above the ground, he cut right under the surface and hard on to the spread of the roots.'

In modern practice collar pruning has been completely abandoned and the procedure described by Harler is perhaps that most commonly followed:

About a year after planting it has grown into a conical plant four to five feet high, which is then cut across flat in November or December, eighteen inches above ground level and perhaps one centre branch removed.* The bush is allowed to grow up the following spring but is plucked, level with the ground, when it reaches about thirty inches, and is kept plucked flat at that height. Next year or the year after it is again pruned back level to about eighteen to twenty inches and in due course plucked flat again at thirty inches. Then each year or alternate year the bush is cut back, a little higher each time, on one inch or half an inch of new wood. After twenty-five years or so, the bush may be getting too high for plucking, since this operation calls for a run of about six inches of new growth above the pruning level. In this event, the bush is medium pruned back to about twenty-four inches, and the cycle of pruning started again. In South India it has long been the custom to prune at heights comparable with those in Assam and to run four, five or even six years between prunings, the longer periods being used at the higher altitudes.

There are, however, many views as to the uses of medium pruning, light pruning, skiffing, or leaving tea unpruned and it need only be said that planters today would regard with horror any return to the old severe methods.

In one other respect pruning practice has changed. At one time it was common to prune each bush 'on its merits', and this necessarily produced a very uneven plucking table. During the last two or three decades level or contour pruning has become usual and an unbroken plucking surface is characteristic of tea gardens today.

* A very experienced Assam planter says that in general removal of the centre branch would precede 'cutting across'.

FERTILIZERS

One of the most spectacular developments in recent decades has been the introduction of artificial fertilizers. It might have been thought that knowledge of general agricultural practice would make all the early planters believe in the application of organic manure, but this was not apparently the case. Money makes an interesting statement on this subject:

> An idea existed formerly got, I believe, from some stray Chinaman, who I don't think knew much about tea anyway, that manure, though it might increase yield, spoilt the flavour of tea. The idea is opposed to all agricultural knowledge, for high cultivation, which can in no case be carried out to perfection without manures, much improves the strength and flavour of all edibles, the produce of mother-earth.

Money combated this superstition vigorously, and wrote as follows:

> After experience showed me that manuring nearly doubles the yield of plants, and that so far from injuring the flavour of tea it improves it, while it adds greatly to the strength, I shall, therefore, beg the question that manure *is* an advantage. If any planter doubts it, let him try it, and his doubts will soon be solved.
>
> Any manure is better than none, but I believe that one of the best manures for the tea plant (always excepting night soil and the excrement of birds, which cannot be procured) is cattle manure.

Planters soon came round to Money's view, but there was wide divergence of opinion as to what manure should be used and how it should be applied. Cow dung, stable refuse, and decayed vegetation were obvious manures, but a writer in the *Vade Mecum* strongly advocated the use of limestone. There was also considerable controversy about the virtue or otherwise of putting the manure in deep below the surface.

Planters thoughts soon began to turn towards chemical manures. Money himself patented 'Money and Ponder's Chemical Manure', and claimed that it was successful in several gardens, but unfortunately he gives no details as to its constitution. A writer in the *Vade Mecum* makes mention of sulphate of ammonia when he describes a cheap fertilizer: 'This consists of sulphate of ammonia, 60 lb; nitrate of soda, 40 lb: ground bone, 250 lb; plaster, 250 lb; salt, ½ bushel; wood ashes, 3 bushels; stable manure, 20 bushels.' Another writer in the same publication gives a somewhat similar recipe, while a third correspondent was experimenting with saltpetre together with sowing in an oil seed. Many planters, however, preferred to rely on organic manures such as sterilized animal meal and oil cakes which they thought maintained quality without interfering with the chemistry of the soil. Others relied mainly on shade trees to maintain soil fertility. It was not till about 1920 that scientific manuring began to be general and at that time the Tocklai

scientists embarked on an important series of experiments which led them to advocate a five-year rotation thus described by Harler:

> Lime and cattle manure/phosphates and cowpeas/N and K mixture/phosphates and Boga medeloa sown/mixture and Boga medeloa trenched in. The lime application consisted of ten maunds (800 lb) crushed limestone with five tons cattle manure. Next year forty lb phosphoric acid was given and the following year thirty lb nitrogen and twenty lb potash. In the Boga medeloa year forty lb phosphoric acid was again given, whilst in the fifth the same mixture as in the third was applied.

The defects in this prescription were soon realized and a trend set in towards regular and heavy application of sulphate of ammonia. There has been much argument about the effects of applications of potash and phosphates, but in North-east India they are not generally regarded as necessary for mature tea, though they are applied to young tea. It is sufficient to say that the necessity of using artificial fertilizers, and particularly sulphate of ammonia, is now taken for granted and is partly responsible for the remarkable increases in yield in recent years. A leading tea man today, who has helped the writer much in this chapter, likes to tell the story of a planter who told his assistant many years ago that quality tea could not be produced with yields of over 480 lb an acre. If this were true, at present costs of labour the industry would be doomed to failure. Fortunately, many estates in India now produce 1,500 or 1,600 lb per acre – or as we should now say in view of the introduction of the metric system 1,700 to 1,800 kilograms per hectare.

SHADE TREES

During the first few decades of the tea industry, planters regarded the presence of trees amongst the bushes as harmful, since they tended to make the bushes throw out long stalky shoots, resulting in woody and meagre flushes. The credit for the discovery in the seventies that these objections did not apply to the *sau* tree, *Albizzia stipulata*, seems to have been shared between Colonel Hannay of Dibrugarh and J. Buckingham (later Sir James Buckingham) of Amgoorie. As we have seen in an earlier chapter their theory gained rapid acceptance and the *Vade Mecum* contains an interesting correspondence in which planters set forth very divergent views as to why the *sau* tree produced beneficial effects on tea bushes. Some attributed these effects to the fact that while the *sau* tree protected the plants from the fierce rays of the sun, its shade was too light to produce the harmful effects described above; others maintained that the benefit resulted from the accumulation of vegetable matter round the bushes from the leaves of the tree; while yet others contended that the real value of the tree lay in the fact that its roots

drained the sub-soil. However much these views might differ, none of the correspondents had any doubt as to the fact that planting *sau* trees did improve the bushes and shade soon became an established feature of tea gardens.

Claud Bald, writing many years later, produced yet another theory:

> It is not many years since green manuring was taken to mean only the ploughing in or hoeing of green stuff into the ground with a view to fertilizing the soil for a crop to follow. Now, however, the expression has wider signification, and is taken to mean also the planting of trees and shrubs, to act as perennial fertilizers among the particular crop which is cultivated. It is now very generally known by agriculturalists that most leguminous plants, trees, and shrubs, viz, those which carry their seeds in pods, have the faculty of fostering on their roots certain bacteria, which by their activities absorb free nitrogen from the surrounding atmosphere, and transform it into nitrates in which it is readily available to support plant life. It has been demonstrated that the special usefulness of certain crops for green manuring and the fertilizing properties of leguminous plants and trees are directly traceable to the presence of these bacteria upon their roots.

Modern authorities would perhaps be less inclined to attribute the value of shade trees to any one cause, but the subject is still a matter of controversy. In general, most planters and scientists would accept the need for shade for tea in North-east India while recognizing the need for a better understanding of its direct effects on the tea bush, its effects on the soil and on the atmosphere immediately round the tea bush. It is possible that shade may lessen severity of attack by some pests, especially red spider, but more experimental evidence on this must be awaited. Since Bald's time other trees have been found to serve the same purpose as the *sau*, the trees most commonly employed being other species of *Albizzia* such as *A. molluccana* and *A. procera*. During the past two decades pests and diseases of shade trees have become more serious, and planters have been heard to say it is now harder to get shade growing than to grow tea bushes.

PLUCKING

In plucking, too, modern practice is very different from that of the first generation of planters, though individuals such as George Williamson began at a very early date to strike out on lines similar to those of today. Here we cannot do better than quote Claud Bald:

> The history of modern methods of plucking dates from 1855 when Mr George Williamson was Manager of the Assam Company. Previous to this the maximum crop of this Company was about 3½ maunds per acre. The biggest yield was in April and the season practically ended in September. The reason was that leaf was plucked as soon as it grew, without leaving any initial growth. The monthly outturns of a garden of about 700 acres were:

	(maunds)
March	130
April	510
May	450
June	470
July	400
August	300
September	240

Williamson realised that the tea bush should be allowed to grow before plucking and when he tried this, alarm was caused by crop shortage in March and April. The result at the end of the year, however, was a remarkable increase in crop. This started the problem of how much initial growth to leave, and is still a most difficult matter for the manager to decide. The tendency has been to go to the opposite and leave too much, or more often, too many leaves after initial plucking. Too much or too little growth means loss in crop and in the latter case deterioration of the bush also.

Harler, after referring to Williamson's innovation goes on to comment as follows:

The early planters, still following Chinese methods, often plucked the buds separately in order to make Pekoe, whilst even in 1900 it was common to take half leaves, leaving the axil below the half leaf to produce a shoot. In 1920 it was customary on many estates to pluck the bush to an umbrella-shape top, on the assumption that the convex plucking surface gave more leaf than a flat one. Experiment then in hand soon convinced the industry that, both for ease of supervision and for crop, a flat plucking surface paid.

Since then little change has taken place in methods of plucking, but with the generous application of fertilizers now customary, the initial growth left on mature tea before plucking is often seven or eight inches – a great deal more than pre-war. Much importance is now attached to a regular plucking round, and at any rate in Assam a seven-day round is regarded as the norm.

PESTS AND DISEASES

It is not possible in a non-technical work to describe the effective pesticides, fungicides, and sprayers, with which the modern planter is equipped to deal with pests and blight. It need only be said that the need to find remedies for these afflictions was one of the factors which led to systematic scientific research in the industry.

THE LIFE OF THE TEA BUSH

It seems fitting to conclude this chapter with a reference to the life of the tea bush. A contributor to the *Scientific Department Encyclopaedia* of the Indian Tea Association writes as follows:

We are often asked the question, 'What is the life of a tea bush and that of a tea garden in North East India? On what cycle should a replanting programme be based?' Answers to such questions will depend on many factors such as type of tea, soil, climatic conditions and other local factors . . . Theoretically a tea bush on a garden may live indefinitely provided sufficient food, water and air are made available, and provided that it is adequately protected from pests. However, in practice, tea bushes of an age beyond a certain limit can rarely be of economic value and their continued existence can have academic interest only.

A well-known Assam planter asked to comment on this extract wrote as follows:

Below is an extract from the inscription on the stone marking a plot of 'original' tea on Jaipur Tea Estate, Naharkatiya.

'The China plants in this plot were raised from seed imported from China about 1834.

The Assam plants are those raised or propagated from seed off the indigenous trees discovered at Namsung by Drs Wallach and Bruce in 1836.'

Upwards of fifty per cent of the original plants still survive and, to quote the *Encyclopaedia*, are certainly of considerable academic interest.

There is, of course, no general answer to the question as to what is the life of the tea bush, and all that can be said is that many planters now reckon to replace about 2½ per cent of their tea bushes annually and that there may be some ground for thinking that when tea is replanted on some land which has previously borne tea, its life may be considerably less than that of the original bushes. The rehabilitiation of old tea land before replanting, including the need for a rest period of one or more years under a leguminous green crop, is now being intensively studied by Tocklai.

CHAPTER THIRTY-THREE

TECHNICAL DEVELOPMENTS: II. MANUFACTURE

Orthodox tea manufacture in India today still involves five of the six processes used by the Chinese tea-makers who worked at Sadiya in 1837 under Bruce's supervision. Bruce himself considered mechanization of some of these processes essential and, since it would have been difficult at that time to achieve this result in Assam, he proposed that green leaf should be sent to Calcutta, or even to England where 'it might be left to the ingenuity of the Englishman to roll, sift and clean the tea by machinery'. His proposal was not accepted. Three decades were to pass before the introduction of tea machinery by a few far-sighted planters, and a further ten years were to elapse before the soundness of the change was generally admitted.

The development of new methods of manufacture began in the late sixties, was rapid in the seventies and eighties, and except for a few minor improvements, was substantially complete by the end of the nineteenth century. In the following fifty years there were, as we have seen, great advances in methods of cultivation, but manufacturing techniques underwent little fundamental change until Tull and McTear, under the guidance of Nicholls and the Development Panel of the Indian Tea Association (London) investigated the possibility of continuous manufacture and discovered methods which are now likely to revolutionize the Indian tea industry.

PROCESSES OF MANUFACTURE

This is not a technical treatise, nor would the author be capable of writing such a work, but if the great developments of the last thirty years of the nineteenth century are to be understood by the non-tea man, a brief explanation of the main processes of manufacture must be given. They are withering, rolling, fermenting, firing or drying, and sorting.

Withering is carried out as soon as the green leaf is brought in from the garden – indeed, it begins as soon as the leaf is plucked. It involves the exposure of the leaf to air for a considerable period, during which both physical and chemical changes take place. The physical changes are relatively simple. Even on a dry day, about seventy-five per cent of the leaf by weight consists of water, and unless this quantity is reduced the ensuing processes could not be properly effected. In addition to loss of water certain chemical changes take place during withering. Their exact nature is still uncertain and is being further investigated. That these changes are essential to the making of tea with good market characteristics is not in doubt, but exactly how long a withering is required to ensure them is open to question. Orthodox withering seems to have hit upon a timing which provides for both physical and chemical changes to proceed successfully.

The second process of manufacture is known as rolling. It involves literally rolling the leaf is such a way as to bruise it and distort the cells in order to liberate the juices and thereby facilitate the next process, fermenting. An almost equally important object is to give the leaf the twist which improves its appearance and sale price. Orthodox manufacture calls for at least two and often more periods of rolling, between each of which fine particles of leaf which require no more rolling are sifted from the bulk.

During fermentation – the third process – certain chemical substances in the leaf become oxidised through the action of an enzyme, also present in the leaf, and thereby transformed into tannins. In some ways this is the most critical of all the processes of manufacture. High humidity without excessive temperature is necessary for its satisfactory operation. The value of the tea depends to no small extent on the proportions in which these various tannins are present and this in turn is partly determined by the conditions of fermenting.

In the early days of the industry, this process was often followed by what was known as panning, after which the tea was rolled again. Panning – which meant simply heating the fermented leaf in pans as a preparation for drying – has long since been discontinued and today the fermented leaf normally goes straight into the firing or drying machines.

The main object of firing is to stop the further fermentation of the leaf, but as Carpenter and Harrison tell us 'some of the substances present are changed by the heat and given the "malty" taste and smell peculiar to fired tea. The change is known as caramelization.' The same authorities point out that in the process some of the valuable constituents of tea are lost, but since the alternative would be the continuance of fermentation, the lesser evil has to be accepted. A subsidiary object is dehydration of the leaf, the moisture content of which is reduced to perhaps two or three per cent.

The final process, known as sorting, is self-explanatory.

It should be pointed out here that not all Indian teas undergo all these processes. There is, for example, non-withered tea and there is also green tea. These variants will be discussed later, as will also the additional processes introduced in certain systems of manufacture, known as Legg-cut and CTC.

We are now in a position to study the technical developments of these various processes.

WITHERING

In his book on Indian Tea, Claud Bald quotes an interesting description of withering from an early Chinese manuscript: 'Spread the leaves about five or six inches thick on a bamboo tray,' says the unknown writer, 'in a proper place for the air to blow on them.' After the sage advice that a workman should be hired to watch the leaves, the writer continues: 'Thus the leaves continue from about noon until six o'clock, when they begin to give out a fragrant smell. They are then poured into large bamboo trays, in which they are tossed with hands about three or four hundred times. It is this operation which gives the red edges and spots to the leaves.' Fine leaf was to be withered in the shade, but coarser leaf required exposure to sun.

Assam planters naturally began by using Chinese methods, but they soon decided that tossing the leaf was a mistake and before long they also came to doubt the wisdom of exposing it to the sun – though as late as in 1878 Money advised that if leaf spread on *machans** all night was not fully withered in the morning, it should be put out in the sun for about half an hour. In 1873 Money was an enthusiastic believer in the virtue of a strong light and apparently constructed a glass withering house in the Western Dooars. In general, however, open withering sheds 'admitting air and light freely and fitted with tier upon tier of bamboo trays', were the order of the day, and a little later it was laid down in the *Tea Planters' Vade Mecum* that in damp weather 1¼ lb of leaf might be spread on a tray of area nine square feet. The *chungas* or tiers of the leaf house were covered with hessian. Fine galvanized wire netting which allowed the best circulation of air was considered better than the bamboo racks, but at the time its cost was regarded as prohibitive in many cases.

From the earliest days, withering in tea pans had been practised in very bad weather, but this soon began to be regarded as injurious to the leaf, and in the sixties enterprising planters experimented with milder methods of artificial withering by means of heated air. These experiments gave rise to a good deal of controversy but a planter, Percy

* Bamboo platforms.

Swinburne, writing in the *Vade Mecum* in 1883 stated that 'a large proportion of the best tea which is sent to the market is now made from artificially withered leaf, that is to say, from leaf which has been withered by heated air'.

One early artificial withering machine consisted of a series of drawers over which heat was forced by a bullock-driven fan. Elsewhere, racks of leaf were suspended over charcoal stoves. A natural development was the construction of withering lofts above the drying sheds, suitable arrangements being made for regulating the heat and admitting air. In practice, however, it was often found difficult to prevent the temperature in such lofts from rising to such heights as to be injurious to the leaf. In some estates, the leaf was withered in houses built of bamboo, lath, and plaster, and heated by smoke flues. Swinburne describes such a system on the Kainagar Estate in Sylhet and comments thus:

> The heat is all so uneven and the greater it is the more difficult it becomes to equalise the withering. The leaf must be thinly spread and carefully watched. One part of the house withers much more quicker than another and if the leaf is left for an hour only after it has reached the right stage, much quality is lost.

Nevertheless, Swinburne concluded that these houses, despite their defects, were preferred to those of the old style.

This method was soon abandoned and in 1893 Kelway Bamber was able to state that: 'Withering with the aid of heated air, drawn over the leaf by means of large revolving fans is now universally adopted on tea estates.'

In parts of the Dooars, Darjeeling, and South India heated air and enclosed withering lofts are still used, but today in Assam and Cachar and generally elsewhere withering is carried out in open, roofed sheds, sometimes protected from the sun by blinds and consisting of one of the two types thus described by Ukers.

> The leaf house or withering shed may be one of two types. The *chung* or frame type, consists of a series of bamboo floor racks covered with Hessian. The *chungs* are three feet apart; just enough to allow boys to creep in and spread the leaf. They cover the whole floor except for a centre aisle. There may be as many as ten tiers of *chungs* in a shed. The other type consists of a series of shallow racks of wire netting, although bamboo or coarse Hessian also are used. These racks are built on a slant six to nine inches apart, reaching a height of about six feet.

Wire-mesh *chungs*, fabricated on the spot and covered with hessian cloth, are the norm today, and nearly all leaf houses built after the Second World War are of steel construction. Generally speaking, in Assam and elsewhere after the Second World War, withering space was inadequate to deal with greatly increased crops, but this shortage has to

some extent been removed by the adoption of the CTC process – which will be described later and which requires a lesser degree of withering.

The construction of leaf-houses or withering sheds is expensive and various attempts have therefore been made to devise other methods of withering. In 1892 W. Jackson – that great figure in the development of tea machinery – supplied the Jorehaut Tea Company with a leaf-withering stove and fan of his own invention, but it was apparently not a success. Other withering devices were soon on the market, of which the most important was Davidson's drum-withering apparatus.

One method of withering involved the use of a drum and A. J. Wallis-Tayler describes it as follows:

> In another method of carrying out the process, a revolving drum or cylinder may be used, which is so constructed that when the inlet door for charging it is closed, it will be approximately air-tight except at each end, where an aperture is provided – that at one end for inlet and that at the other end for outlet of the circulating air current – and to each of which openings conduit pipes are so connected as to conduct the circulating air current from the drum or cylinder through an air-heating apparatus and fan, and back again into the drum or cylinder. Longitudinal shelves fitted upon the inside of the cylinder act to lift the leaf up to the top and then let it fall again as the drum revolves. The inlet and outlet ports are preferably connected by a tube of foraminous or perforated material, blocked midway by a baffle plate, which prevents the air passing straight through from the inlet to the outlet port, and compels the radial diffusion out from the inlet end of the tube towards the periphery of the drum, and back therefrom to the outlet side of the tube.
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> In order to keep the warm air in the withering chamber, or the withering drum, moisture-laden, like a vapour bath, and at a constant temperature of from 90° to 100° Fahrenheit, conduit pipes connected with the inlet and outlet ports are provided for conveying the exhaust air of the withering chamber or withering drum, and causes it to pass through the heating apparatus and back again into the withering chamber or withering drum.

Drum-withering did not catch on and even when the idea was revived in the middle of the twentieth century, it was not widely adopted. A variant of this was tunnel-withering also described by Wallis-Tayler, in which the withering racks 'were moved on wheels through a tunnel-shaped withering chamber, whilst being subjected to the action of a current of moisture-laden, heated air' – a principle used many years later by the Tocklai Experimental Station. It is indeed of great interest to note how many of the principles which have been applied by the engineering branch of Tocklai in recent years were in the minds of thoughtful and inventive makers of tea machinery more than half a century ago.

In South India much use was made of controlled withering in which hot air from the drying-room, consisting partly of the exhaust air from

the driers, is conducted into the loft and drawn over the leaf racks by means of fans. Ukers goes on to describe the procedure thus: 'In order to level up the withering, reversible arrangement of air flow has been introduced, whereby the air flows first in one direction and later in the opposite. This reversal is a simple matter and is done by opening and shutting of doors.' In Assam this system was tried by several companies, but was not considered to be a success.

Withering methods developed after the Second World War fall into two classes – the tunnel-withering system developed by Tocklai and referred to later in this chapter, and trough-withering on which the Tocklai experts tended to frown, but which has been adopted by a number of progressive companies. In that system tea is spread in a trough of considerable dimensions and air at the appropriate temperature is forced through the trough by means of a fan. This method has not yet been subjected to comprehensive, scientific experiment at Tocklai, and the length of time for which, under any given climatic conditions, the leaf must be stored for its chemical wither before going into the trough, has not yet been determined.

ROLLING

For the first two or three decades of the tea industry in Assam, leaf was rolled by hand in accordance with the method thus described by Money:

> A strong immovable smooth table, with the planks of which it is formed well joined together, so that no apertures exist for the juice of the leaf to run through, is the best thing to roll on. If covered with a fine *seetul pattie* mat, nailed down over the edges of the table, a still greater security is given against the loss of any sap, and I believe the slightly rough surface of the mat enables the leaf to roll better. An edging of wood one inch above the surface of the table should be screwed onto the edges over the mat, if there is one, to prevent leaf falling off.
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> The leaf is rolled by a line of men on each side of such a table (4½ feet is a good width for it) passing up from man to man, from the bottom of the table to the top. The passage of each handful of roll from man to man is regulated by the man at the end, who, when the roll in his hand is ready (that is, rolled enough), forms it into a tight compressed ball (a truncated shape is the most convenient) and puts it away on an adjacent stand. When he does this, the roll each man has passes up one step . . . There will be some coarse leaves in the roll which cannot be twisted. These, if left, would give much red leaf in the Tea. They should be picked out by, say, the third or fourth man from the head of the table, for it is only when the leaf has been partly rolled that they show. The man who picked out the coarse leaf should not roll at all. He should spread the roll, and pick out as much as he can, between the time of receiving and passing it on.

Ukers suggests that the rolling coolies used both hands, and carried out a figure-of-eight motion on the table, but it does not appear that this

was universal. According to Money, different planters advocated different patterns of motion and Money did not believe the pattern mattered.

On some gardens, leaf was rolled in hot pans, but this practice was dying out in the seventies. In some places the leaf was placed on a bamboo mat and rolled by a coolie's feet, but in the majority of tea factories the method described by Money was used. McMeekin, a Cachar planter, devised an ingenious rolling table constructed of battens, which served the purpose of sifting as well as rolling.

The next advance came at an indeterminate date in the sixties, when another Cachar planter, Nelson, designed a rolling machine described by Money as being 'nothing more than a mangle'. 'The leaf is placed in bags,' says Money, 'and then compressed under rollers attached to a box weighted with stones.' Ukers tells an amusing story of Nelson's invention:

> The genesis of this machine is said to have been that Nelson was watching his coolies at hand-rolling, and pondering on the possibilities of quickening the process by dealing with larger quantities of leaf than just the handful each man individually could tackle. It occurred to him that if one of the long tables on which the coolies worked was turned upside down, and put on top of another table, and then was drawn backwards and forwards with leaf between the two tables, the rolling action would be much the same as by hand, and leaf could be treated in larger quantities. However, it became clear to him at once on trying this, that the leaf had to be contained in something to hold it together. Nelson's mind jumped to the idea of a bag container, and he sent to the bungalow for a pair of his white drill trousers. He cut off the legs, filled them with leaf, tied up the ends, put the bags between the two tables, sat some coolies on the top one to add weight, and set the others to pull and shove the top, inverted table over the bottom one. The leaf in the trouser legs was rolled, and the Nelson roller was invented.

The machine was only intended to prepare the leaf for a final hand rolling and its great merit was that it reduced by seventy-five per cent the time required for the hand-rolling process.

A few years later, John Greig, of Regent Works, Edinburgh – apparently following a principle adopted by one Haworth, of whom nothing appears to be on record – brought out a refinement of the bag process. Greig's Patent Link and Lever Tea Roller rolled two bags at once, could be worked either by bullock, water, or steam and only required one man to operate it. It was capable of rolling ten to twenty maunds an hour, whereas the Nelson machine could only deal with one maund in fifteen minutes.

A number of other rolling machines appeared at about the same time as Greig's roller, the most important of them being the centrifugal rolling machine invented by J.C.Kinmond of the Assam Company, and

first tried out in 1867. It was intended to imitate the action of hand rolling and consisted of two revolving wooden discs pressed against each other by weights. The bags used by Nelson and others were replaced by a box in between the two rollers. It is thus described in the *Tea Planters' Vade Mecum*.

> The principle of the machine is centrifugal force, the leaf being thrown and re-thrown perpetually from the centre by the effect of carefully-regulated set wooden flanges on the two opposite discs. The discs revolve in the same direction, but apparently at different rates of speed, and the pressure is regulated by a delicately-threaded screw, working against a spiral spring, under the most perfect control, the action of which, in separating or drawing the discs together, can be regulated by a boy.

It was driven by a two- or three-horse-power steam engine and was able to turn out five maunds an hour. Like all the other rolling machines of this period, it only prepared leaf for a final rolling by hand.

In 1873 William Jackson produced what was in effect an improvement on Kinmond's roller. Its action is described by Harler as follows: 'The leaf was placed in a bottomless box which stood an inch or so above the rolling table and the top of the box was fitted with an adjustable cap for giving pressure. The box moves backwards and forwards and the table moves sideways.' Kinmond succeeded in an action against Jackson for infringement of patent rights, but the two men then came to an arrangement which allowed Jackson to continue with his machine. Jackson went on experimenting and in 1887 put the Rapid Roller on the market.

There were apparently single- and double-acting versions of this machine. The principle of the double-action rolling table is thus described by Wallis-Tayler as that of 'super-posed rolling plates, to each of which motion is imparted by compound or double cranks'. Originally, to quote a modern authority, 'the table was faced with wood, marble or granite. The leaf container or jacket was made of wood with brass corner pieces, and the pressure cap was either timber or granite faced.' With this machine, a final rolling by hand was unnecessary and indeed hand rolling soon became unknown.

A later refinement was the Jackson-Marshall Roller which was put on the market in 1907. In this machine the leaf was contained in a metal cylinder instead of a wooden box, and the square table of the rapid machine was replaced by a brass surface, circular table. Since then no great changes in principle have been made, though size and capacity have varied, different materials have been used for the tables and various devices for adjusting pressure have been employed. For all practical purposes, rolling machines reached their full development with the Jackson-Marshall Double Acting Machine. The Sirocco OCB Roller

introduced in 1927 followed the same principles as its Jackson-Marshall predecessors, and the widely used Britannia Roller patented in 1928 was orthodox in all respects except for its ball and roller bearings and cranks.

Rolling is normally done in two or three instalments and after the first operation, which is a light roll lasting for perhaps anything up to half an hour, the ball of the leaf is broken in a *kutcha* sorter or breaker.

Perhaps the most important classification of modern rollers is that into single-action machines, in some of which the table moves and the box is stationary, while in others the box moves and the table is stationary – and double-action rollers in which the box and table both move. Rollers may also be classified into those with open top and those with provision for the application of pressure. Recently the swing to the CTC manufacturing process which requires less pressure in rolling has led many companies to convert their rollers to open top.

In 1912 Perman patented an expressor, the purpose of which was to remove surplus moisture from the leaf before it was rolled. Other expressors appeared on the market and were sometimes used after the first roll. According to a modern authority many of these expressors were to be seen on Assam factories' scrap heaps up to the time the Japanese scrap merchants started operations in the 1930s. When in the mid-1950s an attempt was made to locate one for Africa, there were no replies to advertisements in Assam newspapers.

Various methods have been devised to overcome the difficulty of rolling leaf which has not been adequately withered. Under the no-wither system, which is used in a number of Dooars and Cachar estates, the leaf must be cut before rolling and in 1923 a chaff-cutter was introduced for this purpose in Cachar. Two years later a refinement of this method was introduced in the Dooars. A tobacco cutter was used to cut the unwithered or inadequately withered leaf into strips. Various forms of the cutter exist, but the Legg cutter is now almost universally employed where this type of manufacture is required. Legg-cut tea is only rolled lightly and for a short time. This system has become very popular in the Dooars in the last thirty years, chiefly because of the difficulty at some times of the year of effecting a satisfactory wither.

Other methods of bruising the leaf in conjunction with rolling have been devised in modern times. The Chalmers' Milling Machine, designed in 1925, started the fashion but it was not taken up. In 1931 W. McKercher produced a machine intended for the same purpose but destined to be far more successful. The prototype of his crushing, tearing, and curling machine, universally known as the CTC, was installed in the Amgoorie factory. It is in effect a mangle. It is not our purpose in this book to describe technical processes in detail, but a brief account of the CTC system is necessary since it is perhaps the most important

development in manufacture in the first half of the twentieth century. The rollers of the mangle revolve inwardly at different speeds. The operation is applied after the first or second roll and *kutcha* sifting. According to Harler the leaf is then instantaneously distorted, 'an action which wrings out the leaf physically without loss of juice or rise in temperature and also causes fuller oxidation than is obtained by rolling'.

There are many variants of the process, but Harrison in his revised edition of Claud Bald's classical work on Indian tea describes a typical system of CTC manufacture as follows: 'First the withered leaf is rolled for forty minutes with light or no pressure. It is then sifted and the fine leaf separated. The coarse leaf is then passed through the CTC machine two, three or even four times, sifting out the cutting in the CTC.' CTC manufacture was not widely adopted until after the Second World War, but it is now used in most Assam factories and is spreading rapidly in the Dooars.

The only other machine in this category which requires mention is the E. J. Roller invented by Nicholls, who as chairman of the development panel has had much to do with recent developments in manufacture. Like all machines of this class, the E. J. Roller is essentially a mangle.

Since Harrison wrote, two important changes have taken place. First, much greater attention is now given to the sharpness of the cutting edges of the roller segments and the roller setting. 'Crush, tear, and curl' has become 'cut and curl', since the hundreds of knife edges formed by the intersection of the annular and helical (spiral) grooves shear rather than tear the leaf.

The second change is the reduction of the duration of the roll to thirty minutes at most.

CTC manufacture has gained greatly in popularity since the Second World War, and a leading London tea broker estimates that in North India about half of all tea produced is manufactured by the CTC process. It is not used on any significant scale in South India or Pakistan – or in Darjeeling or Cachar.

GREEN LEAF SIFTING

In this process leaf which has been rolled sufficiently is separated from the bulk, balls of leaf formed by rolling are broken up (a matter of particular importance when well withered leaf is concerned) and heat generated in the rolling table is dissipated. There are two main types of sifter – rotary sifters, which their name sufficiently describes, and *jiggers* which are sometimes equipped with beaters to break the ball of the rolled leaf and occasionally have belt-driven fans which force air into the feed hoppers to cool the leaf. There have been no fundamental changes in green leaf sifter design for the last fifty years, but there is a Sirocco

machine known as the 'Foursome', invented between the two world wars, which combines four functions – it breaks the ball of the rolled leaf, it cools the leaf, it aerates, and it separates the stalk from the leaf.

FERMENTING

So much importance is attached to proper fermentation today that it is not easy to realise that even as late as the seventies there were planters who disbelieved in this process even in the manufacture of black tea. Samuel Baildon writing in 1877 refers to the numerous opinions on this subject and says that 'some Planters fire their tea immediately it is rolled; others ferment it slightly and some to a very considerable extent'. Baildon, who was himself a firm believer in fermenting, goes on to describe the various methods then in use. He objects to all of them:

> I have often seen the leaf when brought from the machine put upon a cloth or mats spread upon the tea-house floor. One way is to make the leaf into balls when rolled, and thus allow it to ferment; another is to press the leaf into a wooden frame, fermenting it in squares and covering the whole with mats. I dare say I shall be considered rather ridiculous when I say I object to all these plans. When leaf is put on mats or a cloth upon the floor, the tea-house men are not particular enough. I base my argument solely upon what I have seen in no very small number of factories. Tea-house *tecklas* very frequently pile the last rolled leaf upon that which has previously been put down to ferment. When the fires are ready, they come to the mats, and (unless there is some one there to prevent them) invariably take the tea from the top if it is near the colour required. The consequence is, that the first rolled leaf is covered up time after time, and instead of going over the fires first, is left much too long. This accounts for an uneven fermentation and sometimes sour tea.
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> My objection to fermenting in balls is based upon personal practice rather than outside observation. I tried it for a long time, but eventually gave it up. The newly rolled leaf is very tender, and the pressure requisite to make a ball flattens the juicy leaf. In separating the balls, *tecklas* pull them to pieces instead of treating them carefully, and spoil to a certain extent, the twist given by the machine; or sometimes they will hurry over the work, and not separate the tea sufficiently, through which small lumps get to the *challonis* above the fires. The outside of the lump gets fired, the tea inside probably becomes sour, gets eventually mixed with the other tea, and because it is most conspicuous, lessens the value of the whole.
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> In fermenting in wooden frames the leaf is pressed to a much greater extent than in making a ball. It stands to reason that putting the whole strength of one's arm upon soft leaf to make it hold together when the frame is removed, must of necessity flatten the leaf. Invariably too, the centre of the block becomes fermented sooner than the outside; and better things are to be desired than flat, unevenly fermented tea.

He then goes on to describe the methods which he employed:

I have a long *chdng* of bamboos and mats about the height of an ordinary rolling-table and made in the same way, although not so substantial. When the leaf is rolled it is put upon this in lines about eight inches high of the same width, and five or six inches apart. In this way the tea ferments in the order it was rolled, and is taken to the fires in the same. Twice or thrice during fermentation I have the tea gently turned over. One can see at a glance the stage of fermentation, and can trace each lot of rolled leaf as received from the machine. There is no possibility of the last rolled leaf being put on the *dholes* first when once a start has been made. This therefore dispenses with the uncertainty of the rolled leaf being fired in its right order, with the pressing, pulling, and probable sour lumps of tea in balling, and the flattening and uneven fermentation in frame-using.

Money, writing about the same time, distinguishes between planters 'who collect the roll after rolling in a basket' and those who make the roll into a ball at the end of the rolling table. He strongly advocates the latter method on the following grounds:

When a quantity is put into a basket together and allowed to ferment a certain time, what was put in first is naturally more fermented than what was put in last, the former probably over, the latter under-done. The balls, on the contrary, can be each taken in succession in the order they were laid on the table, and thus each receive the same amount of fermentation. I think, further, the twist in the leaf is better preserved by the ball plan, and also that a large quantity in a basket is apt to ferment too much in the centre.

P. J. Hay of Luskerpore, writing in 1880, seems to have disagreed with Money:

If coloured in balls, the tea will have a 'nobbly, curly' make, instead of a 'spidery' one. The latter description sorts out much better than the former, and a long well-twisted Pekoe or Pekoe Souchong is preferred by the broker to one of a curly make. In balls too, the fermentation is unequal, and the outside leaves are apt to get dry, rendering them easily burned. Tea fermented thickly in heaps, has generally in cup a sweetish soft flavor which cannot recommend it.

A decade later fermenting practice had become standardized and the following description of the process by Kelway Bamber in 1893 would probably have been accepted then by nearly all planters:

A separate room is required, which must be well removed from the heat of the firing machines, and protected from the sun, by a double roof, as it is impossible to oxidise the leaf properly, and to obtain a good colour if the room is too hot. It should be conveniently situated to receive the leaf from the rollers, and pass it on to the drying machines. The floor should be of cement, sloping to a drain either in the centre or at the outside, to facilitate the washing and cleaning of the room when the day's work is over. It has also the advantage of absorbing a large amount of the heat generated by oxidation from the layers of leaf lying upon it, and thus assists in keeping the temperature down.

In the early part of the season, when the weather is comparatively cool, and it is difficult to obtain a good colour on the leaf, the leaf will oxidise more readily on trays of canvas or jute cloth than on the floor; but, if the leaf is placed in thicker heaps, and not turned too often, the temperature will rise sufficiently to assist in the colouring.

As the season advances, and the temperature of the atmosphere rises, the leaf must be placed in layers not exceeding four to five inches in thickness, and turned every half hour to prevent the temperature rising too high. About 85° Fahrenheit is apparently the most suitable temperature for the heaps to attain, but it is very difficult to keep it as low as this, when the surrounding atmosphere is over 90° Fahrenheit. Covering with damp cloths and keeping them moist with cold water assists in keeping it down, especially as on hot dry days evaporation takes place very rapidly, and by the absorption of heat, also reduces the temperature of the leaf.

It soon began to be realised that the cleanliness of the fermenting floor was important and that 'a cracked or porous floor is a natural breeding place for bacteria, which have a harmful effect on tea'. In the thirties the writer met one old Darjeeling planter who seriously maintained that an unwashed fermenting floor encouraged bacteria which gave Darjeeling tea its special quality: – but this planter was a lone wolf even then and would find no supporters today. Much useful work has been done at Tocklai on the chemical cleaning of floors and on the control of bacteria at all stages of manufacture.

An important development in the next few decades sprang from the realization that high temperatures during the fermenting process were detrimental to tea and this led to the widespread use of humidifiers or mist chambers.

Another change was in the thickness of the spread for fermenting. In Assam today the average for orthodox manufacture is about one inch for fine leaf and one and a half inches for coarse leaf, with a thickening of the spread when temperatures are low. CTC processed leaf is seldom spread more than three-quarters of an inch thick and often as thinly as half an inch.

Towards the end of the last century up and down draught oxydising and leaf cooling were introduced into this process and in the twenties or thirties of the present century a well-known Assam planter – familiar to Assam men as 'Blue-Nose' Warren – patented a process in which oxygen was used to accelerate fermentation. It proved too expensive and was not generally adopted.

A number of different fermenting surfaces are used nowadays. Impermeable concrete in the form of a level floor, raised bed, or raised tables is common. Anodized aluminium or stainless steel sheets are also used, while trays made of aluminium, stainless steel or plastic, which fit into racks on trolleys, are also popular in some districts. The trolleys

can be hand or conveyor propelled from the fermenting room to the dryers and back to the fermenting room when empty.

More recently resin-based paints have been introduced which, when applied to concrete floors, slabs or tables make them less liable to bacterial infection and easier to clean. When comparatively thin metal or plastic trays are used some form of air-conditioning is required in the fermenting room otherwise there will be 'drying' which is undesirable.

Fermenting in depth which calls for air being forced through the leaf, has come to India from Africa in the last year or so. Many planters today would regard fermenting as the most critical process in manufacture. It must be carried to exactly the right degree and what that degree is cannot be mathematically defined, but must be determined by sight and smell.

FIRING (also known as Drying)

Assam planters naturally began by firing according to Chinese practice. The rolled tea was first placed in an iron pan over a fire – a process known as panning – and then dried in trays above an open charcoal brazier. Panning soon fell into disfavour and in 1877 Baildon thus commented on the change of fashion:

> The old plan of 'panning' is, I believe, a Chinese one, but Planters in Assam are fast giving it up. The reason for panning is to tone down the harsh, rough flavor of the tea, so as to make it mellow to the palate. Now, as I said before, sufficient tasty, aromatic tea reaches the home market from China, without it being necessary to increase the stock by exportations from India. Considering that teas from this country are invariably used for strengthening the China article, rough, malty strength is principally required, and if such is sent no complaint will ever be made I fancy; unless, indeed, Indian tea is drunk alone, and then a little panning is not out of place. The only time I have ever considered it advisable to pan tea has been late at night, when the rolling has got ahead of the firing, and a quantity of sufficiently fermented tea remained to go on the *dholes*. On such occasions I have given it a turn in a very warm pan, stopped the fermentation, and lessened the risk of the tea becoming sour. Fortunately, however, such times were very few. Unless carefully watched, the pan is allowed to become too hot, and the tea gets burnt.

Baildon went on to describe the process of firing as follows:

> After fermentation the tea has to be fired. This is done by putting it on bamboo *challonis* of a sufficiently fine mesh to prevent the leaf falling through. The *dholes* or casement round the fire upon which the *challonis* are placed, are made in several ways. Mats bent round and ribbed with pieces of bamboo. These are moveable. Then there are bamboo stakes put into the ground, and thin strips woven round them to the top, and the whole plastered inside and out with mud. Upon the same principle the reed *Ekora* is used. I prefer *dholes*

made of the latter, as they are neater, and if properly made require less attention. Mine are mudded inside only, with a space of six inches left at the bottom to admit the air.

About the beginning of the seventies a Cachar planter named McMeekin, invented a refined process of firing which was thus described by Money:

It is nothing more than a low chest-of-drawers, or trays fitted in a frame one above the other, the bottom of each tray being fine iron wire, so that the heat of the charcoal, in the masonry receptable over which it is placed, ascends through all the drawers and thus dries or fires a large quantity of 'roll' at the same time. By the old plan, a single wicker sieve was inserted inside a bamboo frame called a *dhole*, which was placed over a charcoal fire made in a hole in the ground. On the sieve the roll was placed, and all the heat, after passing through this one sieve, was wasted. Mr McMeekin's idea was to economise this heat by passing it through several drawers.

Most planters use these drawers, and there is no doubt in the space saved, and the economy of heat: it is a great step in advance over the old barbarous method, where not only was the heat wasted after passing through *one* sieve, but a great deal was lost through the basket work of the *dhole* itself.

Money was careful to advise against the use of too many drawers since 'the steam ascending from the lower drawers must more or less injure the roll in the upper ones'. McMeekin's machine soon began to be used widely in Cachar, but when Baildon wrote in 1877 it was not much in use in Assam, and he referred to the danger of the wire getting heated and the tea burnt.

At the time when McMeekin invented his dryer, a great controversy arose as to whether the charcoal fumes were essential to the chemistry of the process of firing, or whether other forms of heating would do. The question was of great practical importance since charcoal was in short supply. Money conducted exhaustive experiments and satisfied himself that charcoal fumes were in no way necessary. He designed a machine in which heat was supplied by wood instead of charcoal and installed it in the Soom Tea Estate in Darjeeling. In the meantime other planters had been working along similar lines and in 1871 Dickinson employed McMeekin's chest-of-drawers system, but used a fan driven by bullock to force through the apparatus air heated by an outside furnace.

At this stage the subject of drying engaged the attention of one of the most fertile brains ever concerned with the tea industry – Samuel Davidson, later knighted for his inventions. Davidson went to Assam as a planter in 1874 with three other lads from Belfast. His journey is thus described in a pamphlet *The Sirocco Story*, which reproduces the address of E. D. MaGuire, chairman of Davidsons:

After reaching Calcutta, the four youths proceeded up river on 15 November to Cachar, a matter of some 600 miles, by means of a primitive boat, sometimes being rowed and sometimes being towed from the bank, and it was under these primitive conditions that Sam Davidson celebrated his 18th birthday, on 18 November 1864 – a year for every day of the month, as he notes in his diary. For a great part of the way they passed through flat and marshy mosquito-ridden countryside, and it was not long before they had their first experience of fever and dysentery. However, they finally reached the district of Cachar on 5 December 1864.

Davidson joined as an assistant in the Burkhola Tea Estate in Cachar, in which his father had a share, and in due course he became its sole proprietor. He soon began to experiment in all the processes of tea manufacture and in 1869 he took out his first patent for a cylindrical dryer. His rapid success as a planter enabled him about this time to buy the Subong estate in Cachar, but he continued to conduct his researches mainly at Burkhola. We are told in the *Sirocco Story* that, with his own hands and local labour, he constructed and modified one drying machine after another, and by 1875 he had a trial drying machine working at Burkhola, of which he was able to say that 'it can dry tea about twice as fast as the charcoal fires can already, but I am raising the chimney by another ten feet and expect it will dry about three times as fast as the charcoaled frames do'.

Satisfactory manufacture of this machine in India on a commercial scale would have been impossible at that time. Davidson therefore returned to Belfast and had it constructed by Ritchie, Hart & Company. When he returned to India with the machine in 1878, he also took with him a wheel hoe which he had designed and MaGuire states that the profits on the hoe, together with commissions paid to him for writing reports on various estates, covered the whole expenses of his trip to India and back as well as the cost of demonstrating the drying machine.

The dryer was a great success and sold well but Davidson was not satisfied. In 1879 he produced the up-draught dryer, the principle of which Harler thus describes: 'The furnace fumes and air going to the drying chamber passed through alternate sections and the hot air rose by convection. The trays were moved by hand and temperatures up to 275° Fahrenheit were used.' In 1881 he founded and ran the Sirocco Engineering Works in Belfast.

A number of other people now entered this field. Greig & Company, for example, produced the patent globular pipe, of which they said:

> a splendid stove can be made by merely taking eight of these pipes and placing them in rows in the form of the letter X, four at each side and building them into brickwork . . . any number of sections or driers can be heated by the same fire. Wooden hot air chambers and trays can be made by the local *maistries*, the same as used in Assam over charcoal fires.'

Kinmond, the inventor of the first mechanical roller, also produced a dryer, but a more important development was the production by Gibbs and Barry of the first automatic dryer, in which 'the hot air blasts were sent by fan into the lower part of the (revolving) cylinder to meet the descending leaf'. According to Ukers, William Alfred Gibbs of Essex took out a patent in 1870 for an apparatus for drying agricultural, mineral, and chemical products, including tea and in 1886 he took out a British patent on a specifically tea-drying machine. John Hewett Barry, a son of the founder of Barry & Company, the Calcutta agents and merchants, collaborated with Gibbs. A little later Gibbs produced an improved version of the dryer. The Gibbs and Barry Dryer appears to have been the first automatic dryer used in the tea industry and as a Gibbs and Barry dryer was in use in a green tea factory in Ranchi as late as 1943, it obviously had a very long run.

A more formidable competitor to Davidson now appeared in the person of William Jackson, who began to experiment at the Negriting Estate of the Brahmaputra Tea Company. A healthy rivalry between Davidson and Jackson soon grew up and it can fairly be said that the entire modern technique of firing owes its origin to these two men.

In 1880 Jackson produced his self-acting tea dryer. Suction was employed to draw hot air through a central tube and instead of removable trays, Jackson so arranged that by the rotation of a handle the leaf was dropped from one tray into the one below. For obvious reasons it was known as the Venetian.

Davidson was not to be outdone and he soon produced his down-draught Sirocco dryer in which hot air was drawn through the drying chamber from top to bottom, while the trays were lifted step by step to the top, where they could be removed. Ukers says that the machine 'incorporated a correct principle, namely that the tea leaf travels in the opposite direction to the draught of hot air and as it dries meets warmer and less saturated air'.

Jackson then produced a dryer named the Victoria, which might be described as an automatic version of the Venetian, using the travelling web system – an idea which he is thought to have borrowed from an experimental dryer made by Ansell, an inventive Darjeeling planter. Jackson had for some time been working in collaboration with the well-known engineering firm of Marshall Sons Ltd, and their subsidiary the Britannia Iron Works at Gainsborough. Thompson of the Gainsborough firm now hit on the idea of using both sides of the web bands of the dryer. Ukers says:

> The trays were caused to drop the leaf they carried before reaching the sprocket wheel, and returned level, carrying the leaf back on the underside of the web, or band, where it dropped again, before reaching the sprocket

wheel, to the band below, and so on. He thus utilized the full surface of the bands for drying purposes, and his webs all traveled in the same direction.

In 1894 Jackson, who had in the meantime produced the Britannia, which differed little from the Victoria, incorporated Thompson's principle in his new dryer, the Paragon.

A decade or so later, Davidson produced an automatic dryer using Thompson's principle, but employing pressure instead of suction to pass the hot air through the chamber. The Endless Chain Pressure Dryer, together with Jackson's Empire Dryer, which was a refinement of the Paragon, long continued to hold the field and there were no later developments sufficiently striking to warrant inclusion in the history of the Indian tea industry. We need only add that since the Second World War, many factories have switched to oil firing for their dryers, which, though more expensive, ensures more even firing temperatures and saves labour. Steam radiators, using exhaust or live steam, are also employed to heat air for dryers.

SORTING

In a non-technical treatise such as this, sorting requires only brief mention, since it only involves putting the dried leaf through a sieve. In the very early days Bruce apparently used a hand winnowing fan at Jaipur and a little later circular bamboo mesh trays, shaken by hand, were brought into use. The object of sorting is, of course, to separate the different classes of leaf required and Harrison points out that this must be done with the least possible friction. Ukers refers to patents taken out for tea sifting and cutting machines by one Edward Savage in 1854 and again in 1860. Two other patents were taken out for sorters at the same time and Ukers also mentions a sifting machine patented by Kinmond.

It was obvious that hand-sorting was a clumsy process, and in the late eighties and early nineties those remarkable inventors Davidson and Jackson brought out mechanical sorters, in which the leaf was placed in a rotating cylindrical sieve. Today there are a large number of different types of sorters in use, but all depend on reproducing mechanically, by reciprocating or rotary motion, the action of a hand-sieve.

Before the early sorters could be effectively used, the leaf had to be cut to the required size. Savage's sorter, to which reference has been made apparently also fulfilled this function, but in 1891 the sorter patented by the indefatigable Davidson included its own cutting arrangement.

It is not necessary to describe the many refinements which followed, but mention should perhaps be made of McLeod's AMA system, which employed an Andrew's breaker, a Myddleton stalk extractor, and

an Arnott sorter. Bucket conveyors and gravity were used for feeding leaf into the several machines. Combinations of this kind have become very popular in recent years. It is, however, interesting to learn from a modern authority that one garden noted for the quality of its teas did not install any automatic sorter until 1947.

PACKING

In the early days of the Indian tea industry packing presented many difficulties. Tea chests were made in Assam from seasoned teak-wood planks from Moulmein and Antrobus tells us that when in 1868–9 William Roberts proposed importing chests, his co-directors on the Jorehaut Tea Company objected on the ground of the 'loss and inconvenience that would arise from the non-arrival in time of boxes imported from Moulmein'. It appears, however, that within ten years the making of boxes on the company's gardens was discontinued. Saw mills were established in Assam using mainly Simul wood, but fir, pine, and even mango trees were also used. The chests were lined with lead shipped from home.

Some of the timber used was quite unsuitable and often tainted the tea, and experiments were made towards the end of the nineteenth century with steel chests. Early in the twentieth century, however, a solution to the problem was found and the industry began to import plywood *shooks* – i.e. top, bottom, and sides – from Finland, mainly through the firm of Venesta & Company. One E. H. Archer had given much attention to this problem and produced tea chests made of metal sheets. For a time they were used by some producers in India and Ceylon, but they soon proved unpopular with blenders and grocers. Archer next began to experiment with three-ply, which was already in use for certain domestic purposes in America, but he was baffled by the fact that in the damp climates of the tea-producing countries the three veneers soon came apart. In the meantime Martin and Carlos Luther, of Reval in Estonia, had patented a new glue based on casein. Archer entered into collaboration with the Luthers and in 1898 formed the Venesta Syndicate,* which bought their plywood panels from Estonia and exported them to India and Ceylon. The battens were made from Indian timber. A little later the syndicate set up a factory at Kamarhati, near Calcutta, for the production of fitments – lead linings for tea chests. Before long, plywood chests were almost universally used for the packing of tea chests in India.

The First World War and the Russian Revolution almost destroyed the Luther's business. Estonia was occupied by the Germans and the source of supply of birch wood from Russia was thus cut off, while the

* This section is based partly on *Our First Fifty Years*, published by Venesta Limited

Luthers' other factories were taken over by the Bolsheviks. A small factory was started in Finland, which, with Latvia, now became the main source of supply.

At about the same time a feeling against the use of lead, based on allegedly hygienic grounds, grew up. It was particularly strong in that over-health-conscious country, the United States, and it therefore became necessary to use aluminium foil linings, between which and the tea a paper lining was introduced. Tin was used at one time for lining, and this, after a famous controversy with the food and drug authorities in the United States, was given up for aluminium.

After the Second World War economic nationalism led to insistence on the use of boxes made in India. Such chests had indeed been manufactured by the Assam Railways & Trading Company and one or two other manufacturers for some years, but the demand now artificially stimulated led to the emergence of many new manufacturers. In the early years their produce was most unsatisfactory. The type of timber used often tainted the tea; unsatisfactory glues were generally employed; and the workmanship in the factories was, as a rule, defective. Complaints from London tea buyers were very frequent and for a time tea producers were allowed to import a reasonable proportion of the *shooks* for tea chests. The Government of India kept up a double pressure – they compelled tea producers to use more and more indigenous chests, and they brought great pressure on Indian tea-chest manufacturers to improve their quality. The double pressure was successful and some years before the end of our period practically all Indian teas were packed in Indian-made chests. Complaints from foreign buyers are not now as common as they were.

However the boxes are made, the tea still has to be packed. Originally this was done by hand – or perhaps we should say by foot. The tea chests were rested on a piece of split bamboo and rocked with levers to shake the tea into them, and what Wallis-Tayler calls 'the disgusting practice of treading, trampling, or stamping on the tea' was normal. In the nineties Davidson and MaGuire patented a mechanical packer, and Jackson soon followed them. Many planters still maintain that these devices do not pack as tight as could be done by hand, but the march of events has left them high and dry.

DEVELOPMENTS AFTER THE SECOND WORLD WAR

The factors leading to the establishment of the engineering department and the development panel have been explained in an earlier chapter but it remains to describe the results achieved by the powerful Nicholls-Tull-McTear combination.

Although many experienced and progressive planters doubted if mechanical plucking of 'quality' tea would ever be possible, the desire

for such a process was one of the motives which led the Indian Tea Association to set up the new department, and Tull turned his mind to this problem as soon as he began work. His description in *Tea Progresses* of the logical steps in the search for a practical plucking machine, is fascinating. After many ideas had been tried and rejected, practical tests were made in 1953 with a hand-plucking machine mounted on a trolley, which could be pushed along steel rails laid between the bushes. The cutters were electrically driven from batteries carried in the frame. The results of the experiment were encouraging and after much trial and error, a machine to be known as the Harvester was sent out to Tocklai for practical trial. Further modifications were then made and, in November 1955, Tull was able to report as follows:

The necessary corrections were made and the machine was tested on four feet by four feet tea at Borbhetta, where it has been used weekly during the past season, dealing with about 1,200 bushes. After so short a period it would be rash to suggest that the machine is entirely successful, but it is not too much to say that some of our fears have proved groundless and that present results are surprisingly good. In its present state the machine can cover thirty bushes a minute, producing leaf of acceptable standard and showing little evidence of 'cutting'. The bushes grow evenly and each successive cut appears to improve their condition, whilst at present there is no indication of loss of crop.

There is room for improvement in selectivity but as we have now proved that a fairly constant level can be maintained without rails this can probably be achieved by adjustment of the deflector bar and cutters.

Small drains can be negotiated, but larger ones could be bridged simply. Shade trees on other gardens could reduce the speed of operation but this would be minimized if a few bushes were up-rooted around the trees so that a detour can be made.

The chassis contains a longitudinal member, which unfortunately occurs at the level of the bush tops on this particular garden and thus disturbs the overhanging branches so that coarse leaf is brushed into the cutters. The offending member can be lowered, but with wider bush spacing the trouble would not occur, and in addition the narrow spaces within which the driver must steer his front wheels would be more easily recognised than they are at present. Otherwise, there is no reason to suppose that machines are suitable only for hedge-planting: on the contrary the present four feet spacing results in a fairly handy machine and, viewed in this light alone, any appreciable increase in machine size would make operation more difficult and eventually impossible as gardens are at present laid out. The maximum possible size which could be efficiently used is probably that of two bush widths, and the three wheel arrangement which is then possible allows better vision for the driver and permits adjustment of track width for various types of planting.

It is obviously advantageous to prune bushes by the machine which will later crop them but in the past season time had not permitted the attachment of a pruning head, and hand pruning has already taken place on the bushes

concerned. However it is proposed to continue work with the present machine during next season, when it is hoped that close observation will show remedies for faults and suggest improvements as well as establishing a technique of operation which has still to be learned; in the following year it may appear profitable to design a machine for commercial use.

Further improvements were effected, but it is still fair comment that while the Harvester performed its task admirably on level ground and where its progress was not impeded by shade trees, such conditions rarely exist in practice. Experts have pointed out that a similar machine is used in the great level shadeless stretches of tea in Georgia and have speculated as to whether in years to come tea in India will be planted in such a manner as to make the use of the Harvester possible. In the meantime it is in cold storage.

Of far greater importance was the attention that Tull now gave to the problems connected with withering and rolling. It was recognized that 'the objections to withering houses are their high first cost, recurring cost of maintenance, cost of labour and often the ineffective results of their use'. Tull began to study the many suggested alternative methods of withering, and the possibilities of wither assisted by fans, the use of warm air, air ducts, drum withering, expression of moisture by rollers, or by a hydraulic press, were all examined. It was soon realized that none of these methods allowed for the chemical processes – which are now believed to be as important as the physical effects – involved in withering. Tull's conclusions at this stage were that 'a regular flow of air in contact with the leaf is the basic necessity for withering, but little was known about the effects of temperature, air velocity, and relative humidity either singly or in combination'. In order to obtain more data as to the importance of these factors, an experimental withering chamber was built at Tocklai capable of producing considerable variations in air speed, temperature, and humidity.

It soon became clear that if progress in this field were to be rapid, Tull must have an opposite number in Tocklai. Fortunately, as we have seen the Association was able to secure the services of I. McTear as head of the Tocklai Engineering Department. McTear soon proved to have a remarkable flair for this kind of work, and the Tull-McTear combination was destined in the course of a few years to make possible a complete revolution in the process of manufacture.

Attention was at once given to following up the results obtained from the withering chamber. A prototype continuous withering machine was built in England, assembled at Tocklai, and then subjected to commercial tests on two Assam tea estates. The principle involved has been thus described by an expert:

> The leaf to be withered is carried through the drying chamber on trays which move from the bottom of the chamber to the top. The machine has two

great advantages, first, there is no need to touch the leaf while it is withering, and secondly, as the trays move slowly along and up the zig-zags to the top of the chamber, the leaf is ensured uniformity of wither in the conditioned air by which it is surrounded.

The degree of wither required varies considerably from one type of tea to another and also depends on atmospheric humidity, and the great virtue of this system is that the temperature and rate of flow of the air through the chamber can be readily adjusted to circumstances. The withering tunnel which was a logical result of these developments, has begun to be used on some gardens since the end of the period with which we are concerned. The expert previously quoted wisely remarks that the very flexibility of the system brings its own dangers, since individual interpretation of the principles involved often fall short of requirements, notably in the lay-out of the tracks and the design of the trolleys – and this can lead to an unsuitable pattern of air flow. There is also the fact that the need for a slow chemical wither necessitates storage of the tea for a time before it enters the chamber. It can, however, be stored in depths much greater than that required on a withering rack and the major object of the system – to do away with large and expensive withering racks – has been achieved.

It is in the matter of rolling that the achievements of McTear's engineering department have been most spectacular. His Rotorvane involves complicated processes and it seems wise to quote an official description of the machine.

> *Leaf is fed into a hopper superimposed at one end of a cylinder of approximately three foot six in length. Within the cylinder rotates an interrupted helical spindle. The cylinder and the spindle can be regarded as consisting of eleven 'stages' through which the leaf progresses from intake to discharge the leaf diminishing in size at each stage in the process, so that the final stage, after firing, emerges in particle size approximating to that of broken grades. With reasonable standards of plucking it is possible to produce seventy-five per cent – to eighty per cent of primary grades: i.e. saleable grades which can be produced in one stage of sorting without recourse to further 'breaking' or 'cutting'.*

This sounds simple – except to unmechanically minded people like the writer – but difficulties soon appeared. In the first place the moisture expressed from the leaf acted as a lubricant and so the spindle turned round without sufficient friction to move the leaf forward. When this difficulty was overcome by an ingenious device, the leaf moved too freely and did not stay in the machine long enough to acquire a 'twist'. When this problem was solved, it was still necessary to ensure that the Rotorvane could produce the particular size of tea required and this was achieved by the introduction of vanes. The saving of power resulting from the use of the Rotorvane was considerable. The machine was now

satisfactory and it had the great merit that it could be used in almost any system of manufacture. As the official report put it:

When the machine had been perfected, there remained the question of its location in the chain of manufacture. For example, the machine can be used on its own: as the direct link, that is, between the stage of withering and that of fermenting. It can be used in orthodox manufacture: i.e. 'wither – roll – rotorvane – fermenting'; or CTC manufacture in the sequence 'wither – rotorvane – CTC – fermenting'. It can also be used in non-wither manufacture; namely 'green leaf – Legg cut – rotorvane'. The most common use to date is the sequence of 'wither – rotorvane CTC and fermenting'. It can be said to have given birth to the idea of the mini-CTC, both machines being 'continuous' in type.

McTear next turned his attention to the production of a continuous roller to be used in orthodox manufacture, but the successful development of that machine occurred after our period. Tull and McTear had, however, already begun to aim at continuous rather than batch manufacture.

It is clear that after a long period during which tea machinery changed comparatively little, the last decade or so has been a period of restless inquiry and rapid change, the ultimate effect of which on costs and quality cannot yet be predicted. The credit for this revolution must go principally to Nicholls, Tull, and McTear, and the late A. N. Stuart.

Section 6

ORGANIZATION AND FINANCE

CHAPTER THIRTY-FOUR

THE INDIAN TEA ASSOCIATION AND SISTER ASSOCIATIONS

Owing to the destruction of many records by enemy action in 1943, it has been impossible to discover any official reports or first-hand accounts of the formation of the Indian Tea Districts Association in London – the precursor of the Indian Tea Association (London). Fortunately, Ukers, writing at a time when the records still existed, has described this transaction and the following paragraphs are based solely on his account.

The inaugural meeting was held in the Guildhall Tavern, Gresham Street, on 22 July 1879, and Ukers's list of those present includes such names as George Williamson, William Roberts, R. B. Magor, Alexander Lawrie, and others of the founding fathers of the Indian tea industry. Sir Douglas Forsyth, a former member of the Legislative Council of India, was elected to the chair and it fell to him to propose the formation of the Association. The objects of the Association and the reasons for founding it in London rather than in Calcutta had previously been set forth in a prospectus from which Ukers thus quotes:

> The large field prevents its establishment in India. Tendency of the owners and others interested to gravitate towards London, points to that city as the best location for the headquarters of the Association. At the same time, the co-operation of planters and others resident in India having kindred interests would not only be most valuable, but almost indispensable to the support of the Association.
>
> The more important objects were stated to be:
>
> (1) To serve as a centre or medium of intercommunication to those directly or indirectly interested in the cultivation of tea in British India, and to collect and disseminate information calculated to be of service to that industry.
>
> (2) To endeavor to bring about a certain degree of concert and unity of action amongst owners and managers of tea property upon all important questions, having for their object to cheapen the cost of production, improve the quality of the product, and increase the demand for it.

(3) To watch the course of legislation in India and England in so far as it affects the tea industry and the general interests of the districts in which that industry is prosecuted, and to procure such amendments and modifications of existing laws as may be found necessary for the realization of the objects in view.

(4) To take such action as may be found needful to improve the means of communication and transport, and to promote a fuller and freer stream of immigration, both of laborers and settlers, into such of the tea districts as require it.

The proposal was received enthusiastically and Ukers tells us that seventy members were enrolled within a fortnight. Sir Douglas Forsyth became chairman – a post which seems to have corresponded to that of president today – while his vice-chairman was General Hopkinson, a former Commissioner of Assam. Perhaps more important than these appointments was the fact that the Association secured as its secretary one Ernest Tye, who was to hold that post until 1906. It is indeed interesting to note that during the eighty-one years from the formation of the Association to 1960, the post of secretary has only been held by as few as five incumbents. Except for a short break when an acting secretary carried on, W.H.Pease and G.H.Mardon held the office between them for forty-four years and there is no doubt that this continuity provided by able secretaries has had much to do with the soundness of the organization.

THE INDIAN TEA ASSOCIATION

In the eighties of the last century shortage of labour was the planter's bugbear and it led inevitably to enticement, more often described as 'pimping', and to the offer of excessive bonuses for the renewal of agreements. In 1876 an attempt was made in Calcutta to form an association for the regulation of these matters, but it failed to secure adequate support. In the closing years of the decade some attempts were made by planters in certain districts to combine for this purpose, but it was not until 1881 that the economic difficulties of the industry compelled proprietors to revert to the proposal of 1876.

In 1881 A.Wilson of Jardine Skinner & Company, and D.Cruickshank of Begg, Dunlop & Company, took the lead in initiating discussions on the subject of the formation of an Indian Tea Association in Calcutta. Memoranda were circulated and favourable responses having been received, a meeting of those interested was held in Calcutta on 18 May 1881 with A.B.Inglis of Begg, Dunlop & Company, in the chair. Inglis stated that there were at least two associations of planters in existence, one in Tezpur and the other in Dibrugarh, while elsewhere understandings existed between managements of adjoining gardens not to interfere with each other's coolies. The purpose of the new Associa-

tion would, however, be wider than this. The formation of the Indian Tea Districts Association in London in 1879 had made it also more necessary that there should be a corresponding body in India. Inglis went on to say that:

> The want of united action amongst tea proprietors has been a great drawback hitherto, and if this were remedied, the representations of such a body regarding any grievance affecting the Tea interests, would have far more weight with Government . . . There were many other matters of common interest to be dealt with. Amongst others might be named – following up the work of the Tea Syndicate in endeavouring to extend the sale of Indian tea in India itself – dealing with blight and other diseases affecting the tea plant; improvement of communications with the Tea District; questions affecting the tenure of land; inland emigration etc.

The Association was formally constituted in this meeting and a provisional committee was appointed to draw up a scheme for its working and also to frame rules regulating the re-engagement of time-expired coolies. At the meeting on 1 June 1881 the rules were adopted, and a general committee of nine firms were elected. The representatives nominated by those firms are worthy of record as the members of the first committee of a great Association:

A. W. Wilson	nominated by Messrs Jardine, Skinner & Company
J. H. Edwards	Gillanders, Arbuthnot & Company
R. Williamson	Finley Muir & Company
D. F. Mackenzie	Macneill & Company
R. B. Magor	Williamson, Magor & Company
A. Simson	Schoene, Kilburn & Company
D. Cruickshank	Begg, Dunlop & Company
Lesslie Worke	Octavius Steel & Company
P. Playfair	Shaw, Finlayson & Company

The Bonus Rules, the need for which had led to the inauguration of the Association, were formally adopted on 22 June 1881.

For the first few months the work of the Indian Tea Association was done by D. Cruickshank as honorary secretary, but it soon became necessary to appoint a European assistant, and a little later one G. M. Barton became secretary to the Association. At the annual meeting on 22 February 1882 an annual subscription of one anna per acre was fixed. Membership grew rapidly and by June 1882 covered the following acreage in the various districts.

Cachar	37,643
Sylhet	14,201
Durrung	7,977

Kamrup	1,655
Lakhimpur	16,292
Nowgong	5,601
Sibsagar	27,066
Chota Nagpur	214
Hazaribagh	519
Terai	631
Darjeeling	947
Chittagong	2,806
	115,552 acres

Darjeeling was not concerned with the particular labour problems which led to the formation of the Association, but by 1884 it had been realized that the functions of the Association were to be very comprehensive and in that year a considerable number of Darjeeling and Terai gardens joined the Association. Tea in the Dooars was still in its infancy, but one Dooars garden joined the Association in 1884, and by 31 August 1888 Dooars membership covered 13,012 acres. Membership continued to grow and in 1885 it was possible to reduce the subscription to half an anna per acre – though it had to be raised again to one anna in the following year.

In 1885 an important change in the headquarters organization of the Indian Tea Association took place. It was agreed that the Indian Tea Association and some other associations should be administered in connexion with the Bengal Chamber of Commerce, under the general supervision of the Secretary of that Chamber. Barton, who had been secretary of the Indian Tea Association for some years, was taken on the Chamber staff, and in return for the modest contribution of Rs 400 a month towards the expenses of the chamber, the industry derived the benefit of the wider experience of collective British business. In the twentieth century the question as to the desirability or otherwise of establishing a separate secretariat for the Indian Tea Association has often been considered, but the conclusion has always been that the existing arrangement must be continued. The Bengal Chamber of Commerce is a remarkable organization, characterized by wisdom and efficiency, and the tea industry in North-east India has undoubtedly been stronger for its connexion with that body.

DISTRICT ORGANIZATION AND RELATIONS WITH CALCUTTA

The rules of the Association provided that the Association might be represented in the tea districts 'by existing local Associations working in conformity with the Association's rules and by District Committees appointed for the purpose of carrying out the objects of the Association'. Only superintendents and managers in the respective districts were to be

eligible to serve on district committees, and in the election of those committees the number of votes to which each superintendent or manager was to be entitled would be based on the area of tea cultivation under his charge. On 29 December 1881 a circular was sent to a leading planter in each of the tea districts of Assam asking him to call a meeting for the election of a district committee, or – if a local association having the same object in view already existed – to send a copy of its rules and a list of members to the Indian Tea Association, Calcutta. This was to be done without delay so that the Bonus Rules might come into force on 28 February 1882.

District committees were soon established and by 1884 they covered the entire province. Assam Valley planters, however, soon began to desire greater independence, and on 29 October 1889 a meeting of representatives of all tea districts in the Assam Valley was held for the purpose of forming a local tea association to work in unison with the Calcutta Association. The Calcutta Committee were not very enthusiastic over this proposal and would evidently have preferred to continue working through the Association's own district committee, but eventually it was agreed that the new association should be formed as a branch of the Indian Tea Association. It would have its own chairman and a part-time secretary, towards whose salary the Indian Tea Association would contribute Rs 150 per month in return for an enhanced subscription from Assam Valley members. J.H.H.Rolfe was the first secretary.

A little later the planters of South Sylhet also decided to form themselves into the South Sylhet Branch of the Indian Tea Association, their primary object being to strengthen their legal position for the purpose of recovering fines imposed on members who broke the labour rules. The Association's legal advisers expressed doubt as to whether the South Sylhet Branch would be able to achieve this object, but, under the chairmanship of W.Marillier of the Lungla Tea Company, the South Sylhet planters said bluntly that if the Indian Tea Association did not agree to the formation of a South Sylhet Branch, the South Sylhet planters would have an association of their own. The Calcutta Association considered that the attempt to enforce fines by legal means might well lead to disruption and asked the South Sylhet planters to reconsider the matter. This led to the complaint, familiar in modern times, that planters' views did not receive adequate attention in Calcutta. Eventually the South Sylhet Branch was formed. The exact date of its formal inauguration does not appear, but its rules were published in the Report of the Indian Tea Association for the year ending 28 February 1891. Unfortunately, dissension soon sprang up and in 1893 the withdrawal of the Lungla Tea Company from the branch left it without a secretary and all the papers were sent to Calcutta. A branch had also

been formed in the Balisera Valley, but nobody could be persuaded to take on the duties of secretary. In 1897, however, the South Sylhet Branch was revived and in due course the organization began to play an active part in tea affairs throughout the Sylhet District.

In Cachar even greater difficulties were experienced. Some important Cachar planters would apparently not co-operate either with their own local committee or with the Indian Tea Association. In 1889 the chairman of the Indian Tea Association was so disturbed at this attitude that he held up Ceylon as an example of harmonious co-operation and warned his colleagues that Ceylon would prove a far stronger rival than even China had been. Matters soon took a turn for the better and by about 1893 the Cachar organization seems to have become more effective.

Darjeeling planters proved even less amenable to organization than those of Cachar and Sylhet. In 1886 complaints that the proprietors of some Darjeeling gardens had increased the wages of their coolies seemed to require examination by a local committee, but, unfortunately, no Darjeeling District Committee had been formed and even a particular request by the Indian Tea Association to the agents of all Darjeeling gardens to form such a committee produced no result. Then, and throughout the seventy years which have since passed, Darjeeling planters were essentially individualistic and would not be dragooned. Calcutta went more than half-way to meet the planters of Darjeeling by recognizing that the particular interests of Darjeeling, the Dooars, and the Terai were not adequately represented on the Calcutta Indian Tea Association Committee. In 1892 a Darjeeling-Dooars Sub-Committee of the Indian Tea Association was, therefore, formed with beneficial results, but Darjeeling still remained without proper organization and it was not till a little later that the Darjeeling Planters Association came into being.

In 1886, lack of uniformity in the remuneration of labour in the Dooars seemed to require consideration, but no local committee existed and a circular from the Indian Tea Association to the Calcutta agents of all Dooars gardens produced 'a want of unity on the subject of joining'. Nevertheless a Dooars Planters Association was evidently established before 1889, for in that year it made emphatic complaints about the working of the North Bengal State Railway. At the meeting of the Dooars Planters Association in 1964 the chairman referred to it as the eighty-fifth meeting. If his statement was correct, general meetings must have been held more frequently than once a year, for the Dooars Association does not appear to have existed in 1879.

At the annual meeting in February 1894, the chairman of the Indian Tea Association felt able to report optimistically on the growth of unity in the industry. In doing so he was no doubt influenced by the fact that the Assam Branch, equipped with a paid secretary, was a very live body,

and that planters associations in some of the other districts were now beginning to overcome their teething troubles.

In 1900 the Indian Tea Association made yet another attempt to secure closer contact with affairs in the tea districts. A sub-committee of the general committee was formed to deal with matters affecting Cachar and Sylhet – the counterpart of the Dooars and Darjeeling Sub-Committee. One of its first tasks was to improve the organization in Sylhet and Cachar. The committee's attempts were successful and in June 1901 the Surma Valley Branch, consisting of four district committees in Sylhet and five in Cachar was constituted. For the first year work was carried on by an honorary secretary and no subscription was levied, but the branch soon became active and a paid secretary was found to be necessary. In 1902 a local subscription was therefore introduced at the rate of half an anna per acre for the members of the Indian Tea Association and one anna for others. Subscriptions were not quite expected to cover expenses and the parent Association undertook to provide the balance. Members of the districts committees were in the first place nominated by the Calcutta agents, and when in 1902 local elections by planters were suggested the branch was opposed to the change. At this time certain difficulties arose with regard to the administration of justice in Cachar and a suggestion was made that a planters' defence association should be formed. This soon resolved itself into a proposal for the engagement of a European barrister as branch secretary, but the proposal did not materialize as no such person was willing to accept the post on a salary of Rs 200 a month, which was all that the branch association was able to offer. The branch was in fact very adequately run by a secretary who was formerly a planter.

In 1908, Irwin, the then president of the Darjeeling Planters Association, suggested the affiliation of that association to the Indian Tea Association. If this proposal had gone through in the form in which it was first put up, the Darjeeling Planters Association would in fact have become a branch of the Indian Tea Association. The proposal was not finally implemented in that form, but in 1910 the Darjeeling Planters Association affiliated itself to the Indian Tea Association and undertook that before making representations to the Government on any important question affecting the interest of the industry, the Darjeeling Planters Association would communicate with the Indian Tea Association and 'endeavour to attain co-operation as far as possible'. The Calcutta chairman continued to make great efforts to establish a closer connexion between Calcutta and the branches and this led to the growth from 1909 of a practice whereby the chairman of the Indian Tea Association attended the annual meetings of the Assam Branch and the Surma Valley Branch of the Indian Tea Association. This practice was extended in due course to the other district associations and though it throws a

heavy burden on the Calcutta chairman, there is no doubt that it is of great value.

Relations between a headquarters organization such as the Indian Tea Association and up-country branches are always a delicate matter. There is an inevitable tendency for the planter to think that the agency house man knows nothing about tea and for the Calcutta agent to regard the man on the spot as parochial. In 1913 there seems to have been a good deal of friction between Calcutta and the Assam Valley Branch and a note of asperity crept into the correspondence between them. The chairman of the Indian Tea Association referred frankly to this situation in his speech at the annual meeting in 1914. He pointed out that whereas correspondence generally led to friction, joint meetings invariably resulted in unanimity. He therefore suggested that such meetings should be held more frequently, particularly as communications between Calcutta and Assam had so greatly improved. It so happened that in 1913, the Chief Commissioner of Assam had called a conference in Shillong of representatives of the Indian Tea Association and the Assam and Surma Valley branches, and had expressed the view that if the conference could be made an annual event, it would have great value. This proposal seemed to meet the need to which the chairman had referred in his speech, but like so many resolutions as to the desirability of periodical meetings even when there are no specific points to be settled, it did not work with the desired regularity.

In 1914 the Calcutta Committee suggested a somewhat closer integration of the branch and local associations with the Indian Tea Association on the basis of the inclusion of representatives from the tea districts in the general committee of the Indian Tea Association and the centralization of financial arrangements. The Calcutta Committee were at pains to explain that in this proposal they were not animated by any desire to deprive the districts of power, but the branches were suspicious and the proposal came to nothing.

The next few years were a period of consolidation and increasing activity rather than radical change in organization. In 1915 an attempt was indeed made by the committee of the Indian Tea Association to convert the district associations of Darjeeling and the Dooars into branches of the Indian Tea Association and to introduce uniform constitutions for all branches and associations, but the planters were again suspicious and the proposal was dropped.

CALCUTTA AND LONDON

In the last decade of the century the Indian Tea Districts Association in London began to feel the need of increased funds and in 1891 it was suggested that a subscription of so much per acre under tea should be levied in India for the benefit of the London Association. The majority

view in Calcutta was against this proposal, but in February 1894 the Indian Tea Association agreed to grant an annual subvention of £200 to the London organization. The Calcutta Committee observed, however, that the London arrangements for keeping the two committees in touch were not altogether satisfactory and they were glad to learn that in view of the subvention now proposed, London would employ a secretary who would be able to devote to the Association's work more time than the previous secretary had been able to do. It will be noted that neither then nor later was there any organic connexion between the London and Calcutta Associations. They were independent bodies, though with many common interests and being composed of sensible men, they have always worked together with no more friction than is a healthy sign of vitality.

In May 1894 the committee of the Indian Tea Districts Association, London, proposed that the Calcutta and London Associations be formed into one Indian Tea Association having its branches in Calcutta and London, and with a common fund. Spheres of activity were to be demarcated as follows:

> The London Branch shall deal with questions arising in England having specially under its control, measures for promoting the interest of Indian Tea in the public press and in Parliament and with the Home Authorities, and for pushing and increasing sales in the Continental and American Markets.
>
> The Calcutta Branch of the Association shall deal with questions arising in India and shall have under its control matters which have heretofore been conducted by the Indian Tea Association of Calcutta.
>
> Even in matters within its special province each Branch shall work in close association with the other Branch.

The Calcutta Committee found it a little difficult to comment on this proposal in the absence of any information as to the probable future expenditure of the London office, and they requested S. E. J. Clarke, secretary of the Bengal Chamber of Commerce and of the Indian Tea Association, to discuss the matter with the London Committee during his leave. Clarke seems to have convinced that committee that the London Association required reorganization 'with the view to keeping members more fully informed of the proceedings of meetings and of the work done by the several Committees, and of maintaining closer touch with the Calcutta Committee'. There is no further reference in the reports of the Indian Tea Association, Calcutta, to the proposal for amalgamation and it was presumably dropped, but the designation of the London Association was changed to the Indian Tea Association, London, and a convention was established that the words Indian Tea Association by themselves would be understood to refer to the Calcutta and not the London Association.

THE CALCUTTA ASSOCIATION

The Calcutta Indian Tea Association at this time was a very live body and its membership grew rapidly. By 1900 it covered an area of over 330,000 acres. It took a broad view of its functions and played an important part in the Indian Tea Market Expansion Commission which came into being in 1901 as a voluntary organization to promote the consumption of tea in India. Andrew Yule and Company undertook to organize and work the agency for three years under an arrangement by which they would become the owners of the business at the end of that time. A grant was received from the American Foreign Market Fund, which had been raised by tea companies in London, and contributions in the form of tea were also made to the Commission by many tea companies in India. The new body got to work vigorously, but the results were not considered satisfactory and at the end of three years it was allowed to lapse. The next propaganda organization set up was known as the Tea Cess Committee which was financed by a statutory cess, levied at the request of the industry for the expansion of the tea market at home and abroad. These two organizations will be discussed in detail in the appropriate chapter. Here we need only note that, at the beginning of the twentieth century, in deliberately asking to be mulcted of a cess for its own long-term benefit the industry showed its progressive character, and the credit for taking the initiative in this matter must go entirely to the committees of the Indian Tea Association in Calcutta and London. Those committees might have been less enthusiastic if they had known that, nearly half a century later the administration of the cess would be taken out of their hands by the Government of India.

Inevitably the Association's expenditure mounted and at the annual meeting of the Indian Tea Association in February 1911, a somewhat apologetic chairman secured agreement to the raising of the subscription to 1½ annas per acre. The present members of the Association, paying 1·38 *naya paisa** per lb of tea – perhaps equivalent on an average to Rs 13/8 per acre – can hardly be expected to feel very sympathetic towards those who had their subscriptions increased in 1911, but at that time the chairman thought it necessary to comfort members by telling them that they could, if they so wished, reduce it in the following year. No such reduction was in fact made and indeed in 1913 the subscription was raised to 2 annas per acre.

Early in the First World War the subscription to the Indian Tea Association was found to be inadequate and the mounting expenditure of the scientific department necessitated its increase to 4 annas per acre in 1915, 5 annas in 1918, 6 annas in 1919, 8 annas in 1921, 9 annas in 1927, and 10 annas in 1928. When the chairman proposed the increase

* *Naya paisa*=one-hundredth of a rupee.

to 10 annas in 1928, he expressed the pious hope that it would be reduced in the following year. In reality, Tocklai expenditure continued to grow, and so far from reducing the subscription, the Association had to increase it to 12 annas in 1930, though it came down again to 9 annas in 1931 as a result of retrenchment at Tocklai.

POLITICAL ORGANIZATION OF THE INDIAN TEA ASSOCIATION

Very little change took place in the general organization of the parent Association or the branches and affiliated organizations in the next few years and it will be convenient therefore, to pause here and consider the development of the political side of the Association's work.

By the Indian Councils Act 1892 the number of non-official members of the Viceroy's Legislative Council was increased and the claims of industry and agriculture to representation were recognized. In 1892 J. Buckingham, CIE, of Amgoorie was appointed to represent planting interests in the Council. The Indian Tea Association attached great importance to this appointment and the chairman stated that the Government had at last recognized that the tea-planting community formed one of the most important factors in the Empire. Buckingham held this seat until 1894 but on his resignation planting interests ceased to be represented in the Council.

In 1905 the Curzon partition of Bengal was effected and the tea districts of the Assam and Surma Valley, as well as of the Dooars and Chittagong were included in East Bengal and Assam, while Darjeeling was assigned to West Bengal. In the Provincial Legislative Council of the new province of East Bengal and Assam, of the six non-officials nominated by the Lieutenant-Governor one was to be so appointed on the recommendation of Associations of merchants, manufacturers, and tradesmen. It was laid down in the regulations that the right to recommend a representative should be shared between the tea industry, acting through branches and district associations, and the jute industry acting through the Narayanganj Chamber of Commerce. For the first vacancy a tea representative would be nominated, while on the next occasion the representation would be made by the Narayanganj Chamber of Commerce. Joint representation with the jute industry was not considered adequate, but a permanent representation was not granted until 1909, when under the Morley-Minto Reforms, the industry was given two representatives in the new council. The Indian Tea Association claimed that one of these representatives should be nominated by the Indian Tea Association as representing proprietors and agency houses, leaving the other representative to be elected by planters. This suggestion could scarcely have been accepted, since the headquarters of the Indian Tea Association lay outside the province of East Bengal and Assam, and it was laid down that both representatives must be resident in the new

province – that is to say, they must be planters. W. T. Cathcart was the first planters' representative and was joined in 1909 by W. Skinner.

Although the expansion of the representation of the industry was a source of satisfaction, the electoral arrangements were such that it was not easy for a Dooars representative to secure election in competition with Assam. The Dooars Planters Association accordingly demanded separate representation, but in 1911, while this was still under discussion, the partition of Bengal was annulled. Under the new arrangement the Assam and Surma valleys were included in the Chief Commissionership of Assam, while Darjeeling and the Dooars were included in Bengal. Of the eleven elected members in the new Legislative Council of Assam, three were allotted to the tea industry and it was provided that one of these should be elected by the Assam Branch of the Indian Tea Association, one by the Surma Valley Branch, while the third member was to be elected by those branches alternatively. The first three members elected were C. T. Forbes, C. L. Pringle, and W. T. Cathcart.

In West Bengal, the tea planters in Darjeeling had had the right to recommend one member of the Provincial Legislative Council. By the time of the annulment of partition the advantages of representation had come to be keenly appreciated and the Indian Tea Association therefore represented to the Government the desirability of allotting one seat in the Bengal Legislative Assembly to the Darjeeling and another to the Dooars planters, and they claimed that the Indian Tea Association itself should also be directly represented. On both points the Association was unsuccessful. It was decided that one member should be elected by the planters of Darjeeling, the Dooars, the Terai, and the Chittagong districts acting as a single constituency. A. W. C. Chaplin was the first member to be so elected.

When the Montagu Chelmsford Reforms came into operation under the Government of India Act 1919, the Association made strong but unsuccessful representations to the Franchise Committee for increased representation in the provincial legislatures. Representation in the Indian Legislative Assembly was, however, granted to Assam Europeans.

The work of the industry's representative in the legislatures continued to grow in volume and importance and at the annual meeting of the Indian Tea Association in 1924. E. W. Hodson, chairman of the Surma Valley Branch, pleaded for financial support to those representatives.

> While on this subject there is another matter, and that is with regard to the representation of the industry on the Council. As you are aware, there are two representatives from the Surma Valley on the Council, and it was with difficulty that we found men to represent us. But they are considerably out of pocket by doing what they can for the tea industry in Assam, and there is rapidly coming a time, gentlemen, when these two representatives will not be

forthcoming as far as I can see. I do not think that anybody has thought of this or taken the slightest interest in it. That is the political situation as I see it at the present time in Assam. The Surma Valley Branch have no money; they have only Rs 10,000 to pay their Secretary and staff, travelling allowances and other expenses. I think in the near future it is up to the Tea Association in Calcutta to take very active steps before the next elections take place.

Hodson made another suggestion which might be considered of doubtful soundness.

With the amount of British money sunk in the tea industry in Assam I cannot understand the attitude of the Indian Tea Association in allowing the Council elections to go by recently without taking the slightest notice or assisting in any way to get the best class of Indians elected. As you are fully aware, these Indian gentlemen are going to form the laws for Assam, and it was up to us as members of this Association to have thrown our weight with the planter and our organisation on to the side of the best men. What did you do, gentlemen? Nothing, whatever. You never raised a finger. I cast no aspersions against the men elected but whether they suited you or not you do not know. You took no interest of any kind in the matter.

It is perhaps fortunate that Hodson's second suggestion was not adopted and that the Indian Tea Association did not attempt to interfere in the election of Indians.

By 1929 the work of the industry's representatives in the Assam Legislature had attained such a volume that the provision of adequate secretariat services became essential. E. S. Roffey, who had for some time been secretary to the Assam Branch, Indian Tea Association, was accordingly appointed political secretary of the European group in the Assam Legislature, which post he combined with the secretaryship of the Assam Branch.

The responsibility for filling the Assam European seat in the Indian Legislative Assembly naturally fell on the Indian Tea Association and it proved difficult to find a suitable candidate whose services could be spared for lengthy sessions in Delhi and Simla. Five or six individuals held that seat in a few years. T. A. Chalmers then stepped into the breach and represented Assam Europeans for several years, but in 1931 it was considered essential to make a more permanent arrangement. In that year, H. B. Fox, a retired planter, was engaged by the Indian Tea Association for this purpose and the Assam Oil Company and other British industries in Assam agreed to contribute towards his salary.

In 1932 an important development took place, J. A. Milligan, ICS (Retd), who had for some time been Superintendent of the Tea Districts Labour Association, was engaged with effect from 1 April 1933 as Adviser to the Indian Tea Association, it being understood that his services would also be available to the Tea Cess Committee and the Tea District Labour Association and that he would from time to time, as

convenient, represent the industry in one or other of the legislatures. In a sense this appointment involved little change, since even during his time with the Tea Districts Labour Association he had in fact been a kind of unofficial adviser to the Indian Tea Association on many matters. The new arrangement was, however, a definite recognition of the fact that government impinged on the industry in so many ways that there was need for advice from an individual familiar with the working of the government machine.

Milligan was a remarkable man and his appointment more than justified itself by results. His performances in the Central Legislature, when tea matters were under consideration, were impressive, as also was his ability to persuade planters that the course of action proposed by the Indian Tea Association was wise. The calls on Milligan's time were numerous and it was soon found necessary to appoint another stipendiary who could sit in the Central Legislative Assembly. F. W. Hockenhull, the proprietor of an Assam Tea estate, was appointed to that post with effect from 1 January 1934. In November 1935 Hockenhull became secretary and political adviser to the Assam Branch of the Indian Tea Association and was succeeded in the Central Assembly by C. H. Witherington.

In 1935 Milligan became the Technical Member for India of the International Tea Market Expansion Board which had just been formed, but he continued to spend part of the year in India and to sit when required in the Indian Legislative Assembly.

The industry was rapidly becoming politically minded and the chairman of the Indian Tea Association thus expressed the new mood in his speech at the annual meeting in March 1936:

> This need for a more intimate concern with politics is not made necessary solely because of the particular legislation which has more recently been enacted, and which we have now got to understand, so that we can apply it, but for years past we, in common with very nearly any other industry, have relied upon that splendid body of Civil Servants, to mother and father our political interests. If, under the Reformed Constitution, we have all individually to take our due share of political responsibility, for one thing because those Civilians will have neither the time nor the opportunity to do it for us, then it is surely for us, in all matters, including finance and the release of personnel, to bear our share of that responsibility.

It was in this spirit that the Association pressed strongly for adequate representation in the new legislatures to be established under the Government of India Act 1935. The Association's efforts were successful and in the Assam Legislative Assembly, seven seats were reserved for representation of European* planting interests, one for European

* Under the Government of India Act, European meant British.

commerce and industry, and one for Europeans in Assam generally. In the Upper House of the Assam Legislature, two seats were reserved for Europeans. The eleven Europeans in the Legislature were provided with a permanent secretariat located in Shillong and were collectively known as the European group. The expenses of the group were met from the Assam Political Representation Fund, financed mainly by the Indian Tea Association, with contributions from the oil companies and other British controlled interests in Assam. F. W. Hockenhull became leader and political secretary of the group, his place as secretary of the Assam Branch of the Indian Tea Association being taken in December 1943 by C. Henniker Heaton.

In Bengal under the 1935 Act two seats in the Legislative Assembly were allotted to the Indian Tea Association while the Darjeeling District and the rest of the Rajshahi Division – from each of which area a European representative was elected – were virtually tea constituencies. In the Upper House there was one all-Bengal European constituency and no separate representation of tea interests was provided. Tea did not play as large a part in the general commercial life of Bengal as of Assam and the organization of the European group in the Bengal Legislature is therefore not relevant to our purpose.

In the Central Legislature, under the Government of India Act, 1935, Assam Europeans had one representative and it was the good fortune of the writer, who became adviser to the Indian Tea Association in April 1937, to hold that seat until European representation in the legislatures came to an end at the time of the Transfer of Power in 1947. South Indian planting interests were represented in the Central Legislative Assembly by F. E. (later Sir Frederick) James, some of whose speeches in that body will long be remembered for their brilliance and for the breadth of knowledge they revealed.

Up to this time, the representatives of the tea industry in the legislatures had confined themselves mainly to problems directly affecting planting interests. Now, however, the tempo of events became faster and in the last phase before self-government, the wider twentieth-century concept of the functions of government began to make its appearance in India. The European groups in the legislatures began to play an important part in the discussion of all legislative measures and indeed they were soon recognized as the best organized and informed parties in the various assemblies. In the Central Assembly, the European group was involved in debates on all aspects of legislation, and it speaks volumes for the enlightenment of the committee of the Indian Tea Association that the writer was able, with their approval, to devote a great deal of time to matters not directly concerned with the tea industry. In Shillong, too, the European group counted for a great deal and, indeed, found itself called on to play an embarrassingly prominent

part in the making and unmaking of provincial governments. Planters who might have been expected to be out of their depth in political matters outshone many of the Indian members in knowledge and understanding of the problems of administration and governmental finance and made a solid contribution during this period to the progress of India.

THE EXPANSION OF THE ORGANIZATION

We can now return to the more general aspects of the Association's work. Although the fourth decade of the century was a period of intense activity, no major changes in organization were found necessary, except those connected with the war effort of the tea industry which will be described in a later chapter. After the entry of Japan into the war, the work of the Shillong office increased by leaps and bounds, but Arnold Whittaker, CIE,* who had retired from the Indian Civil Service to succeed Hockenhull as political secretary in 1939 was able to cope with it, and it was not until 1944 that he was given help. H.F. Clark, a well-known and respected planter who had been part-time secretary of the Surma Valley Branch of the Indian Tea Association since 1938, was then appointed additional political secretary in Shillong. Extra work was thrown on the Calcutta Chairman and Committee by reason of the absence of the writer, whose services had been lent to the Government of India as publicity adviser, but no additional appointment was made to meet this difficulty. When the war came to an end and the Association's various officers became fully available for their normal duties, it was thought that the work of the Shillong office would still be too heavy for the political secretary to manage without aid. The secretaryship of the Surma Valley Indian Tea Association was therefore made into a full-time post and it was arranged that the individual holding it would also be additional political secretary in Assam and would spend some part of every year in Shillong. In practice this periodical departure to Shillong was not found necessary and, moreover, the work of the Surma Valley Branch had grown sufficiently to demand the whole time attention of the secretary.

An important development was now at hand. Towards the end of the war, the first stirrings of a new consciousness were manifest amongst tea-garden labour and it was obvious that they would be quickened when India attained independence. A self-governing India would be sensitive to world labour movements and would be more ready to regulate all aspects of relations between employers and labour than had been customary during British rule. The old *ma-bap* relationship would be replaced, for good or for ill, by governmental controls, involving a con-

* Later created CSI.

siderable volume of labour legislation. Tea-garden managers could not be expected to be at home in this new field – and perhaps the best managers, who cared most for their labour, would most resent the inevitable changes. They would need specialist advice and in 1945, in one of a series of post-war planning notes, the writer put forward proposals for the establishment by the Indian Tea Association of a labour organization. This idea was readily accepted by the Indian Tea Association both in Calcutta and London, but many planters were initially averse to it. It seemed absurd to suggest that an outsider could assist them in dealing with labour forces which they knew so intimately. Gradually it was realized that the functions of labour officers would in no way encroach on those of managers and in the second half of 1946 the proposal was generally accepted in principle. In October 1946 a labour department of the Indian Tea Association was accordingly established in Shillong under the charge of Clark who had long been specially interested in labour problems, and who was now designated labour adviser. At about the same time, H. J. Walsh was appointed as labour officer to the Assam Valley and a little later S. B. Datta was appointed to a similar post in the Surma Valley. The primary responsibility of the labour officers was to the Branch Associations, though naturally they looked to the labour adviser for technical guidance. The functions of a labour officer were defined as follows:

(a) to make himself acquainted with all aspects of labour conditions on tea estates and to obtain a sound general knowledge of the economic conditions of tea garden labour in his jurisdiction. In particular, he will familiarise himself with the variation from Circle to Circle or from one area to another within Circles and as far as is possible, from garden to garden.

(b) to advise Managers on all labour matters on which his advice may be requested. This advice will be of particular importance in connection with

(1) the formation and recognition of Trade Unions,
(2) the conduct of discussions and negotiations with such unions,
(3) examination of matters likely to lead to disputes,
(4) any contemplated alterations in rates or methods of payment,
(5) matters affecting the welfare of the labour.

His advice will often take the form of telling one Manager what has been done or experienced in another garden or Circle and indeed the dissemination of information about labour matters will be one of his principal functions.

(c) To advise Branches and Circle Committees on all labour matters which come up for consideration and to take the initiative in bringing labour matters to their attention whenever necessary. In particular, potential causes of trouble should be brought to the notice of these Committees and indeed one test of a good Labour Officer will be his ability to call attention to such matters before they become critical.

(d) To maintain close contact with all local Government officials primarily

concerned with labour matters, as well as with Deputy Commissioners and other officers subordinate to them.

The Dooars had always been regarded by educated Indians as an unhealthy and unpleasant area, fit only for planters and tigers, and it had therefore been relatively free from political interference. Perhaps for this reason Dooars planters did not feel the need for labour organization quite as soon as their colleagues on the South Bank and in the Surma Valley, and it was not until early in 1947 that J. L. Jenkins, CIE, who had just retired from the post of Deputy Inspector-General of Police, Bengal, was appointed as labour officer for the Dooars, while Lieutenant-Colonel E. S. E. Rerrie, an Indian Army Officer who had served as a Military Intelligence Officer in Bengal during the terrorist days, was appointed to the corresponding post for Darjeeling. Rerrie combined the post of labour officer with that of secretary to the Darjeeling Planters Association.

The labour adviser's jurisdiction was extended to cover Bengal as well as Assam, and the outline of the labour organization was now complete, except that planters on the North Bank still considered that they did not need a labour adviser as they had not so far experienced labour troubles.

The Transfer of Power brought relief to the tea industry in one respect. Representation in the Indian Legislative Assembly came to an end, and J. L. Llewellyn, OBE,* who had retired from the Indian Civil Service to succeed the writer as Adviser to the Indian Tea Association, Calcutta, in 1947, was able to devote the whole of his time to the affairs of the tea industry. In the provinces, although European representation in the Legislature was considerably reduced after the transfer of power, it did not completely disappear until the inauguration of the new Constitution in January 1950, and until that date James Hardman, OBE, who had also retired from the Indian Civil Service in 1947 and had succeeded Whittaker in Shillong, played an active part in Assam legislative affairs. From 1950 onwards the industry was finally relieved from the duty of providing representatives in the legislatures and it is indeed difficult to see how the branches could have coped with this burden in view of the growing complexity of the problems of the industry in the first decade after Independence.

The work of the Association continued to increase rapidly and in 1949 it was found necessary to create the post of additional adviser to the Indian Tea Association in Calcutta. P. H. Crombie, OBE, retired from the Indian Civil Service and was appointed to that post, while at the same time the Association recognized the value of Llewellyn's advice and work by making him deputy chairman of the Calcutta Committee.

* Since created CBE.

In the branches and affiliated Associations, the need for additional help was also felt and in 1948 it was decided to appoint a paid whole-time secretary to the Dooars Planters Association. The first incumbent held the post for two years and was then succeeded by Brigadier F.H. Stevens, who was the focal point of Dooars Planters Association activities during the next decade and indeed longer. In 1948 the Dooars Planters Association was formally dissolved and reconstituted as the Dooars Branch of the Indian Tea Association. The change did not perhaps amount to much, but it was valuable as a recognition of the great need for co-operation between Calcutta and the Districts – and in 1951 the Darjeeling Planters Association followed suit and became a branch of the Indian Tea Association.

In Assam, too, changes were felt to be necessary. The resignation of Henniker Heaton from the post of secretary of the Assam Branch in 1946 left a temporary weakness in this important organization. W. Warren, already a well-known figure in tea circles, acted as secretary until the newly appointed secretary, J.R. Wilson, could join and then held the post of deputy chairman for two years while Wilson was finding his feet.

Towards the end of 1950 the writer was invited by the Indian Tea Association and the Assam Branch jointly to examine the branch organization. He reported, first, that an unreasonable burden was being placed on honorary officials, and, secondly, that in spite of these gentlemen's best efforts, there was a serious lack of contact between planters and branch headquarters. He recommended the establishment of three zones, each of which would have an honorary chairman and a stipendiary secretary who could also act as zone labour officer. The areas covered by these zones would roughly correspond with Upper Assam, the South Bank, and the North Bank respectively. These recommendations were accepted, with the modification that the Nowgong Circle was included with the North Bank in Zone III. The necessary personnel were recruited in 1951.

The partition of India had removed the Sylhet circles from the membership of the Surma Valley Branch of the Indian Tea Association. The residue in Cachar was neither large enough to require nor rich enough to afford an organization on the scale of that of the Assam Branch of the Indian Tea Association. To Donald Moore, the branch secretary at the time of Partition, fell the task of consolidating what remained of the Branch and when he was joined by S.B. Datta, who became labour officer, the organization took on its permanent state. In Darjeeling, too, the pattern fixed when Rerrie was appointed as secretary and labour officer, was to endure.

In 1952 Clark, whose health had for some time been poor, retired after a notable five years of service as labour adviser. When the

labour department was first established few people understood its functions, and perhaps the hardest part of Clark's task was to win the sympathy of the planter. He did this so successfully that before his retirement the stage had been reached where local associations complained bitterly if for any reason they were left temporarily without a labour officer. At the time of Clark's death in 1957, it was universally recognized that his influence had been one of the most progressive forces in the industry.

Clark was not replaced on his retirement and the direction of the labour department was undertaken by the Association's advisory staff, which was strengthened in 1953 by the creation of the post of another additional adviser. Walsh was transferred from Dibrugarh to fill that post and held it until his retirement in April 1957. He was in due course succeeded by J.E.Atkins, formerly of the Tea Districts Labour Association.

No further major modification in the structure of the Association's advisory and labour services has been found necessary, though additional officers have been appointed in the zones.

In filling these posts, the Association has drawn heavily on the Civil and Military Services in India.

Although the convention followed in this book prohibits comment on individuals still connected with the industry, it can safely be said that the advisory and labour organization has served the Association well in a difficult period.

THE LONDON ORGANIZATION

The Indian Tea Association (London), the South Indian Association in London and the Pakistan Tea Association (London) share the same office and secretariat in London. For many years the office was located first in 21 Mincing Lane and then in 29 Mincing Lane, but after its premises had been destroyed by enemy action in 1941, the Associations moved their headquarters to 39 Lombard Street – an address which has now become indissolubly associated in the mind of planters and agency house men with their industry.

The Indian Tea Association (London) is concerned only with policy and not with its execution and does not normally hold discussions with Ministers or officials in India. It has not, therefore, been compelled to expand its organization greatly by reason of increased activity in India. It differs from the Calcutta organization in two respects. In the first place whereas the secretariat of the Calcutta Association is part of the Bengal Chamber of Commerce, the Indian Tea Association (London) has its own secretariat and as has been mentioned earlier it has been fortunate in the long tenures of office of its secretaries.

Secondly, whereas a Calcutta chairman does not normally hold office

for more than one year, London chairmen are often re-elected and indeed a convention has grown up that the deputy chairman should as a rule serve two years in that capacity and then occupy the chair for two years – a convention which, because of the very heavy pressure of work together with the complications of leave requirements, would be almost impossible to apply in Calcutta.

Up to 1947 the superior staff of the London office consisted of a whole-time executive vice-chairman – a post held by E. S. Roffey, CIE, 1935 to 1947, secretary and an assistant secretary. When Roffey resigned in 1947 his post was not filled, but the writer became adviser to the Association on a part-time basis. It was part of his duty to visit India frequently and to keep the London Committee in touch with thought and feeling in Calcutta and the tea districts, and with the policies of the Governments of India, Bengal, and Assam, and to perform a similar function in respect of Pakistan.

With the ever-growing complexity of the problems of the industry in the last few decades, the work of the London Committee has become greatly diversified. Sub-committees have had to be set up to deal with such matters as wages and labour, conditions of sale, regulation of crop and exports, taxation, and administration of the scientific department. Co-operation with other associations and other branches of the trade has become more than ever necessary, and this need has been met by the formation of a Tea Trade Committee and a Standing Joint Committee of Producers. Today the organization is closely knit and efficient.

OTHER TEA ASSOCIATIONS IN NORTH INDIA

One of the happy characteristics of the tea industry has always been the friendly co-operation between British and Indian planters. Nevertheless when the Indian-owned acreage under tea began to increase, it was clear that as many of the new estates were small and as the resources of the proprietors were often very limited, they would need a separate organization to look after their interests. In 1918 Jyotish Chandra Sanyal, a well-known Jalpaiguri lawyer who had tea interests, proposed the formation of an association of Indian-owned tea companies. At an informal meeting in the house of Khan Bahadur Nawab Musharaff Hussain the Indian Tea Planters Association of Jalpaiguri was formed. The Nawab did not join the new Association, but its membership soon included several of the most important residents in the district. It began with only ten companies in its membership and for two years its secretarial work was done, in an honorary capacity, by Brindaban Chandra Karmaker the secretary of the Dheklapara Tea Company. The Association was registered under the Societies Registration Act in January 1919 and its subscription was fixed intially at 4 annas per acre.

The committee of the new Association were practical-minded men,

and their early activities were largely concerned with securing insecticides and fungicides and demanding better quality coal. The growing importance of the Association was recognized in 1921 when Lord Ronaldshay visited the garden of one of its leading members, but perhaps its first really important public activity was the presentation of its case to the Royal Commission on Labour, and it is interesting to note that the delegation was led by J. C. Ghose, father of the prominent present-day planter B. C. Ghose, who has himself supplied most of the information on which these paragraphs are based.

For a time a number of members of the new Association retained their membership of the Dooars Planters Association also, but this practice was soon abandoned, though the two associations remained friendly.

The Indian Tea Planters Association next came into prominence in its representation regarding the opening up of further lands in the Dooars for tea cultivation. The Government of Bengal had for some time refused to allow any extension of tea cultivation, on the ground that it would encroach either on forests or on land which should be under paddy or jute, but in 1924 the Association was successful in securing a modification of this policy. As a result there was a substantial expansion of tea-garden land in Indian proprietorship.

From the early thirties the Indian Tea Planters Association began to play an important part in a wider field. In 1932, D. C. Ghose, its honorary secretary, was one of the Indian non-official representatives at the Ottawa Conference, and a little later the Association secured representation on the Tea Cess Committee, the District Board of Jalpaiguri, the Embankment Committee, and the International Tea Committee. The fact that the subscription of the Indian Tea Planters Association was low made it attractive to smaller proprietors, and its membership grew rapidly in the years before the Second World War. This necessarily made it more democratic in character and, whereas Tarani Prasad Roy was chairman for the first thirty years of the Association's existence, thereafter that office changed hands annually, the necessary continuity being provided by the long-term continuance in office of the honorary secretary, B. C. Ghose. Ghose was a very active secretary. Not only did he establish East and West Dooars branches of the Association, but thanks to a careful husbanding of resources he was able to organize the construction of the Association's own building in 1950.

At the end of the period covered by this book the Indian Tea Planters Association began to give much attention to scientific research and decided to set up a Dooars Tea Research Institute to supplement the work of Tocklai, with special reference to common tea areas.

By the end of our period, the Indian Tea Planters Association had become an efficient and well-organized body which worked in close harmony with the Dooars Branch of the Indian Tea Association,

while never hesitating to put forward the view of the smaller Indian planters.

The next purely Indian Association to be established in the tea districts was the Terai Indian Tea Planters Association, which came into being in 1928. The birth of the Association was not altogether happy, since it was partly the result of friction between the Indian members and one or more persons prominent in the management of the old Terai Planters Association. Fortunately the friction died down and the new and old associations worked well together – thanks largely to the friendliness and tact of T. P. Bannerjee, who was chairman of the Indian Association from its inception until 1949. Nevertheless it is to be regretted that in a small district containing only twenty-two gardens it should have been found necessary to have two associations.

Next in order of time came the Surma Valley Tea Planters Association with headquarters in Sylhet, which appears to have been founded with the encouragement of the Indian Tea Association in order to enable Indian tea planters to join with the mainly British section of the industry in organizing schemes for the regulation of crops and in pressing for the formation of an International Tea Agreement. It came into being in 1933 and was at once given representation on the Indian Tea Licensing Committee and a little later on the Indian Tea Market Expansion Board. At the time of the partition of India, the Association was in the awkward position that its office was in Sylhet in Pakistan, though its members were mainly Indian. In 1949 it moved its headquarters to Calcutta. Since then it has taken its full share in the representations of the tea industry both in India and abroad, thanks in no small degree to the energy of S. C. Datta who was its secretary from that time until 1961.

On 28 October 1936, three years after the foundation of the Surma Valley Tea Planters Association, a group of Indian planters met at Dibrugarh under the chairmanship of Kamakhyaram Borooah to inaugurate the Assam Valley Indian Tea Planters Association. The sponsors were careful to emphasize the identity of interest of European and Indian planters, but felt the need for a separate Association in view of the fact that most Indian estates were relatively small and therefore needed special consideration in such matters as the fixing of the best crop basis under the Tea Control Act, or the provision of facilities for financing the smaller gardens. The Association grew rapidly and when the office was transferred from Dibrugarh to Golaghat at the end of 1940 its membership covered over eight thousand acres of tea. From 1948 a whole-time secretary was employed. By 1950 the member-acreage had grown to thirty thousand and the Association had become of considerable importance. In 1961 it acquired its own office premises in Jorhat.

The three important Indian Associations just described were efficient

and representative bodies and it is not easy to see why it was necessary in 1944 for another group of Indian planters to form the Assam Bengal Indian Tea Planters Association. In 1955 it changed its name to the Bharatiya Cha Parishad and by that time its membership was almost entirely confined to the Assam Valley and Cachar. In the following year yet another Association, the Tea Association of India, came into being. Its most prominent members belonged to the Marwari community and this may be the reason for the formation of the new body. It was affiliated to the Indian Chamber of Commerce, Calcutta.

The Indian Tea Association maintained close and friendly relations with all these new bodies.

CONSULTATIVE COMMITTEE OF TEA PRODUCER ASSOCIATIONS

It is now necessary to describe an organization of a somewhat different kind from the Indian Tea Association and its sister associations. We have seen that in the early years of Independence the transfer of some properties from British to Indian hands and the emergence of new groups of proprietors led to an increase in the number of Tea Producers' Associations. Ministers and government officials were liable to find themselves receiving several delegations on the same subject and this led in 1954–5 to pressure from some official quarters for the formation of a federation of tea producers. The idea appealed to some producers in as much as it would obviate the danger of conflicting representations by different associations. On the other hand it was clear that there would be disadvantages in a truly federal organization. Rules and a formal constitution would involve voting and similar rights; the smaller associations would have no chance, even in conjunction, if voting were on the basis of production or acreage; while the larger associations would be in danger of being outvoted on vital matters by a combination of small associations if each association were given equal rights. Moreover, individual associations were understandably unwilling to accept limitations on their right to approach the Government direct.

For a long time the matter hung fire, but before long the belief in the need for a forum in which common problems could be discussed won the day, and in 1956 a consultative committee of Tea Producer Associations was formed, the members being:

The Indian Tea Association, Calcutta
The United Planters Association of Southern India
The Indian Tea Planters Association, Jalpaiguri
The Assam Tea Planters Association, Jorhat
The Bharatiya Cha Parishad, Calcutta
The Surma Valley Indian Tea Planters Association, Calcutta
The Terai Indian Planters Association
The Tripura Tea Association, Calcutta

The principles upon which the committee was to work have been summed up as follows:

> To discuss matters of common interest, and to endeavour to arrive at uniform and unanimous views on questions of policy, while still leaving to individual associations complete freedom of action, and being satisfied, where unanimity was unattainable, with an agreement to differ.

The first meeting took place on 9 August 1956. It was resolved that the committee should meet at regular intervals and whenever the need arose: that there would be no voting: and that the secretarial work would be undertaken by the Indian Tea Association. It was also agreed that the chairman of the Indian Tea Association would be chairman of the consultative committee. The committee has met regularly and although the distance of South India from Calcutta has often made attendance from the United Planters Association very difficult at short-notice, meetings are usually well attended and a fair degree of unanimity has generally been reached. Meetings are normally held in Calcutta, but Coonoor, Darjeeling, Shillong, and New Delhi have also been chosen. All matters connected with tea are discussed, and delegations representing the committee have visited Ceylon to discuss the possibility of a renewal of the International Tea Agreement, and have assembled in the Central and State capitals several times in every year. Memoranda have been submitted on matters of taxation, labour welfare, tea promotion, crop regulation, housing, and labour bonus, and in reply to government questionnaires and the enquiries of statutory and semi-statutory bodies.

The committee is now well established and is generally considered to have served a useful purpose, though much care will be required if it is not in course of time to lessen the importance of the Indian Tea Association and other powerful associations.

CHAPTER THIRTY-FIVE

THE UNITED PLANTERS ASSOCIATION OF SOUTHERN INDIA

As we have seen, the planting of coffee in Southern India began in the Wynaad about 1840 and after some initial reverses spread rapidly into other districts. Other important plantation crops in the South were cinchona – introduced from South America in 1860, and cultivated both by the Government and by private individuals – and cardamoms, which were grown on the western slopes of the mountains of Coorg and Mysore. By the sixties or seventies the plantation industry had become important and a number of district planters associations came into being, primarily to regulate arrangements with labour and secondly, to make representations to the governments concerned. They worked independently of each other and had no central organization.

In 1877, after a planters conference at Manantoddy, the district associations submitted a joint memorial to the Government of India regarding certain labour matters, but no permanent organization was formed. In 1890, J. G. Hamilton, the then secretary of the South Mysore Planters Association endeavoured unsuccessfully to form a central association. In 1892 the district associations of the Wynaad, Coorg and North Mysore, Travancore, the Shevaroy Hills, and the Kolagheny Hills combined to submit a petition asking for certain amendments to Act XIII of 1859 which dealt with breaches of contract by labourers. According to the preface to the minutes of a planters conference held in Bangalore on 28 August 1893, the reply of the Government of India was curt and discouraging in tone and with one slight exception, refused every request contained in the memorial. The resentment of the planters at this reply led Digby T. Brett, chairman of the North Mysore Planters Association to write to the *Madras Mail* suggesting that the Wynaad Planters Association should convene a conference to discuss the matter. G. Romilly, honorary secretary of the Wynaad Association was unable for domestic reasons to do this and at his request Brett took the initia-

tive and called the conference, which assembled in Bangalore on 28 August 1893.

Apart from their anxiety over the working of Act XIII, South Indian planters were extremely angry at certain statements characterizing them as oppressors and it is interesting that indignation over these matters led Indian proprietors in Mysore – who were not members of the District Association – to form associations of their own, which sent delegates to the conference.

A lively discussion took place as to whether the delegates should content themselves with recommending the convening of annual conferences, or should set up a permanent central body. The latter proposal would obviously involve expenditure and the delegates were not authorized to commit their members to contribute. The representative of the Nelliampathies indeed went so far as to say that his association could not afford to contribute as it included only twenty-two estates 'of which nine belong to Europeans half of whom are Scotsmen'. The question was therefore held over for decision at a conference to be called in the following year, but in the meantime it was agreed to engage the services of G. L. Yonge as part-time secretary on a salary of Rs 100 per annum.

At a conference held in Bangalore in September 1894 agreement was reached and Brett, the chairman, announced with great satisfaction that 'there now exists no conference but the United Planters Association of Southern India'. It was decided that the headquarters of the Association should be in Madras, and that the annual general meetings should be held in Bangalore. The membership was to consist solely of District Planters Associations and there was no provision for individual membership. Subscriptions would be determined annually, but initially would be as follows:

CLASS 1	Wynaad Nilgiris North Mysore South Mysore	Rs 250	5 votes
CLASS 2	Kanan Devan Travancore North Mysore Native	Rs 150	3 votes
CLASS 3	South Mysore Native Shevaroys Nelliampathies Peermade Lower Pulneys	Rs 100	2 votes
CLASS 4		Rs 50	1 vote

The subscriptions in the first year on this basis, were expected to amount to the princely sum of Rs 2,150 per year. Figures for 1894 are not available, but since the acreage of plantation crops covered by the returns to the United Planters Association in 1896 was about fifty thousand the subscription may be regarded as nominal.

The Association soon found this rudimentary organization quite inadequate for the work to be done. In the annual meeting in August 1896 the chairman referred to a difficulty which had confronted Hon Mr H. P. Hodgson, who represented the Association's interest in the Madras Legislative Council. An important issue having arisen, Hodgson tried to get a representative gathering of planters to discuss it – but only the chairman of the United Planters Association turned up and he and Hodgson had to settle it themselves. It was therefore decided in the 1896 meeting to form a committee of which the chairman of the Association and the Planting Member of the Madras Legislative Council were to be *ex officio* members while each District Association would normally be represented by its honorary secretary. The committee would meet at whatever place and time the chairman might designate and the expenses of the delegates would be paid by the Association.

This development naturally involved increased expenditure and there was a heated discussion as to how the money should be raised. The chairman proposed the creation, by donations spread over six years, of a trust fund of Rs 2 *lakhs* the interest on which would meet the expenditure of the Association. This proposal was rejected and it was decided merely to increase subscriptions by five per cent. Subscriptions were again revised in 1897 on the basis that each district association would be assessed at a minimum of one anna per acre on one quarter of the area under cultivation, but might pay up to one anna per acre on the whole area. Each association would have one vote for every Rs 10 subscribed.

Even when the financial problems of the Association had been solved for the time being, there remained the difficulty arising from the great distances separating members and the poor state of communications. It was therefore proposed that members should be allowed to use proxies. Some members objected that the proxy delegates would come with a mandate and discussion would become a farce, but when it was pointed out that some members had to travel four hundred miles to Bangalore – and an instance was given of a senior member who waited four days on the bank of an impassable river – the objection was overruled.

The only other important development of the organization in the nineteenth century was the formal registration of the Association under the Indian Companies Act. As this book will be read mainly by tea men, it should perhaps be emphasized that the individual proprietors of coffee estates in Mysore and Coorg were the moving force in the forma-

tion of the local associations as well as of the United Planters Association of Southern India.

The dominant influence of individuals was indeed one of the characteristics of the South Indian organization in contrast to the Indian Tea Association in which the big companies acquired great influence at a fairly early date. This difference continued even in modern times, and in the years between the two wars, men like 'Carver' Marsh, Congreve, and J. J. Murphy who looked at the United Planters Association's matters entirely from the proprietary planter's point of view and suspected the big companies and the agency houses, had great influence.

These details are in themselves unimportant, but they illustrate the difficulties confronting men with no previous relevant experience who were determined to organize themselves into an effective body. Being sensible men they sought help wherever they could find it and the obvious sources were the Planting Member of the Viceroy's Legislative Council, the Indian Tea Association, and the London Chamber of Commerce. By the Indian Councils Act 1892 the Viceroy's Legislative Council had been enlarged to provide a number of additional seats for non-officials and Buckingham was nominated by the Chief Commissioner of Assam to represent planting interests. Although he was an Assam man South India planters attached considerable importance to his help, and this soon led them, in the 1893 Conference, to pass a resolution asking for the inclusion of planting representatives in the Legislative Councils of Madras, Mysore, and Travancore. In the following year the Government of Madras acceded to their request and G. Romilly of the Wynaad was appointed to the Madras Legislative Council. At the annual meeting in August 1898 it was agreed that the expenses of the member for attendance at meetings of the Legislative Council should be borne by the Association. At about the same time planting interests ceased to be represented directly in the Viceroy's Legislative Council.

In the meantime the Association had been informed by the Government of Travancore that particular interests could not be represented separately in the Legislative Council of that State, but that it already included a European member. In the case of Mysore the Association were informed that no Legislative Council existed and that it would be inexpedient to appoint a European to the council, which was an administrative body.

Shortly after its formation the United Planters Association entered into correspondence with the Indian Tea Association. In particular they enquired regarding the working of labour legislation in the North and they also asked, in connexion with the proposed Madras Coffee Stealing Prevention Bill, if theft of tea was a cause of anxiety. They received a reply – which surprises the writer in view of the many complaints from

North Indian planters on this subject in the twentieth century – that no such difficulty had arisen since there were no markets to which stolen tea could be sent. In the same letter the Indian Tea Association invited the co-operation of the United Planters Association in the Tea Market Expansion Campaign recently started in America. That co-operation was soon forthcoming. For some years after this there was little general correspondence between the two associations, but in 1900 arrangements were made for a regular interchange of reports of committee proceedings concerning labour and similar matters.

The third possible source of help was London. No South Indian Association in London existed at that time, but at the annual meeting of the United Planters Association of Southern India in 1894 it was proposed that the Association should join the London Coffee Association. The question of joining the 'Tea Association in London, if there is one', was also raised, and Clarke of Travancore reported that there was indeed such an Association, and that it was very strong since 'it had an office and a sort of meeting room in which the Planters when they went home could make appointments'.

In 1895 it appeared that the only object of the Coffee Association was the prevention of adulteration and it was therefore proposed that that Association should be dissolved and that the United Planters Association should join the London Chamber of Commerce. This proposition was hotly debated, some members maintaining that the interests of producers were bound to clash with those of merchants and that it would be wiser to form a separate South India Planters Association in London. This alternative was rejected on the grounds of expense and the United Planters Association joined the London Chamber. It was represented on that body by J. C. Sanderson (the former secretary of the Coffee Association) and a former planter, Frank Mangles.

The Association at once sought to make use of its new London ally and in 1896 it asked for advice on measures to avert the decline of coffee consumption in Great Britain, on warehousing difficulties and on the possibility of implementing the Adulteration Act in respect of coffee. Sanderson replied on this last point that as a Parliamentary Committee had advised against compulsory printing of the proportions of the admixture on the labels of coffee tins, it was useless to raise the matter again. This reply gave rise to some indignation and in the annual meeting of 1900 one member suggested rather unfairly, that the apathy of the London Chamber arose from the fact that there were many members of that chamber to whose interests the action suggested would be opposed. It was therefore decided to set up a separate committee in London, including Members of Parliament and others interested, to discuss this problem of adulteration with the London Chamber of Commerce. Little practical result ensued.

It was now becoming clear that the office organization of the Association required strengthening in view of the increase in work, but the failure of the Association's bankers in 1906 created financial difficulties and it was not until 1910 that it was found possible to establish a suitable office in Bangalore for the secretary and the scientific officer and their staff. The secretary's salary and allowances were now raised from Rs 2,000 per annum to Rs 2,750.

We have already seen that in South India, even in recent times, the private proprietor – or the large company not connected with an agency house – has counted for a great deal. The organization of the industry has therefore been altogether looser than that in the North, and it has always been much harder for the United Planters Association of Southern India to take a decision on policy than for their colleagues in the Indian Tea Association.

This difference is reflected both in London and in India. As we have seen, the United Planters Association first joined the Coffee Association in London and then transferred its allegiance to the London Chamber of Commerce. The link with that powerful and efficient body was of great use as long as such issues as United Kingdom preference on tea were prominent – and as long too, as the Secretary of State had effective control of the economic policy of the Government of India. It could not, however, help in integrating the policy of South Indian tea companies in such matters as relations with labour, scientific research, regulation of production, and the like.

In the years just before the First World War the need for an organization in London dealing with these matters began to be felt, but the South Indian tea industry was still so individualistic that the need might have remained unfulfilled but for problems arising out of the war. Discussions with the United Kingdom Food Controller regarding the control for the supply of tea in war-time provided the compulsive force that led in 1918 to the formation of the South Indian Association in London representing all sterling plantation interests in South India. It was formally established at a meeting in Mincing Lane on 24 January 1918, the initiative having been taken by H.M.Knight, a former planter from High Range, who was its first chairman. In his introductory speech the chairman referred to planting, shipping, and commerce generally as being the subjects with which it would be concerned.

Its office was located in that of the Indian Tea Association (London) and from the beginning that Association has provided its secretariat. Although the formation of this London organization gave greater homogeneity to the South Indian Planting Industry, individual proprietors, of whom there were many, continued to go their own separate ways, and as a result the South Indian Association never played a part in

the formation of policy quite comparable to that of the Indian Tea Association (London).

In India, too, the balance between the United Planters Association, the district associations, and the individual or company members, has often been delicate. In the early days the United Planters Association of Southern India was simply an association of District Associations. In 1931 the need for an expansion of the organization was considered, and an important factor in the minds of some members was the fear of London control. Changes in voting procedure were proposed and there was much discussion as to the location of the Association's headquarters. In 1934 the headquarters was moved to Coonoor – a location which in spite of its delights has always seemed to the writer peculiarly unsuitable as compared with Coimbatore or some other central place in the plains. In 1936 it was decided to convert the organization from an association of Associations into an association of proprietors, firms, and district associations, divided by products into sections. Each product section would deal with its own affairs and would be represented in the executive committee.

The labour department was also reorganized at this point. Its main original function had been to deal with the recovery of advances to labour, but the recommendations of the Royal Commission on Labour that advances should be progressively reduced had been to a great extent implemented and the work of the department had been correspondingly reduced. Its staff was curtailed, but in a few years time its work had changed in character. The labour problems of the industry from the Second World War were concerned not with advances but with wages, bonus, labour amenities, and relations with labour generally. They were indeed to provide the main part of the Association's activities.

In the political field the United Planters Association was from an early date very conscious of the need for organization. In 1929 F. E. James (later Sir Frederick James) became the Association's political secretary. In 1931 the South Indian Representation Fund was formed to deal with interests wider than those of the plantation industry, and James's services were transferred to that fund. In 1933 South Indian planters somewhat reluctantly surrendered him to the All-India (European) Representation Fund and he became a member of the Central Legislative Assembly. His place in the Madras Legislative Assembly was taken by W. K. M. Langley, but James continued in fact to be – and to be regarded as – the Planting Member and for twenty years he kept planters aware of political developments and helped them to adjust themselves to the changing times. It would be difficult to exaggerate the value of his services to the industry.

The next change in organization took place in 1941 and was a mere

change of form. For technical reasons it was found convenient to wind up the Association as an incorporated body and transfer its functions and assets to an unregistered body with the same name.

In the circumstances of the United Planters Association of Southern India, co-ordination of the activities of district associations was often difficult. In 1942 the Mysore District Association sent a representation regarding coffee control direct to the Government of India. It was quite entitled to do this, but the procedure was evidently considered unwise and in 1942 a resolution was passed to the affect that such representations should always be sent through the United Planters Association.

A more important change took place in 1947. The coming of Indian Independence and the growth of the trade unions both made it necessary that the Association should strengthen the labour side of its organization. The old labour department had been established for limited purposes and was not suited to the task of advising members about labour relations, or conducting negotiations with unions. An Estates Labour Relations Organization was therefore established, to be financed by subscription, quite separate from their United Planters Association subscription, by those members who chose to join. For a time there was some overlapping between the new organization and the United Planters Association, but before long it settled down to being for all practical purposes an important branch of the Association. In 1954 formal effect was given to this integration and the Estates Labour Relations Organization was abolished. It was indeed anomalous, now that labour matters had become the chief preoccupation of the Association, that a nominally separate organization should deal with this subject. At the same time the Association was reorganized in such a way as to give it a more truly federal character – a euphemism which disguised the fact that under the new conditions, and with the growing tendency of labour organizations to work on an all-India, or at least a state-wide basis, the central organization of the United Planters Association must have more authority. It speaks volumes for the tact and good sense of those concerned that the change was achieved without too much friction and that, at last, the United Planters Association of Southern India occupied a position in the industry roughly comparable with that of the Indian Tea Association. It is right to record the important part played in all these developments by Linden Mitchell, the secretary of the United Planters Association from 1946 to 1957. He was sometimes accused of being a dictator, but it difficult to see how without a strong Secretary the United Planters Association would have adapted itself to modern conditions.

In the last two decades the most noticeable change has been the great expansion of Indian membership. There are in fact more Indian than

British members today, though this preponderance is much greater in coffee and rubber than in tea.

In concluding this chapter it is important to point out again the marked contrast between developments in North and South India. In the North, although many proprietary interests continued until the Second World War, the sterling tea companies and the agency houses were paramount. Perhaps because of the strength of their position, the sterling companies seldom rode rough-shod over their Calcutta representatives. In South India on the other hand, the main formative work was done by sturdy individualist proprietors who resented interference by sterling interests or by the big companies. Fear of London control intensified individualism and this in turn sometimes led by reaction to a determination on the part of some of the sterling companies to have their own way. Instructions were issued to South India representatives about matters which sterling interests in the North would have left for decision in Calcutta. The resulting difficulties illustrate the advantages enjoyed by the North Indian tea industry as a result of the existence of the managing agency system which obviated the necessity for remote control.

CHAPTER THIRTY-SIX

INTERNATIONAL ORGANIZATIONS IN THE INDUSTRY

THE INTERNATIONAL TEA AGREEMENT

We have seen in an earlier chapter that by 1933 the economic condition of the tea industry was parlous and that producers in the main producing countries had agreed as to the necessity for a scheme under which exports and extensions of cultivation would be regulated. The procedure then followed was curious, inasmuch as it was producers and not governments who entered into the International Tea Agreement. That agreement was indeed made on 9 February 1933, between the Indian Tea Association London, the South Indian Association in London the Ceylon Association in London, and the two associations concerned with tea in the Dutch East Indies. It contained two main provisions. In the first place, exports of tea from the producing countries were to be regulated in order to restore equilibrium between supply and demand and the Governments of the respective countries were to undertake to prohibit exports in excess of the agreed quotas. The allocation of quotas to the countries concerned was to be based on the maximum exports from each producing country in any one of the years 1929, 1930, and 1931, and for the first year of regulation the permissible export was to be fixed at eighty-five per cent of the standard export so defined. Secondly, extensions or new plantings must not exceed a half per cent of the planted area in each country. The agreement was provisional and was subject to the passing of the necessary legislation by the governments concerned and the establishment of an International Tea Committee.

The International Tea Agreement was followed on 30 March 1933, by a memorandum of recommendations made by the same parties. The memorandum laid down *inter alia* that it was not the intention of the parties so to operate the scheme as to cause prices to rise exorbitantly; and that the figure of regulation each year must be fixed by a unanimous vote, failing which, the matter would be referred to a neutral arbitrator.

It went on to state the number of votes which each country should be entitled to cast in the committee and it provided that each producing country should appoint its own members of the committee. It also provided for the collection of statistics, and enjoined the committee to recommend measures to increase world consumption of tea. Another clause prohibited the export of tea seed from the signatory countries.

The International Tea Committee was formally constituted in July 1933, the members from India, nominated by the producers, being R.Graham, E.A.Watson, L.T.Carmichael, and J.R.H.Pinckney.

All these transactions had been carried out with the approval of the governments, which agreed with producers that the industry itself should operate the regulatory machine though Government should provide the legal sanction. The Ceylon Government was represented on the committee from the beginning, but it was not until 1936 that the Government of India had a representative in the person of Dr D.B. Meek, included on it.

Since the relevant legislation could not be passed immediately,* in May 1933 the Government of India issued a notification setting up a Licensing Committee, consisting wholly of producers. The committee was to apportion the Indian export allotment fixed by the International Committee amongst producers in proportion to the 'best crop basis' of each estate, that basis being the maximum production in any one of the four years 1929, 1930, 1931, and 1932.

Export of tea by land across the North-west Frontier was not controlled at this stage. India kept within her allotment and her exports in the first year of regulation were over sixty million lb less than in the previous year. The signatory countries as a whole exported 654·8 million lb in 1933–4, as against 825·2 million lb in 1932–3. The supply and demand position seemed to have eased and the International Committee, which was always fully alive to the importance of providing enough tea for expanding world markets, fixed the figure of exports for 1934–5 at 87½ per cent of the standard export of 807,714,396 lb. Subsequent experience showed that this increase was perhaps a mistake.

The Government of India discovered that in 1934–5 exports to Iran had increased fourfold. They therefore imposed control on the export of tea by land to Iran and decided to deduct from licenses issued in the two following years sixty per cent of the excess exports resulting from lack of control on the land frontier in the first two years of regulation. For the last three years of the agreement the International Committee fixed the quotas at 82½ per cent, 82½ per cent, and 87½ per cent respectively and by the end of the period it could be said that while at no time had any shortage of supplies been permitted, markets had strengthened considerably. The effect on the economy of the Indian tea industry has been discussed earlier.

* The Act was passed in November 1933.

During this period the International Committee succeeded in persuading producers in Kenya, Uganda, Tanganyika and Malaya, to implement part of the regulation scheme, though they did not join the International Tea Committee at this stage.

INTERNATIONAL TEA MARKET EXPANSION BOARD

Of even greater importance was the action taken by the committee with regard to market expansion propaganda. Soon after its establishment the committee entered into correspondence with the Indian Tea Cess Committee, the Ceylon Tea Propaganda Board, and the Amsterdam Tea Association, with a view to co-ordinating the various separate tea propaganda campaigns organized by those associations. In October 1934 a Commission consisting of J.A.Milligan, Gervas Huxley, and D.Lageman representing India, Ceylon, and the Netherlands East Indies respectively, was sent to the United States to examine the possibility of a Joint Tea Propaganda Campaign. While this enquiry was in progress the International Tea Committee formulated a set of general principles as follows:

> Valuable as is the propaganda work now being conducted by the Indian Tea Cess Committee, the Ceylon Tea Propaganda Board, and the Amsterdam Tea Association, in India, the United Kingdom, the United States of America, Canada, South Africa, and on the Continent of Europe, the Committee do not feel that it is adequate to meet the urgent need not only of finding new markets for large quantities of tea but also – and equally important – of checking any decline in consumption in existing markets.
>
> The Committee therefore consider:
>
> Firstly, that it is imperative that existing propaganda should be solely devoted to the one purpose of increasing the consumption of the teas produced by the regulating countries, irrespective of any sectional considerations.
>
> Thirdly, that the propaganda efforts of the three countries should be as closely co-ordinated as possible so as to ensure that all available resources are expended to the fullest advantage, and only in those markets where the maximum of return in the way of increased or maintained consumption is likely to be reaped, and so as to ensure that all the experience and information gained by each of the bodies concerned in the conduct of propaganda can be made available to the others, in order to increase the economy and efficiency of the work as a whole.
>
> In regard to the first of the above considerations, the Committee most strongly urge that the Indian Tea Cess Committee, the Ceylon Tea Propaganda Board, and the Amsterdam Tea Association should each take immediate steps to obtain an increase in their propaganda resources to a common level of one rupee or the equivalent per 100 lb of tea exported.
>
> In regard to the second consideration, the Committee understand that each

of the bodies concerned has already definitely adopted the policy advocated. The Committee warmly endorse their action in this respect.

In regard to the third consideration, the Committee propose to suggest arrangements whereby they themselves can most effectively function in an advisory capacity for co-ordinating propaganda efforts as a whole, in accordance with their terms of reference. It should be understood that this proposed new arrangement will not affect the propaganda now being carried on in producing countries, although it is hoped that the organisations in these countries will keep in touch with the International Committee.

The Commissioners strongly recommended that the three regulating countries should raise funds 'on the basis of an equal amount of tea exported or produced'; that a substantial proportion of the fund should be devoted to propaganda on the North American continent; and that such propaganda should be under the charge of a small permanent central executive body representing the three signatory countries. The recommendations of the International Tea Committee went further than this. They were of opinion that a central body should co-ordinate tea propaganda not only in the United States but throughout the world. Their proposals led in 1935 to the establishment of the International Tea Market Expansion Board, financed by contributions from cesses on exports raised by the producing countries. Its composition was: three representatives of the Indian Tea Cess Committee, two representatives of the Ceylon Tea Propaganda Board, and three representatives of the *Vereeniging Voor de Theeculturur in Nedeslandsch.* It also included one whole-time technical member from each of the three countries. In the case of India that post was held by Milligan.

It was agreed in principle that the propaganda would be on behalf of tea as such and not tea of any particular country. It was recorded in the Indian Tea Cess Committee's Report for 1935–6 that

> the International Tea Market Expansion Board was formed in July 1935 for the purpose of exercising executive control over the joint campaigns in the United States of America, Canada, and Egypt; to act in an advisory capacity in respect of the campaigns in South Africa, Australia, Holland, Belgium, and Germany; and to maintain a close liaison with the Empire Tea Market Expansion Board through which the campaign in the United Kingdom was formerly operated by India and Ceylon jointly.

The Empire Board was dissolved in April 1936 and the administration of the United Kingdom campaign transferred to the aegis of the International Tea Market Expansion Board, so that the campaigns of the International Board during 1936 were those in the United States, Canada, the United Kingdom, and Egypt, financed as follows:

	India	*Ceylon*	*Netherlands East Indies*	*Total*
	£	£	£	£
USA	26,000	48,000	26,000	100,000
Canada	20,000	20,000	—	40,000
United Kingdom	32,500	32,500	—	65,000
Egypt	2,000	4,000	4,000	10,000
	80,000	104,000	30,000	215,000

In all cases local councils on which the trade was strongly represented were set up.

Co-operation between producers and distributors was indeed the foundation of the board's work and much emphasis was laid on the promotion of better merchandizing and the improvement of equipment and tea service. The International Committee reported in 1946 that although 'the approach and methods of individual distributors, which are aimed at increasing their share of existing markets, differ from those employed in maintaining and expanding the market as a whole', in every instance expenditure by producers through the board had stimulated and increased expenditure by the distributors. It is not necessary for our purpose to study the campaigns of the International Board. It is generally admitted that they were most competently and enthusiastically run, and it is a matter of regret that for reasons which need not be discussed here, in 1952 India withdrew from the board.

RENEWAL OF INTERNATIONAL TEA AGREEMENT

The first agreement was for a period of five years only, but in November 1936 the original signatories entered into a new agreement for five years from 1 April 1938. In this new agreement the governments of the producing countries occupied a stronger position than before. Each government was to appoint five representatives on the committee, four of them after consultation with the producers, and was to specify the name of the member who would vote on behalf of the country concerned. At this time it began to be felt that an agreement of this character ought to be between governments rather than between associations, and proposals for an inter-governmental agreement were under consideration when the outbreak of the Second World War interrupted them. During the period of the second agreement the British East Africa territories participated more fully in the scheme of regulation though it was not till 1944 that J. H. Loram was appointed a member of the committee to represent Nyasaland, while Colonel C. W. Walker, CMG, DSO, was similarly appointed to represent Kenya, Uganda, and Tanganyika.

By this time the Second World War had changed the entire position.

In 1941–2 prices in eastern markets rose steeply and although the statistical position did not warrant any increase in the export quota, the International Committee raised it first to 95 per cent and then to 110 per cent. From this time onwards the problem of supplying the West with tea became difficult. There could be no question of imposing restrictions, and yet it was important to keep the machinery of regulation in being. The export quota was therefore fixed at 125 per cent.

It was clearly impossible to negotiate a new agreement in 1943 and the Governments of India and Ceylon therefore agreed to continue the existing agreement with minor modifications for the duration of hostilities and two regulation years thereafter. This in fact came to mean renewal until 31 March 1948. In 1947 the Governments of Kenya, Uganda, and Tanganyika ceased to regulate exports and production in accordance with the International Agreement and therefore lost their representation on the International Tea Committee.

Discussions regarding regulation were now transferred to a wider forum. The United Nations Conference on Trade and Employment, held at Havana in the winter of 1947–8, laid down the conditions governing commodity agreements – and India, Ceylon, Pakistan, and Indonesia were signatories to the final Act. The agreed conditions differed in two important respects from the International Tea Agreement. In the first place such agreements must be between governments, and, secondly, they must include provision for consumer representation. This latter proposal had indeed been discussed by the International Tea Committee some years before, and had only been shelved because of the practical difficulties of implementing it. It soon appeared, however, that the charter would not be in force by the date of the lapse of the International Tea Agreement, and the committee therefore proposed an interim producers' agreement for a period of two years, which would maintain the machinery of regulation, but would impose no limit on new planting. The Government of India did not favour complete freedom to extend and amended the proposal to provide for a limitation of extensions on virgin soil to two per cent per year and of replanting (with simultaneous uprooting) to five per cent. Pakistan at this stage pressed for a much larger permissible acreage than had been proposed for her after Partition, and also claimed additional voting rights in the International Committee. These points were at length settled, and the interim agreement was signed on behalf of India, Pakistan, Ceylon, and Indonesia on 21 March 1949. The East African territories did not join this interim agreement.

The interim agreement was due to expire on 31 March 1950 and it was soon evident that the charter would not be in force by that date. The International Tea Committee therefore proposed that a new agreement for a full five years should be made. It would differ from previous

agreements in allowing extensions up to five per cent of planted area, and replacements up to ten per cent, and in fixing the figure of regulation for the first year at 130 per cent. That proposal was approved by all four governments and the International Tea Agreement 1950–5 was signed on 8 May 1950. It was still, in form if not in fact, an agreement between producers rather than governments, but in a resolution of 17 February 1950 the International Tea Committee recognized that the agreement might have to be modified if and when the Havana Charter came into effect.

During the period of the new agreement regulation of exports was nominal rather than real. The export quotas were maintained at 135 per cent of the standard quota, but actual exports never closely approximated to the permissible figure. It could fairly be said that the main work of the committee at this time consisted in the maintenance of statistics, and high tribute must be paid to the care and objectivity of the committee's statistical bulletins throughout the whole period of its existence.

Negotiations for a renewal of the International Tea Agreement were opened in 1954 and it was soon realized that in place of discussions between practical-minded business men, determined to arrive at agreement, there now had to be far more difficult arguments between governments. Politics, anxieties about national prestige, and a host of considerations which had no relevance to the problem of equating supply and demand, now began to bedevil the discussions. As early as in May 1954 the Indian representatives in a sub-committee of the International Tea Committee began to raise doubts about the foundations of the agreement, and fierce arguments as to what should be the export allotments of India and Ceylon soon created difficulties. The International Tea Committee recommended:

(a) that there should be no limitation on extension of cultivation;
(b) that regulation of exports should not be automatic under the new agreement, but should only come into operation when the International Tea Committee considered its circumstances so demanded.
(c) that when regulation became necessary –
  (i) Pakistan and Indonesia should be permitted to export up to 47,500,000 lb and 175,000,000 lb respectively, and
  (ii) that the International Tea Committee should deduct from estimated world requirements the probable exports of Pakistan and Indonesia for the year in question, and
  (iii) that the balance should be divided between India and Ceylon in an agreed ratio.

The question as to what this ratio should be then gave rise to difficulty.

It will be remembered that the old ratio was 7:5. Ceylon now claimed that in view of her increased production, her proportion should be

raised. Agreement on this point was not reached, and to meet the difficulties Ceylon put forward two alternative suggestions. The first was that no figures of standard exports should be included in the agreement, but that if regulation became necessary, the apportionment between Indian and Ceylon should be on the basis of average exports for the preceding three years. This suggestion was rejected by India. The second alternative was that the standard exports of India and Ceylon should be 560 million and 400 million lb respectively, but that Ceylon should reserve the right to ask for an increase in her quota if the necessity arose during the period of the new agreement. India appeared to accept this alternative, but at this stage a fresh difficulty arose.

Pakistan refused to acquiesce in fixing India's standard exports at 560 million lb, even though it was carefully explained to the Pakistan Government that it did not affect them and that all that was being done was to fix a ratio between India and Ceylon's share of the world market after Indonesia and Pakistan had taken what they wanted. In the then state of relations between India and Pakistan, this argument cut no ice and deadlock was reached.

It was then suggested that India and Ceylon should go ahead with an agreement without bothering about Pakistan and Indonesia, but at this stage the relations between India and Ceylon deteriorated seriously and the External Affairs Department of the Government of India considered that it was a waste of time to pursue discussions. The matter thus remained in abeyance.

No agreement has in fact been reached up to this day, and thoughtful producers are more than a little worried that there is now no machinery to regulate the world supply of tea if and when such regulation becomes urgently necessary – and nobody with experience of discussions with the governments concerned would for a moment believe that if a crisis arose, an agreement could be negotiated in time to be of use. The only bright feature is that the International Tea Committee itself has been kept in being by the executive action of the governments of the producing countries and that the excellent statistical apparatus of that committee is still allowed to operate.

Section 7

TAXATION

CHAPTER THIRTY-SEVEN

TAXATION

A. INCOME TAX

In 1861 the heavy expenditure incurred on account of the Mutiny led to the imposition of 'assessed taxes' which were in effect the first Indian income tax and it is interesting to notice that agricultural incomes were not exempted from this impost. It was, however, regarded entirely as an emergency measure and it ceased to operate in 1865. Nevertheless, the idea of such a tax was bound to be attractive to the Government and in 1867 it was reimposed in the form of a tax on trades and professions, excluding agriculture. This tax in its turn lapsed and from 1873 to 1877 a period of happy immunity from direct taxation was enjoyed by business men in India. A tax on traders and artisans to meet the cost of famine insurance was then introduced in 1878 and continued in force until the Indian Income Tax Act was passed in 1886. In that Act, agricultural income was exempted, primarily on the ground that agricultural land paid land revenue and that the imposition of income tax would therefore amount to double taxation. It was also suggested that in the permanently settled areas the levying of income tax would be a breach of the undertaking given by Lord Cornwallis in 1793, that the revenue would remain fixed for ever.

Shortly after the passing of the Act, the Advocate-General Sir G. C. Paul gave it as his opinion that the exemption of agricultural income covered the profits derived by a tea planter from tea grown and manufactured by himself. This opinion was accepted by the Government and except for local cesses the tea industry remained free from direct taxation for over thirty years.

The salary drawn by an employee in the tea industry was, of course, taxable and the question was soon raised as to how planters' commission should be treated. The Indian Tea Association contended that this being of the same nature as the profits of the estate, was agricultural income, but the Government had little difficulty in deciding that

commissions payable in India were undoubtedly liable to tax. The case of commission payable in England was more doubtful, and the Association argued that since such commissions were dependent upon the result of sales in England they could not fall within the mischief of the Indian Income Tax Act. The planters' case was considered along with a similar contention of the employees of the Irrawaddy Flotilla Company that the portion of their salaries payable in Scotland was not taxable in India, and in December 1889 the Government of India decided that commissions, wherever they might be payable, were definitely liable to Indian tax. A few years later a legal opinion to the effect that this decision was wrong was obtained from a Mr Stokoe, and the possibility of a test case was considered. The Government of India declined to reopen the matter and the test case was not instituted. It was stated in the Annual Report of the Indian Tea Association for 1893–4 that 'the question may therefore now be considered to have been set at rest for good'. It is easy to imagine the angry comments which must have been made in clubs throughout the tea districts when this decision was announced, but it is comforting to remember that, in 1893, the highest rate of income tax was 5 pies in the rupee – or about 6¼d in the £!

In 1914 the whole question of the liability to tax of profits of plantation industries was again raised. The Governments of Bihar and Orissa and of the United Provinces claimed the right to tax the profits of the sugar industry on the grounds that 'the process resulting in the production of refined sugar cannot reasonably be considered as a process ordinarily employed by the cultivator to render the produce raised by him fit to be taken to the market'. The Government of India ruled that the exemption granted by the relevant section of the Income Tax Act 'is intended to apply only to income derived . . . from the performance of crude domestic processes for fitting agricultural produce for sale and that it cannot apply to the case of a sugar factory established on up-to-date lines for the express purpose of making a business'. The Government of Bengal at once enquired if the same test should not apply to the tea industry and the Advocate-General of Bengal, Dr Kendrick, ruled in a sense favourable to that Government. A little later a reference was made to the Government of India on this subject by the Government of Madras.

In both the Bengal and the Madras cases the Government of India decided that, though they fully accepted Dr Kendrick's opinion and considered that the liability of the industry to tax was beyond doubt, they would, in view of the long period during which the exemption had been enjoyed, let the matter stand over until the Act was revised.

In 1918 a new Income Tax Act was passed and immediately thereafter the Government of India decided to tax that portion of the income of a tea estate which could be said to arise from business other than agri-

culture. A long and acrimonious correspondence followed, but the Government stood firm, though as a special concession they agreed to postpone the imposition of the tax until 1 April 1919.

In 1919, by agreement with the Government of Bengal, the Killing Valley Tea Estate under the management of James Finlay and Company was selected for a test case and in due course a reference regarding it was made to the High Court under Section 51 of the Indian Income Tax Act 1918. The company contended that the processes carried out were purely agricultural operations intended to fit the produce for the market; the use of machinery speeded them up but did not change their character. The income tax authorities on the other hand argued that modern processes were different in kind from those carried out by a cultivator. In May 1920 the High Court, in a closely reasoned judgement (reproduced in the Association's Annual Report for 1920) refused to accept the assertion of the company that green leaf would have no value unless these processes were used. 'The green leaf', the Court said, 'was not a marketable commodity for immediate use as an article of food; but it is a marketable commodity to the manufacturer.' The Court concluded that the entire process was combination of agriculture and manufacture.

The profit must therefore be apportioned between the cultivating part of the business and the manufacturing part, income tax being payable on the latter only. The Court went on to point out that under Section 43 of the Act, the Governor-General had power to frame rules prescribing how such an apportionment should be made. Once this had been done, the non-agricultural portion of the income could be taxed.

It is easy to recognize, at this distance of time, that the judgement was eminently sensible. The Association had no option but to accept the decision, but it disliked an arrangement which left the Government with an arbitrary power of apportionment, and urged unsuccessfully that the apportionment should be made in the Act itself.

In 1921 Milligan, then chairman of the Assam Labour Board, was instructed to make a preliminary enquiry as to the basis of a reasonable apportionment, and a little later a sub-committee consisting of H. E. Spry, ICS (Finance Secretary to the Government of Bengal), Milligan, and T. C. Crawford (chairman of the Indian Tea Association) was appointed to report on the matter. The committee's report was followed by discussions between the Indian Tea Association and Government which led to a compromise whereby it was agreed that twenty-five per cent of the income derived from the production and sale of tea would be regarded as business income and so liable to tax.

This apportionment related only to the profits arising from the production and sale of tea. The treatment of tea seed, bamboos, and thatch remained for settlement, and the Indian Tea Association contended that these items should be left out of account. The Government

of India ultimately agreed that while tea seed produced for use of the assessee himself must be included in the 'profit of the whole business', profit derived from the sale of tea seed to a third party would be free from tax. The Indian Tea Association agreed not to press its point regarding bamboos, thatch, and other produce.

The year 1918 was evidently an unlucky one for the tea industry as regards tax. Not only were estates for the first time regarded as liable for tax, but planters also felt the increasing weight of the hand of the tax gatherer. The income tax authorities now held that rent-free quarters were taxable as perquisites. The Indian Tea Association contended that no such liability existed, since occupation of rent free quarters 'was not a benefit reasonably capable of being converted into money'. The same question had risen in the coal-fields, and it was therefore arranged that a case should be brought in the Raneeganj coal-field. Before the case was brought, however, the Government of India abandoned the proposal and decided that

> where a person occupies a house rent-free by virtue of his office and has the right to let the house, its annual value should be taken into account in computing his income; where, however, he has not the right to let the house, its annual value should not be regarded as part of his income.

Unfortunately, the last had not been heard of this particular matter. When the Income Tax Act was amended in 1922, the provision which excluded perquisities not reasonably capable of being converted into cash was omitted. On the strength of this omission the income tax authorities again proceeded to assess rent-free quarters. The Association still denied the legality of the assessment on the ground that even in the absence of an express provision to this effect 'the thing sought to be taxed is not income unless it can be turned into money'. The Indian Tea Association also put up the ingenious but specious argument that since seventy-five per cent of the profit of a tea garden was agricultural income, seventy-five per cent of the salary of a tea-garden manager or assistant should also be debited to agriculture and so not liable to tax.

In view of the doubt as to the legal position, the Government dropped the proposal for the time being, but in 1923 secured the passage of an Act which definitely laid down that the right to occupy rent-free premises provided by an employer was a perquisite taxable in the hands of the employee. An executive instruction in the Income Tax Manual was then issued to the effect that the cash value of a house to the occupier should in no case be deemed to be more than ten per cent of the salary of the employee. The Commissioner of Income Tax for Assam decided to adopt the maximum rate of ten per cent, but excluded commission from salaries for this purpose. In the case of managers, this was regarded by the Indian Tea Association as well below the maximum

which might have been charged, but in the case of assistants – who did not normally draw commission – it was felt that there was a case for a lower rate. The Association also contended that when two assistants shared a bungalow the rate should be halved. These contentions were not accepted.

The matter became of some importance as rates of tax steepened during the First World War. The Indian Tea Association, Calcutta, therefore suggested that employers should reimburse managers and assistants for the tax paid on their quarters, but the London Committee considered this wrong in principle. The relevant paragraph of the letter from London on this subject is of interest:

> With regard to the question of the tax being paid by employer or employee, I am directed to point out that the incidence of the tax will be trifling. For instance, in the case of a Manager receiving pay at the rate of Rs 800 per month, and assuming that his annual income does not exceed Rs 10,000, the rate of tax would be 6 pies per rupee; the assessment for tax would be Rs 80 per month on which the tax would amount to Rs 2–8 or a total of Rs 30 per annum. Another point which arises is in the case of a manager having a certain amount of private income which would bring his assessment under a higher scale of tax. In the event, therefore, of the tax being paid by the employer it would be necessary to go into the whole income of the manager in order to check the amount due under the higher scale.

In 1924 the income tax authorities sought to tax interest on tea companies' investments or deposits in full on the ground that the twenty-five per cent rule only applied to income from tea. The Indian Tea Association argued that 'credit interest is simply part of the tea companies profits in the same way that debit interest is a proper charge on these profits and should therefore be included in total income before calculating the twenty-five per cent'. Eventually a compromise was reached whereby interest on current account or on short deposits would be covered by the twenty-five per cent rule, while interest on long-term deposits and investments would be treated as business income, liable to a hundred per cent tax.

In 1927 the question of the apportionment between agricultural and business income was again raised by the Government of India which desired to leave it to the discretion of the income tax officer to make the necessary division, since doubt had been cast on the legality of the fixed percentage. The Indian Tea Association protested strongly and the Income Tax Act was amended to surmount any legal difficulties. Thereafter the Government of India revised the apportionment and decided that forty per cent of the income from the production and sale of tea would be treated as business income. The Finance Minister had indeed wished to raise the taxable proportion to fifty per cent as a set off against the removal of the export duty on tea. The industry on the other hand

suggested thirty-three per cent as a fair basis and the figure of forty per cent finally fixed was a compromise. This apportionment has remained unaltered up to today.

In 1929 a new and interesting point was raised in the assessment of the Deundi Tea Company. The Income Tax Officer, Calcutta, disallowed the sum of Rs 12,880 shown in the company's accounts under the heading 'new cultivation' on the ground that expenditure was of a capital nature. The company appealed and pointed out that this was in fact the replacement of an asset, and that since the company did not charge depreciation it was entitled to charge all replacements to revenue. The Commissioner upheld the company's contention in the following terms:

> It is clear that the replacement of abandoned areas of tea by new cultivation is a regular process carried on year by year. In some years more areas of tea are abandoned than are replaced so that the total area under tea drops, while in other years the new cultivation exceeds the area abandoned so that there is an actual extension of the area under tea in that particular year as compared with the previous year. The area under tea is thus a fluctuating figure, but I notice that the original area of 3,116 acres is rarely exceeded by more than a few acres while sometimes the area at the end of a year is considerably less than the original area. At the end of the accounting year in question the area under tea including new cultivation was actually three acres less than the original area under tea when the Company first acquired the garden.
>
> In the circumstances of this particular case it seems to me that new cultivation should be regarded as a process of replacement with the object of maintaining the output of tea at the ordinary level rather than as an extension of a cultivation with the object of increasing the output of tea. As such it appears to me to be allowable as a revenue expenditure.

In 1932 the Central Board of Revenue decided to treat expenditure on infillings or reclamation of abandoned areas as a capital expense for income tax purposes. An attempt to contest the legality of this position failed, but after discussion with the Central Board of Revenue, a compromise was reached under which infilling and replanting of areas under tea would be treated as a charge to revenue, while expenditure on the replanting of an abandoned area would be a capital expenditure. After the period with which this book is concerned attempts were made to have expenditure on planting on virgin soil treated as revenue expenditure, but they have not so far been successful.

In the year 1934 a dispute arose as to the treatment of income derived from the sale of export quotas and manufacturing rights. The Association claimed that these items should be included in the figure of profit of which forty per cent would be liable to tax, while the revenue authorities proposed to tax the whole of the income from these sources. The matter was ultimately settled in favour of the industry.

In 1935 an Income Tax Enquiry Committee was appointed by the Government of India to examine the whole field of taxation of income. The findings of that committee are outside the scope of this book, but two of them were of particular interest to the tea industry. The first of these was a recommendation – which was rejected – that the agricultural income of an assessee should be taken into account in fixing the amount of tax payable on his other income, while the second relevant recommendation was a rejection of the suggestion that an assessee should be allowed to alter the choice made by him in 1923 between charging renewals and replacements or depreciation on buildings and machinery. In the Income Tax (Amendment) Act of 1938, the statutory depreciation basis was adopted, and thereafter data were placed before the Central Board of Revenue by Sir Charles Miles and the writer regarding appropriate rates of depreciation for various classes of building and machinery.

Early in the Second World War a complication arose in connexion with the contract for the sale of tea to the Ministry of Food. Under the income tax law as it then stood, a company over fifty per cent of whose profits arose in India was treated as resident in India for income tax purposes, even though its control might be located in the United Kingdom. According to the arrangement with the Ministry of Food, tea was to be delivered to the Ministry's agents in Calcutta and it seemed likely that the resulting profits would be held to arise in India. The company would thus become resident in India and liable to Indian tax even on its 'other income' arising out of India. The Indian Tea Association urged that the industry ought not to be penalized merely because the Ministry of Food insisted on buying its tea in India rather than in London. The Government of India recognized the reasonableness of this contention and in 1942 ruled that sterling tea companies operating in British India would, during the continuance of the Ministry of Food contract, not be treated as resident or taxed on any foreign income not brought into India. A similar protection was given to rupee companies in Indian States.

B. AGRICULTURAL INCOME TAX

In the meantime, the arguments which had led to the exclusion of agricultural income from taxation had been vigorously assailed, first by the Income Tax Enquiry Committee in 1924–5, and then by Sir Walter Layton, the financial adviser to the Simon Commission. It was pointed out by several experts at that time that, as a result of the exemption of agricultural income from tax, savings accumulated in industry tended to be invested in land instead of in further industrialization. The Government of India did not agree with this view and in their despatch on the Simon Commission Report they pointed out that, whatever the

theoretical considerations might be, the exemption of agricultural income had the sanction of tradition and dealings in land had always been conducted on the assumption that it would continue.

Under the Government of India Act 1935, sources of revenue were divided between the centre and the provinces and taxation on agricultural, as distinct from other income, was reserved to the provinces. The Government of India had the right to define what constituted agricultural and non-agricultural income and as we have seen they had some years previously decided to treat sixty per cent of the profits from the growth, manufacture, and sale of tea as agricultural income. In 1939 the Assam Government decided to levy a tax on agricultural income.

The Assam Agricultural Income Tax Bill was introduced early in 1939 by a left-wing Congress Government which was generally regarded as hostile to foreign business interests and it was the subject of prolonged, and at times bitter, controversy. The Indian Tea Association did not oppose the Bill in principle, but objected strongly to the absence of provisions against double taxation. It will be remembered that at that time double income tax relief arrangements were in force between the United Kingdom and India. Agricultural income tax, being a provincial matter, would not be governed by the clause of the Indian Income Tax Act which implemented that principle and the Indian Tea Association reasonably demanded the inclusion of similar protective clauses in the Assam Bill. The more general question of refunds between a company and its shareholders was also completely ignored in the Bill. The Indian Tea Association also objected to the fixing of the lower limit of taxable income so low that in practice nobody except tea estates would be taxed, but it became clear in the course of the discussions that this discrimination was in fact the intention of the Government of Assam. Apart from these major points of principle, the Bill was badly drafted and full of technical defects and the Government of Assam rejected all offers of help in drafting an agreed measure.

The representatives of the tea industry at this time occupied an important position in the Assam Legislative Assembly. Their numerical strength was significant in view of the fairly even balance between the Congress and the opposition, but even more important was the fact that the European group was the only properly organized and well-informed party in the legislature. The controversy over the Bill inevitably became merely part of the wider struggle between the opposing forces in the Legislative Assembly. It soon became clear that few of the Assamese Members understood any of the points in the discussion. The Bill was passed hurriedly on 6 April 1939. It was then rejected by the Upper House, but before this had happened the Association in London had made representations to the Secretary of State regarding the injustices embodied in the Bill. The manner in which the Governor's right to

grant or withhold assent to a Bill should be exercised had not yet become clear under the new Constitution and it was argued on behalf of the industry that the Governor should not assent to a bad Bill. That, however, was not the intention of the framers of the Government of India Act, 1935. That Act was meant to transfer real power in the provinces to the provincial ministries and the Governor's powers of refusing to sanction a Bill were only to be exercised under circumstances where his special responsibilities were attracted. It soon became apparent in the London discussions that this was not the kind of case in which the Governor would be justified in withholding sanction.

The conflict between the Assembly and the Legislative Council necessitated a joint session and in that session the Bill was passed on 4 August 1939. The rate of Agricultural Income Tax was fixed by the Assam Finance Act, which was passed on 10 August 1939.

Having won the battle the Assam Government declared its willingness to rectify any inequitable clauses, either in an amending Bill or in the statutory rules, but before action could be taken in this matter, the attitude of the All-India Congress towards the war led to the resignation of the Assam Ministry. It was replaced by a Ministry under Sir Mohammed Saadullah, an old friend of the industry, as Chief Minister and the draft rules published in May 1940 represented a distinct advance on the original Act. They were the subject of prolonged discussions and in their final form they largely satisfied the demands of the industry, but it was agreed by the Government of Assam and the Indian Tea Association that the most satisfactory course would be to amend the Act. A Bill for this purpose was introduced in the Assam Legislative Assembly on 4 December 1941, but at this stage the Government resigned, the Assembly was prorogued, and the Bill lapsed. Thereafter the war made its impact on Assam and the matter was dropped. In fact, the industry had succeeded in securing most of the required protection in the rules and the stiff attitude it had adopted had been justified by results.

In 1941 the Government of Bengal decided to follow the example of Assam and circulated an Agricultural Income Tax Bill for opinion. The Indian Tea Association submitted a detailed case for the amendment of the Bill in certain directions, but though this Bill was dropped for the time being, when it was introduced in 1943 it contained the same defects as the original draft. Agreed amendments during the passing of the legislation, together with the acceptance of the industry's views on some important points at the time of drafting the statutory rules, rectified most of the defects and in its final form the legislation was not unsatisfactory.

The rates of tax levied in Assam and Bengal varied from time to time, but only one important dispute in principle occurred during our period. In 1952, the Agricultural Income Tax Appellate Tribunal in West

Bengal ruled that agricultural produce such as bamboos and thatch used by the company was liable to taxation, but that the produce of the labourers' *khets* was not so liable. In 1955 the High Court upheld the Association's contention on the latter point and Government apparently accepted the position that the produce of the *khets* was not agricultural income of the estate. In 1957, on the other hand, the High Court ruled against the industry with regard to bamboos, thatch, and the like. The Government of West Bengal nevertheless stated that it did not propose to tax such produce when it was used for the purposes of the estate itself. The produce would be taxed if it were sold.

The strong feeling that businessmen should not profit by the stimulus which the First World War gave to certain sections of trade and industry led in 1919 to the introduction of an India Excess Profits Tax. Companies were to be assessed on their taxable income for the year ending 31 March 1919 and as the liability of tea companies to Indian income tax had not then been established they escaped the mischief of the new tax – though sterling companies were of course liable to the corresponding tax in the United Kingdom. Before tea companies were brought into the general Indian income tax net, the Excess Profits Tax had been abolished.

Early in the Second World War, an Indian Excess Profits Tax was again introduced.

The Indian Tea Association did not consider that it could appropriately be applied to the tea industry, in which prices and profits would be automatically controlled by the Ministry of Food contract. Nevertheless, any strong opposition to the measure was obviously out of the question. The Association pressed that tea companies should be allowed to select the best of the individual years 1934, 1935, 1936, 1937, and 1938 as the basis over which the excess would be calculated, but there was no logical reason for discriminating thus in favour of the tea industry and the representation was rejected. Problems of capital values and depreciation in connexion with the excess profits tax were somewhat complicated, but the Association appears to have been satisfied with the decisions arrived at in 1941 and the subject of excess profits duty is not mentioned again in the Association's annual reports until its abolition.

C. EXPORT AND EXCISE DUTIES

When an export duty on tea was first introduced in 1916, the Indian Tea Association urged that it would hamper the industry considerably in competition with the tea industries of other producing countries. The Member for Commerce of the Governor General's Executive Council, Sir William Clark, pointed out, however, that Ceylon had imposed an export duty of the same amount as that proposed in India and he was not seriously impressed with the risk that Java teas would score at the

expense of India. The only concession given to the industry was that teas auctioned in Calcutta up to 29 February but not yet shipped should be exempt. With regard to tea awaiting shipment on garden account, it is recorded in the Association's Annual Report that: 'Government did not consider that any good reason had been advanced for the exemption of the duty, as the same abnormal conditions applied to other industries which were affected by shortage of freight.' Nor would the Government give any assurance that the tax would be regarded as temporary.

At a later stage during the operation of this duty, the Association had considered the desirability of pressing for differential duties on high- and low-priced teas. It was believed that the Government might consider a proposal to this effect favourably, but the conflicting interests of 'quality' and 'common' tea producers made it impossible to obtain general support within the Association for a proposal of this nature.

After the First World War, the Indian Tea Association and the United Planters Association of Southern India pressed repeatedly for the abolition of the duty and made particular representations on this point to the Indian Fiscal Commission in 1921. The Government of India continued for some years to maintain that financial stringency rendered it impossible to abandon this source of revenue and it was not until 1 April 1927 that it was abolished.

After the abandonment of the export duty, the industry remained free of imposts of this kind until an excise duty at the rate of 2 annas per lb on all tea manufactured but not exported was imposed by the Government of India with effect from 1 April 1944. Although, as good businessmen, the Indian Tea Association Committee disliked this new impost they were able to secure every reasonable consideration from the Government of India in its operation. Many complicated points of detail arose including, for example, the treatment of trade samples and the export of gifts of tea by parcel post, but they were all settled to the reasonable satisfaction of the industry.

The Transfer of Power ushered in an era of rapid development in the Public Sector and the financial necessities of such a phase, together with widely accepted theories regarding social justice, made it certain that taxation would rise rapidly. The process began, indeed, even before Independence was formally proclaimed. The Interim Government, in which the Congress and the Moslem League were unhappily yoked together, were at least united in their desire to expand the revenue and by an Ordinance passed in January 1947 an export duty of 2 annas a lb was imposed on tea. In the budget session of that year, the duty was raised to 4 annas.

The economic objection to an export duty, namely that the flexibility necessary to prevent it from hampering exports under certain market

conditions creates an undesirable budgetary instability, was deployed vigorously by the representatives of the tea industry in the Central Legislature. The Government were, however, able to argue with some reason that as long as Indonesia remained out of production and world demand for tea exceeded supply, the imposition of the duty would not react adversely on exports, and the Finance Minister stated that the duty would be reduced if the world market situation rendered this desirable. The doubtful argument that the duty would inflate the price of tea and so render it less competitive with coffee and other beverages was also pressed on the Government of India without effect.

In 1949 when the United Kingdom and India devalued their currencies simultaneously, the Government of India asked the Bengal Chamber of Commerce for its views as to the possibility of securing to India some portion of the price advantage which would accrue to hard-currency areas, and they enquired if this could be done either by an increase in the export duty on tea or by some system of exports designed to increase the rupee price of tea exported to hard-currency countries. The Association pointed out that any such action would probably lead hard-currency buyers to go elsewhere for their tea, and if by chance they continued to buy from India the only effect would be a reduction in return to the producer. This argument was presumably accepted and the export duty continued to be levied at the rate of 4 annas a lb until the boom of 1954. Before we consider the alterations then made in the rate, we must return to the question of excise duty.

That duty was levied on all tea manufactured and not exported. As long as the entire export of tea from India was to the Ministry of Food, the mechanics of collection were extremely simple. Ministry of Food teas went from the garden to Calcutta under bond and no duty was collected. The balance of the tea was for consumption in India and duty was levied when it left the factory. At the beginning of 1947 the block purchase system ended, though the Ministry of Food continued to buy tea and the Calcutta export auctions were reopened. Ministry of Food teas, as well as teas shipped directly overseas by the producer, left the garden under bond, but in the case of all other teas the duty had to be paid and a procedure for the refund of the duty when the tea was exported had to be devised. It was arranged that in the case of teas for export, the brokers should refund the excise duty to the producer and charge it to the buyer, who would claim the refund on production of certificate of export. The system did not work well. Claims submitted exceeded the sums paid by producers, and the delay in scrutinizing them was so considerable that at one stage the excise authorities owed the industry in North India over Rs 1 *crore*. Now that an export duty was in force, it seemed possible to devise a simpler procedure. The Association proposed that an excise duty of 2 annas should be levied on all teas, that

no refund should be allowed on export, and that the export duty should be lowered to 2 annas. From the point of view of the resources of the industry this procedure would have had the disadvantage that the excise duty would have had to be paid at the garden on all teas instead of only on Calcutta auction teas, but it was apparently considered that this drawback would be offset by the abolition of the complicated refund procedure. The change would not have affected the revenues and the Government of India intimated their willingness to accept this proposal. Unfortunately the partition of India took place before the necessary orders had been passed. India was then unable to go ahead with this procedure as she would have suffered a loss of revenue on Indian teas exported through Chittagong. The proposal was therefore dropped.

The Association's next proposal, to both India and Pakistan, was that an excise duty of half an anna should be levied on all teas and that a 4 annas export duty should be imposed. This was not accepted.

In April 1948 the Government of India raised the excise duty to 3 annas per lb – to be paid on the garden – and laid down that tea exported should be charged an additional one anna at the time of shipment. Technically the tea exported would be charged 4 annas export duty but credited with the 3 annas already paid as excise duty. In the case of teas grown in Indian States, but shipped from British India, the full export duty of 4 annas was to be realized.

Certain difficulties of reconciling accounts arose in connexion with teas consigned from the garden to the Ministry of Food under bond before this new procedure was adopted, but in general the arrangement worked reasonably well. There were, of course, many administrative difficulties about inspection and the like, but co-operation between the department and the industry was close and amicable.

As production costs increased and many companies began to find their working capital inadequate, the necessity of paying excise duty at the garden months before the sale of the tea was felt to be a burden. A proposal – which had in fact been put to the *ad hoc* Committee on Tea in 1950 – was again put forward by the Indian Tea Association in 1951 to the effect that during the non-earning months of the year, gardens should be given credit and allowed to defer payment of excise duty until later in the year. This proposal was not accepted by the Government of India.

Two years later, when the industry was in severe financial difficulties, an arrangement on an experimental basis was made to allow one month's time for payment of excise duty throughout the year. Unfortunately, not only were bank guarantees demanded by Government, but the banks were required to deposit securities to the value of the bonds guaranteed. Naturally, the banks were not willing to do this. The scheme became a dead letter and was formally abolished at the end of 1953.

In the meantime the Government had made a radical change in the system of levying excise duty. A Bill introduced in 1953 distinguished between teas according to whether they were packed in units of more or less than 60 lb. In effect the producer (unless he sold from the garden in units of less than 60 lb) would pay one anna per lb at the garden. The blender or packer would then pay a further 3 annas if he repacked in units of less than 60 lb, but would make no further payment on larger units. The exporter would continue to pay 4 annas less the excise duty paid. It is not necessary here to discuss the refinements of this scheme. It gave relief to the producer, but bore hardly on the packet distributor. The Association pointed out the undesirability of discriminating against packaged tea, but the Bill passed unchanged. The effect of this new classification perhaps requires some tabulation:

1. Teas sent down from the garden in the normal chests and then exported would pay one anna on the garden and 3 annas at the time of export.
2. Teas sent down from the garden in the normal chests and sold again in chests of similar size for consumption in India, would pay one anna on the garden and nothing further.
3. Teas sent down from the garden in the normal chests and sold again in packets would pay one anna in the garden and 3 annas in the hands of the blender or packer.
4. Teas sold in packages of less than 60 lb by the garden would pay 3 annas at the garden.

We must now turn again to the export, as distinct from the excise duty. By a familiar paradox, the boom year, 1954, was a great misfortune for the tea industry, since it led to the imposition of burdens likely to be felt long after the period of exceptional prosperity had passed. On 3 October 1954 the export duty, which had stood at 4 annas since its introduction in 1947, was increased to 7 annas. The Indian Tea Association protested vigorously and pointed out that the present period of prosperity was by way of being merely a respite from a long series of troubles, and urged the depressing effect on Indian exports that such a penal duty might have. The Association particularly objected to the increase of the duty in the middle of the season, when forward contracts and other commitments might have been made. The only practical response by Government to this representation was a further increase in the duty to ten annas in January 1955, together with the statement that a system under which the rate of export duty would vary with the current average London price of tea would shortly be introduced. This was in fact done in the Finance Act of 1955 in which it was provided that the rate of export duty on tea would be fixed on a variable basis as follows:

When the price of tea

(i) does not exceed Rs 2/8 per lb at the rate of four annas a lb;
(ii) exceeds Rs 2/8 per lb but does not exceed Rs 3/4/– per lb at the rate of six annas a lb;
(iii) exceeds Rs 3/4 per lb but does not exceed Rs 4 per lb at the rate of eight annas a lb;
(iv) exceeds Rs 4 per lb but does not exceed Rs 4/12 per lb at the rate of ten annas a lb;
(v) exceeds Rs 4/12 per lb at the rate of twelve annas a lb.

The price of tea for this purpose was to be that notified by the Government of India on the basis of the weighted average of the price of Indian tea sold in the London auction during the previous month. When the system was introduced, Government notified the London price of tea as Rs 4/3 so that the export duty continued at the same rate of ten annas per lb which had prevailed before the change.

This system was regarded as an improvement on what had gone before, but the Indian Tea Association repeatedly urged that the price of tea for this purpose should be based on Calcutta, Cochin, and London prices taken together. It was pointed out that owing to the time lag between exports and London auctions, seasonally poor teas might under the existing system bear a heavy duty, while better teas escaped more lightly.

The position after the Finance Bill of 1955 thus was that export duty was levied at a rate depending on London prices, that the excise duty paid by the producer on his normal despatches in units of more than 60 lb was one anna and that the excise duty paid was deducted from the export duty payable.

In 1956 the Association made repeated representations as to the heavy burden of the export duty and the Government responded by abolishing the 8 annas slab and prescribing a rate of 6 annas when the notified price of tea was between Rs 3/4 and Rs 4 per lb. Producers derived no immediate benefit from this change as during most of the year the price was below Rs 3/4. In the months of November and December 1956, however, the notified price would have justified an export duty of 10 annas but Government fixed the duty at 6 annas and 8 annas respectively. The rates were again amended in 1957. The new maximum permissible rates, which are recorded on page 76 of the Indian Tea Association Annual Report for 1957, represented in general a slight increase over those previously in force, but Government did not always avail themselves of the maximum rates. Thus in October, November, and December 1957 when the rates could have been 50 nP per lb they were actually fixed at 38 nP per lb.

Simultaneously with the alteration of the export duty in May 1957, the excise duty was also increased, but representations to Government were successful and the previous rates were restored on 1 June 1957.

Some further complicated problems arose with regard to the adjustment of the excise rates paid for the fortnight or so before 1 June, and an interesting detailed account of them will be found in the Association's Report for 1957.

There was considerable discussion at this time between the Indian Tea Association and her sister associations as to the desirability of urging Government to institute a system of *ad valorem* duties, but the Indian Tea Association came to the conclusion that 'such a proposal ignored the position of high cost gardens such as Darjeeling; it would involve extremely difficult problems of identifying teas; and it is likely to prove hopelessly unworkable in practice'. In any case the Central Board of Revenue flatly rejected any *ad valorem* scheme as being 'administratively impossible'.

More attention was then given by the Indian Tea Association to the problem of devising a scheme which would give common teas some relief from excise and export duties.

In 1958 the comparatively poor prices for common tea which had prevailed in 1957 led the Association to make a fresh representation to the Government of India as to the need for some relief from the heavy burden of taxation. The Government replied to the effect that they could not think of granting relief to companies which were earning profits, and invited the industry to submit a scheme which would ensure that relief granted only benefited companies which were in financial difficulties. The Association put forward proposals according to which the excise duty would be levied at different rates in different zones according to their general prosperity as measured by average yields and prices, while at the time of export, excise duty would be refunded at a standard rate, which might in some cases be higher than the excise originally levied. There was perhaps something unrealistic about that proposal in so far as it related to the refund of excise, and it is not surprising that it took the Government a long time to come to a decision. A measure of interim relief was given with effect from 1 June 1950 and later in the year the Government adopted a zonal system under which excise duty was fixed at 2 nP, 4 nP, and 10 nP respectively for the three excise zones now established. At the same time the rebates of excise duty previously allowed on export were cancelled, except in the case of the additional excise paid on package tea. The export duty was reduced to 26 nP per lb.

The concessions were substantial and involved a surrender by the Government of Rs *3 crores* out of a total revenue of Rs 20 *crores* arising from the taxes on tea. The unsatisfactory feature of the charge was that since the definition of excise zones was based only on price and not on yield, the Darjeeling District, in spite of its economic difficulties, was included in the highest excise zone.

No further changes took place in export and excise duty during our period, except those consequent on the introduction of the metric system. Attempts were made by the industry to secure some simplification of the taxation system, and to consolidate the excise duty and the various transit dues into a single impost, but they were unsuccessful.

D. SALES TAX

Shortly after the end of the war, the Provincial Governments, finding their resources severely limited by the Constitution, began to look round for fresh fields of taxation and in Assam and Bengal sales taxes were introduced in September 1947 and 1954 respectively. These taxes were levied on all sales effected in the provinces concerned, with certain exceptions not relevant to our purpose. In the case of Assam, two separate questions soon required consideration.

The first related to purchase by tea gardens of stores and equipment, while the second was concerned with the sale of tea. Under the Assam Sales Tax Act, 1947, tea estates, as registered dealers were entitled to exemption from tax in respect of goods required in the manufacture or production of goods for sale. The Assam Government proposed to take an extremely narrow view of the meaning of this exemption. They held that the manufacture of tea began at the withering stage and that sales tax was therefore properly payable on such articles as pruning knives and leaf baskets required for operations before withering. Representations by the political secretary against this interpretation were apparently successful.

When the Assam sales tax was amended in 1950, the exemption from tax of goods for use in the production or manufacture of any goods for sale was limited to cases where the goods produced were for sale in Assam. The sales tax authorities interpreted this to mean that all stocks and materials purchased by tea gardens in Assam should pay tax, since nearly all the tea manufactured would be sold outside Assam. The Indian Tea Association was advised that this interpretation was incorrect but saw no point in challenging it in the Courts as success would merely have led to an amendment of the Act. A further amendment of the Act in 1951 imposed the tax on goods delivered for consumption in Assam irrespective of where the sale took place. In this case the tax, however, appears to have been levied on the outside dealers rather than on the tea estate purchasers.

The Assam sales tax authorities next sought in certain cases to tax teas sold outside the province. This appeared to be *ultra vires* and after taking legal advice the Indian Tea Association advised its members that they should exclude from their returns sales of tea despatched from

Assam unsold – for example, teas sent to the Calcutta auctions and 'teas sold under a contract executed outside the Province when the teas were not in existence at the time of the contract'. The latter clause, referred particularly to forward contracts.

Before the new Constitution came into effect on 26 January 1950 there was some room for doubt as to the taxing jurisdiction of the Assam Government. A case of particular importance was that of teas sold in 1947 under the Ministry of Food and the Russian black tea contracts. The Indian Tea Association in due course arranged for a test case to be filed, taking two points, firstly that the section of the Assam Act which purported to tax tea sold outside Assam was null and void, and, secondly that even if that section were *intra vires*, it could only affect teas in Assam at the date of the contract. This second contention would have removed all the Ministry of Food teas from liability to Assam sales tax. The Association's appeal was dismissed, but a revision application was filed. In the particular case concerned, the Dhoedam Tea Company succeeded on the grounds that the Ministry of Food contract had been entered into before the Assam Sales Tax Act came into force. This did not help in settling the general principle.

When the new Constitution came into force the Commerce Ministry of the Government of India pointed out that under Article 286 of the Constitution, the State Government could not tax sales outside the State, or sales in the course of the export of tea from India. This limitation strictly speaking came into effect when the Sales Tax Continuance Order lapsed on 31 March 1951. At the same time the Assam Sales Tax Act 1947 was amended and it then became abundantly clear that thenceforth Assam could only tax sales of tea effected in Assam in respect of teas actually delivered for consumption in Assam.

E. TRANSIT TAXES

The difficulties described above were partly the result of the considerable confusion in India as a whole as to the rights of the States in the matter of sales tax, but in the case of Assam they also reflected the inevitably narrow approach of a Government desperately short of funds, in whose territory the tea industry provided the highest yielding milch cow. The same desperate search for money led the Assam Government in 1954 to secure the passage of the Assam Taxation (on Goods carried by Road and Inland Waterways) Act. In the case of tea this Act imposed a tax at the rate of ¼ anna per lb on the carriage by road or inland waterways. It was constitutionally impossible for Assam to apply the tax to carriage by rail, but as practically all tea would have to pass over a public road to the railhead, this made little difference. The Indian Tea Association protested vigorously at this imposition, particularly as it came at the time when the new requirements under the Plantations

Labour Act were about to impose heavy burdens on the industry, but naturally the industry's objections went unheeded.

The Association then contended that the Act was *ultra vires* of the Government of Assam inasmuch as it constituted an interference with inter-State commerce, amounted in effect to an excise duty on tea and impinged on the field of legislation reserved to the union by the Tea Act 1953. It also argued that a tax which affected only tea and jute was discriminatory.

Soon after the Assam Act became law, the Finance Secretary gave an assurance that the tax would not be levied on Dooars teas which passed through Dhubri (in Assam) preparatory to transit by river to Calcutta. Nevertheless in 1955 the tax was levied in such cases and they were therefore included in a series of test cases sponsored jointly by the Indian Tea Association, the Assam Tea Planters Association, and the Dooars Planters Association. The High Court of Assam held that the Act was within the competence of the Assam Government.

The idea of transit taxes was attractive to hard-pressed State Governments and in October 1955 the Government of West Bengal secured the passage of the West Bengal Entry of Goods into Local Areas Act 1955. The Act provided for the levy of tax on tea and other commodities entering the Calcutta municipal area and certain neighbouring areas, whether carried by rail, road, or river. The only teas exempted would be those which passed through Calcutta unsold – mainly to the London auctions. The Indian Tea Association objected emphatically in the following terms:

> The practical effect of such taxes upon the Industry is the same as that of an addition to the Central Government's excise and export taxes. It appears entirely unfair to the Industry that, when the Central Government are prepared to reduce their export duty when the price of tea falls, the effect may well be nullified by the addition of taxes similar to excises by the State Governments. A large proportion of tea manufactured in West Bengal has already been made subject to the Assam Government tax on account of its being routed *via* Dhubri in Assam and will now have to pay West Bengal tax in addition. Producers of tea in Assam will have to pay on their entire production the Assam Tax, plus the West Bengal Tax on all teas except those sent on direct shipment for sale abroad.

The Act was nevertheless put into operation and its effect was that with the Central Export Duty at the level of 8 annas per lb, the new Assam and Bengal taxes would bring the total duty on teas sold in Calcutta for export to 10 annas per lb, 'a fraction of an anna less than the duty now levied in Ceylon'. The North Indian grower 'was thus placed at a marked disadvantage considering the cost of transporting his crop long distances to the port'.

The Central Government regarded these State taxes with disfavour and more than once unofficially pressed for their abolition. The response of the States concerned was always to the effect that they would be ready to give up these taxes, if the Central Government would reimburse them for the resulting loss of revenue. Needless to say nothing was done.

Section 8

TEA MARKET EXPANSION PROPAGANDA

CHAPTER THIRTY-EIGHT

TEA PROPAGANDA IN THE NINETEENTH CENTURY

EARLY EXPERIMENTS

Until 1880 the United Kingdom had been virtually the only market for Indian tea and exports from India to all other countries seldom exceeded 200,000 lb in a year. In 1880–1, exports to Australia rose from 85,994 lb to 807,608 lb and in the following year exports to the United States of America similarly increased from 68,597 lb to 197,302 lb. These increases appeared to be the beginning of a long-term trend and, in 1882, at the first annual meeting of the Indian Tea Association, the Chairman declared his belief that the new Australian and American markets would take off any increase in production. In the following year, he was able to express satisfaction that exports to the USA and Australia in 1882 had been higher than had been anticipated. He urged members to give good support to the Calcutta Tea Syndicate which had just been formed with the object of finding new markets for Indian tea. In 1883 a severe reaction set in. Exports to the USA and Australia fell to low levels, and the syndicate fizzled out.

The industry had nevertheless been made to realize the value of propaganda, and in 1884 the Indian Tea Association guaranteed any loss which might be incurred on a tea pavilion which the superintendent of the Indian section proposed to establish at the Health Exhibition held in that year. Tea was served, and samples and photographs illustrating the processes of tea cultivation and manufacture were exhibited. The technique of such displays had to be learned and the superintendent's report showed that he had had to feel his way.

> Not taking into account the outlay I first made in 'Plant', the amount of expenditure during the first few weeks was nearly as much as that of the receipts, and thus I was obliged to act more cautiously at first than I found it necessary to do later on in the season, when I had gained experience of the Public and what its tastes are. . . .

As an instance of what expenses had to be incurred and which were rather startling at first to any one so inexperienced as myself in such matters, I may mention that the average number of cups (alone) broken in a day was four – in one period of ten days four dozen were broken, and that out of 180 tea pots I bought during the season, only ten are whole now. These breakages are easily accounted for by the frequency of the cups and tea pots being washed and used, not so the spoons, of which a great number were found missing.

There were connoisseurs at the exhibition who were hard to please, and who 'did what it is not customary to do at afternoon tea, although it may be paid for, i.e. they took out leaves from the tea-pot and critically examined them'.

Tea from any district was obtainable if asked for, though of course there was considerable difficulty, never quite overcome, of impressing upon the minds of the attendants, who certainly, as regards India, were not well versed in geography, the names of the various Tea Districts, i.e. Darjeeling Tea was for a long time called 'Darlington Tea', Cachar Tea, 'Catcher Tea', the last misnomer being perhaps excusable.

For some reason not explained by the superintendent, permission to sell samples of tea was granted by the exhibition authorities in the case of China, but not Indian tea. Nevertheless, the first collective venture of the industry into the field of tea propaganda in England was not unsuccessful and the guarantors were not called upon to pay.

Exhibitions were popular at this period and when it was decided to organize a Colonial and Indian Exhibition in London in 1886, the industry decided to participate. The Government of India pleaded financial stringency as an excuse for not making a grant, but the Indian Tea Association and the Indian Tea Districts Association of London nevertheless decided to organize an Indian tea room. Samples of tea were invited from all gardens and it was suggested that 'some estates may be willing to furnish neat 5 lb or 10 lb boxes, with the garden name and brand, with the view of attracting the attention of the small trader as well as the consumer and for competition with the sightly and attractive little China boxes'. Once again the operation was a success in the sense that the sponsors were not called on to reimburse any losses.

The attempts to develop an Indian tea trade with Tibet at this period have already been described. A wholly new venture was that of F. Acerboni & Company the object of which was to work up a business of selling Indian tea in Italy. The company was tempted to embark on this enterprise by the low prices of tea then prevalent, as well as by the co-operation of the Italian Government which led to a reduction of the Italian import duty on tea. Acerbonis asked the Indian Tea Association to make tea available for sale in Italy at tempting prices, and to share the expenses of advertising. The Indian Tea Association in this

matter combined enterprise with a due regard for economy and limited their co-operation to placing tea worth Rs 1,000 in the hands of Acerboni's agent. The Association's cautious attitude was justified and in 1888 the general committee reported in the following terms:

> The General Committee are sorry to say that the effort made has not been successful. Mr Consolo visited Naples, Rome, Florence, Bologna, Leghorn, Milan, Turin, and Genoa, but found no encouragement whatever to induce a shipment of Indian teas, unless in very small quantities to arrive about the month of October, when Italy is frequented by many English, American, Russian, and other visitors. The tea supplied by the Association was shipped to Naples, Leghorn, and Genoa, but as there was very little demand at either of these places and throughout the surrounding localities, Mr Consolo, after trying to push sales to the utmost of his power, decided to ship a good portion of the tea to the London market. Under these circumstances he does not consider it advisable that any further steps should be taken by the Association in this direction.

This failure did not damp the spirits of the leaders of the industry and in that same year, one Alfred Allies, at the request of certain influential tea companies, put forward a scheme for direct consumer propaganda in the United States of America. Allies pointed out that attempts to work through ordinary trade channels had failed, and that Indian teas exported to America had in fact in many cases been re-exported from that country. He thought in terms of a three years' campaign and urged that growers in Indian tea should, for that period, give half per cent of their crops to a committee which would use them for consumer propaganda in the United States of America. Calcutta interests wanted more information, and in London a sub-committee was appointed by the Indian Tea Districts Association to examine the matter in greater detail. The sub-committee expressed the view that the trade in America were not likely to help and that the best hope lay in establishing retail shops in the United States of America for the sale of dry and liquid tea, and in persuading retailers to sell packet teas. These methods would be supplemented by press publicity, and operations were to be controlled by a limited company with a capital of about £40,000, in which tea-garden proprietors would be invited to take shares, paid up either in cash or in tea. The company was styled the Associated Tea Planters Ltd and the prospectus was duly issued in 1888. In his speech to the annual meeting in 1890, the chairman of the Indian Tea Association stated that the Associated Tea Planters Ltd was making slow but definite progress. He must, however, have been speaking without due authority, for in the Annual Report of the Indian Tea Association for 1889–90, it was specifically stated that no report had been received during the year. The Associated Tea Planters Ltd finds no mention in subsequent reports of the Indian Tea Association and it is to be presumed that it petered out.

In the meantime the Indian Tea Association had taken a small part in the Glasgow Exhibition of 1888, and in the Brussels Exhibition of the same year. A grant of Rs 2,500 was made by the Government of India to the Brussels Exhibition and the arrangements were put under the charge of one J. Harington, who was to be a leading figure in the field of tea propaganda. The total contribution from the Indian Tea Association consisted only of 1,300 lb of tea which fetched receipts of £153. Ceylon participated on a somewhat more lavish scale. The committee of the Indian Tea Association were nevertheless more forward-looking than this small contribution might suggest, and they hoped to commission Harington to travel in Holland in tea interests. 'It is in Holland', they said, 'that Mr Harington looks for the greatest chance of success, as the consumption of tea in that country is universal, and the inhabitants being accustomed to Java and other teas, their prejudices are not so exclusively in favor of the China leaf.' Unfortunately, money was not forthcoming, and the project was dropped. It was agreed that Harington should from his own resources establish a permanent depot for the sale of Indian tea in Belgium.

The fact that Finlay, Muir & Company were agents for the Glasgow Exhibition might have been thought to make it certain that Indian tea would be adequately represented, but in spite of their efforts, Ceylon seem to have got in first. The Ceylon planters applied to the executive committee of the Exhibition to be allowed to put up a handsome building for the exclusive sale of Ceylon tea, coffee, and cocoa; they offered to bear all risks and to hand over all profits. Under Finlays' influence, the Indian tea industry made a somewhat similar offer, but, tempted by a guarantee of £3,500, the exhibition committee handed over the Indian Tea House to a refreshment contractor.

The Indian Tea Association took a more active part in the International Exhibition in Paris in 1889. No official help was forthcoming, since this exhibition commemorated the French Revolution, but to prevent the arrangements for tea in the Indian section from falling into the hands of a contractor, the Indian Tea Association came forward with more liberal guarantees than in the earlier exhibitions – though here again Ceylon was earlier in the field and secured the sole concession of tea rooms in the British section. P. A. Walker, the representative of the Indian tea industry at the exhibition, remarked sadly that in Ceylon 'both planters and merchants seemed to act with a laudable unity of purpose and sufficient funds are always forthcoming when required'.

Nevertheless, producers of Indian tea accepted the challenge from Ceylon and subscribed liberally. It was considered important to give the section an Indian atmosphere, and Indian *khidmatgars** were sent to

* Table servants.

operate the tea stalls. 'The only difficulty I foresee,' wrote Walker, 'would be that rich people would try and tempt them away as servants.' The exhibition was, from the point of view of Indian tea, a distinct success, and after its conclusion in 1889, the guarantors of the Indian tea section formed a limited liability company known as the *Palais Indien* Tea Houses Ltd to establish depots in Paris for the sale of dry and liquid Indian tea.

The Government of India at this time took an active interest in the fortunes of the tea industry, and Sir E. C. Buck, Revenue and Agriculture Secretary to that Government, visited Hamburg with Harington, who was then designated Commissioner for Northern Europe for the Indian Tea Association. Buck felt strongly that the Association should undertake propaganda in Germany and he wrote in the following terms to Baron von Heyking, the German Consul-General in Calcutta:

> Indian Tea is hardly known in Germany by the retail customer. The large importers, it is true, buy a good deal of Indian Tea for mixing, but in retail business it is sold under the name of China Tea. Tea is sold by German grocers at very high prices, and is used more as a luxury by the rich or as a beverage in the sick-room by invalids, than as a national drink. Except Tea sold at the highest prices to favoured customers, the Tea procurable is of poor quality and not calculated to encourage extension of Tea drinking; much of it is adulterated, cheap, China stuff, which is sometimes flavoured with Indian Tea. Many of the English residents whom I met in Hanover, and elsewhere, procured their own Tea from London, because they could buy nothing good at a reasonable price in Germany. The grocers make very large profits on what they sell, as much as from 1½ to 3 marks per pound. But as the quantity sold is comparatively small, the profits are realized by a small number of the larger grocers only, and the trade as a national business is insignificant. Great reluctance is shown by the grocers of the large towns to take better and purer Tea from India and to sell it at a lower price, because the large dealers are satisfied with their present high profits, and the smaller grocers are afraid of speculating in a new business.

In examining Buck's suggestion, the Indian Tea Association had in mind the consideration that a consumption per head as high as that in the Netherlands would perhaps have made propaganda unnecessary, while a consumption as low as that in France might have meant that the field was not likely to be fruitful. Consumption per head in Germany was four times that in France, but only one-fifteenth of that of the Netherlands, and it seemed to the Indian Tea Districts Association in London that, in these circumstances, Germany probably offered the best field in Europe for enterprise. Harington accordingly made arrangements with Böttjers that they would buy from him, at fixed prices, three grades of Indian tea packed in London by McMeekins and

would retail the tea in Germany at prices of three, four, and five shillings per half kilo. Advertising would also be done at the joint cost of Harington and Böttjers. No expense was to fall on the Indian Tea Association or the Indian Tea Districts Association, but Böttjers were to have the monopoly for five years of tea packets stamped with the Association's name.

The scheme was well conceived and apart from Harington's natural enthusiasm, the fact that he took his share of financial responsibility, in the hope of future profits, was a guarantee that he would work it diligently. Nevertheless, it proved a complete failure and a year or so later Harington regretted that he had made no real impression on the German tea market. The arrangements then proposed by Böttjers for continuing the work were not considered satisfactory and the scheme was dropped.

THE AMERICAN CAMPAIGN

Three campaigns – in the USA, in Italy, and in Germany – had thus proved abortive, but the Indian Tea Association and the Indian Tea Districts Association of London nevertheless felt strongly that a considerable effort must be made to push the sale of Indian tea in the USA. The London Association, perhaps unfairly, criticized the Indian Tea Association, Calcutta, for lack of drive in this matter, and expressed the view that 'much good could be done if Calcutta could be induced to bestir herself in the same way that Ceylon had done to secure fresh markets for her produce – the prevalent feeling being that in this respect Calcutta does not do half as much as might reasonably be expected'. In Calcutta, J. N. Stuart suggested that petty jealousies of one another had hitherto paralysed the Association in this matter, but that 'roused now by the news that Ceylon is laying out two *lakhs* for the representation of her tea, the Indian tea industry seems to be waking up'.

At the instigation of Shaw Wallace & Company, in 1892 the London Association proposed to levy subscriptions on an acreage basis for the exploitation of new markets through the agency of the London Association. Some companies considered that subscriptions were already too high and that development might safely be left to commercial enterprise.

The proposal of Shaw Wallace & Company soon bore fruit and in 1893 the Indian Tea Association asked its members for subscriptions at the rate of two annas per acre of tea for propaganda at the Chicago Exhibition of that year. The response was satisfactory and grants of Rs 40,000, Rs 10,000, and Rs 5,000 respectively were also secured from the Governments of India, Bengal, and Assam. R. Blechynden, who with Harington can be regarded as a pioneer in this field, was appointed to represent Indian tea interests at Chicago, and a Chicago Committee of the London Tea Districts Association was set up to co-ordinate the

connected activities. A link-up was effected with S. J. Tellery & Company, Indian art manufacturers, for a joint exhibit of Indian art manufacture and Indian tea. Although this arrangement led to some complications, it was essentially sound and enabled tea to be displayed far more attractively and lavishly than would otherwise have been possible. Blechynden writes regarding the East India Pavilion that:

> It is entered through a lofty gateway surmounted by four minarets, and is profusely ornamented in an elaborate arabesque design. The gateway, as is customary in structures in this style, forms the principal architectural feature of the building, and it is here that the ornament is most fully carried out, and reinforced, by paintings in vivid oriental colours, in strict keeping with the design followed, the whole having a rich and harmonious effect. On either side of the entrance are arcades, lavishly decorated with relief work, brackets, and ornamentation . . . The whole of the interior of the building was draped and decorated with carpets, rugs, *phoolkaries*, silk saries, hand-printed cloths, trophies of arms and armour, niches, and brackets supporting Indian and Burmese gods, and other figures, and the whole effect was at once rich and artistic to a degree.

Khidmatgars, dressed in red and gold uniforms, completed the effect of oriental magnificence. For the first few days tea was sold at 5 cents a cup and 10 or 15 cents a pot, but the crowds were so great, that prices had to be raised to limit them. Blechynden dealt admirably with the problem of treating impartially the teas from different gardens and districts. He arranged with Gow, Wilson & Stanton of Rood Lane 'to put up several qualities of tea in varying proportions from different districts and gardens, in blends of such a nature that any of those approved could be duplicated and followed up for an indefinite time'. Eventually two blends, one known as *Light of Asia* from Darjeeling gardens and another labelled *Star of India*, from plains gardens, were chosen and sold at different prices.

A leading American firm of grocers, Reid, Murdoch & Company had a representative installed in the Indian Pavilion to deal with would-be purchasers of dry tea. Wherever possible, enquirers were told to buy from their own grocer, who was then informed that he could obtain *Light of Asia* or *Star of India* from Reid, Murdoch & Company. Thus was laid down the principle, which has been fundamental in all subsequent tea propaganda, that the market expansion organization must never seek to oust the retailer, but rather must direct trade to him. Before the start of the exhibition, Blechynden had realized that if the operations were to be of real value to the industry, a permanent tea market expansion organization in the United States of America would be essential and he had therefore entered into a long-term arrangement with Reid, Murdoch & Company, under which, in a certain area of the United States of America, that firm would be the sole agents for

particular brands of Indian tea, to be supplied to them by the Indian Tea Association on four months' credit. Blechynden stated:

The main point was the attraction offered by the advertising of the brands and the extra value thus given to them . . . By virtue of this we secure the influence of a powerful firm, well organised and in direct touch with the trade, whose name is a guarantee to the trade of the *bona-fides* of any undertaking with which it is associated. It is true that the firm reap all the benefits of the advertisement given at the Exhibition to certain brands; but unless they got some such direct benefit, it would have been hopeless to expect them to interest themselves in the tea. The more they profit the more they will push, and the more they push these teas, the more certain it is that rival firms will enter into competition with them. Apart from mere speculations as to what may result, I can say that when the Exhibition closed, packets of Indian Tea had been placed in the hands of more than 1,500 grocers in different parts of the United States, a result, which has never, so far as I am aware, been achieved by any other Agency for Indian Tea in America.

It is not possible to pursue this subject in further detail, but the curious reader may read Blechynden's fascinating report in the proceedings of the general committee of the Indian Tea Association for the year ending 28 February 1894. It is enough to say here that Indian tea met with an unprecedented success in the exhibition, and that the work done there by Blechynden can rightly be regarded as the foundation of the later market expansion activities of the industry in the United States of America. It led, moreover, to two important proposals, the first of which was for the establishment of an Indian Tea Fund Committee, afterwards known as the American Market Fund Committee, to collect subscriptions and organize arrangements for the further promotion of Indian tea in the American and Canadian markets. The essence of the scheme prepared by Blechynden was to repeat the show technique, already used by producers of cocoa, and other commodities in the United States of America, and it is best described in his own words:

The system of holding Food-shows periodically in different parts of the country is an organised one, and the State Fairs held annually offer the best means of reaching the consumer. Adopting the common system, I would propose employing, say half a dozen native servants, and travelling about the country from one show to another during the season, which extends through the winter and spring. For the rest of the year, still following the usual methods, the servants could be kept for a month or more at a time in grocery stores. With six men at least, three stores could be worked at the same time in different parts of a city. At the expiration of a month, the men would be transferred to other stores, or in the case of smaller cities, to other cities. In connexion with the grocery stores, I propose little changes. My idea is to have a series of three, or more, carefully prepared lectures, illustrated by slides of Tea Gardens, etc, and to make such a series interesting, other matter of a descriptive character regarding historical spots in India, dresses of the people,

caste, and kindred subjects might be introduced. The lectures might be given independently of the stores, in the regular manner, selling tickets of admission, giving the grocer a certain number proportionate to the number of pounds of tea he purchases for distribution to his customers for the tea. Such lectures could include, the distribution of tea in the cup at their close.

In his memorandum, Blechynden discussed the important question as to whether this propaganda should be on behalf of Indian tea generally, or particular and reputable commercial brands, or brands sponsored by the Indian Tea Association, and as the principles involved were of an enduring importance, it seems desirable to reproduce his note *in extenso*:

My own opinion is that it is inadvisable to advertise Indian Teas generally to the customer, for I think that we should have certain standards of what we recognise as good Indian Teas and that it is impossible to erect and sustain such standards without giving them defined names, under which those who desire to purchase can buy them. In doing this it is, I submit, not very material to us that we are giving direct advantages to certain firms. But if the Committee think that this feature of the scheme is undesirable, it can be met in two ways. One is, to advertise the tea used simply as Indian Tea. The alternative is a suggestion which recommends itself to me strongly, but which the Association may hesitate to adopt for other reasons besides the obvious one, that it will interfere in a measure with private enterprise. The plan I refer to, is to adopt four or more standards, give them specific names, and retain those names as the property of the Association. By this means in addition to the indirect benefit to the Industry at large, the Association would, at the end of its operations, be in possession of a distinctly valuable asset, which it could deal with, either by selling it to a company, transferring to the Agency firms, or in other ways. There is no doubt that by advertising certain blends under distinctive names, those names acquire a fictitious value, and the Association, may therefore, be prepared to consider, whether it cannot retain for itself some portion of this advantage. In any case, I maintain that it is essential to the interest of Indian Teas, to employ at all times certain standard blends. As soon as a taste and demand is created for any given blend of Indian Teas the substitution of other blends either in the legitimate course of business, by enterprise and advertisement, as well as by fraudulent substitution, will inevitably follow.

The solution favoured by Blechynden was perhaps contrary to the principles enunciated earlier in this chapter that the market expansion organization should not compete with the trade. Whatever its merits may have been, it was not the principle ultimately adopted. It was in fact decided that the propaganda should be on behalf of Indian tea generally. Subscriptions at the rate of two annas per acre of cultivation, and half an anna per maund of made tea, were raised and Blechynden was sent back to America to carry out his plans.

The second proposal resulting from the Chicago experience was that

India and Ceylon should combine in endeavouring to introduce British-grown tea into America and Canada. The author of this proposal was Sir John Muir of James Finlay & Company, and though he did not, in the reported proceedings of meetings, state explicitly his reasons for desiring such a combination, it is clear that in his view the real struggle in the United States of America was to be between China tea and India-type tea. Increased consumption of India-type tea, whether grown in India or Ceylon, would relieve the pressure of supply on demand in the London market, and so improve prices. This view has long since become an integral part of the orthodox trade theory of tea propaganda.

P. R. Buchanan, himself a supporter of the proposed combination, discussed it with the editor of the *Ceylon Observer*, who wrote thus to him on 26 January 1894:

I find that there is no chance of our Planters' Association taking the lead in asking co-operation from India, though there is a general acknowledgment and a strong under-current of feeling that the starting of a Ceylon Retail Store in Chicago was a blunder, and a determination, I think, to subsidize no new individual efforts for America, but rather to do general advertising. I believe, however, that if a proposal came from Calcutta on the basis you mentioned, it would be accepted at once by the Ceylon Planters' Association. . . . I think if you saw your way with Sir John Muir to sound the traders in the Indian Tea Trade and Association, and get them to agree to a big Advertising Fund for America, and suggest or invite Ceylon to join with contributions in proportion to export, the fund to be administered by a Joint Committee, that success would follow. The danger is of India and Ceylon going on separately in a peddling way and creating suspicions of each other in place of uniting forces on behalf of pure clean teas against the 'faced', inferior Japan and China, eighty millions in the former case, it means a slow advance over many years, in the latter, a big and rapidly progressive gain.

India took the hint, and at a meeting of the general committee of the Indian Tea Association in Calcutta on 20 March 1894 it was resolved that:

this Meeting of the Indian Tea Association is of opinion that it is in the interests of both Indian and Ceylon planters that those interested in the Tea Trade of both countries should combine in endeavouring to introduce the British-grown tea into America and Canada and invite the co-operation of all connected with the Tea Industry in promoting such a combination.

Unfortunately, Ceylon found practical difficulties in the way of accepting this proposal and on 14 April 1894 the Ceylon Planters Association resolved that:

in the opinion of this Association it is most desirable that arrangements made on behalf of Ceylon and India to introduce their teas into America should be in sympathy with one another and based on mutual arrangement; but the Association feels that the control of the Ceylon arrangements and the settlement of precise nature will have to remain in Ceylon.

Blechynden therefore had to carry on propaganda in the United States of America and Canada on behalf of Indian tea alone. The control of operations was vested in a special sub-committee of the London Association, which presumably – though this is not clear from the records – acted as an agent for the American Tea Fund Committee.

Although a formal alliance of India and Ceylon to carry out tea propaganda in the United States of America could not yet be arranged, in practice Blechynden co-operated very closely with Mackenzie, the Ceylon Tea Commissioner in that country. Blechynden soon came to the conclusion that the gorgeously apparelled *khidmatgars* had lost their initial appeal and he began to rely more on advertising, newspaper articles, demonstrations, and above all the provision of facilities for tea drinking in public places. He also, in conjunction with Mackenzie, subsidized advertisements by British sellers of Indian teas, provided they spent equal sums in advertising India and Ceylon teas. In other words, he embarked on a policy which was to be systematically repeated almost sixty years later, when the International Tea Market Expansion Board joined with the tea trade in America in a joint propaganda campaign.

In 1896 the link between India and Ceylon became closer. The main Ceylon advertisement for tea, then running in twenty-eight magazines in the United States of America, was altered to cover India and Ceylon teas and India shared the cost with Ceylon. Great progress was made in the technique of propaganda, and as a result of the campaign, certain tea houses which had hitherto sold only China tea were forced to become propagandists for Indian tea. The results were encouraging as will appear from the following table.

INDIA AND CEYLON TEA TAKEN BY NORTH AMERICA DURING EACH OF THE LAST SIX YEARS

	1891 (lb)	*1892* (lb)	*1893* (lb)	*1894* (lb)	*1895* (lb)	*1896* (lb)
India	1,342,321	1,586,426	2,111,247	2,428,230	4,059,595	5,205,405
Ceylon	991,981	1,489,474	1,870,590	2,295,140	3,735,185	4,268,614
Total	2,334,302	3,075,900	3,981,837	4,723,370	7,792,185	9,474,019

In 1898, there was some controversy as to the methods to be followed in the American campaign, and at the annual meeting in that year, A. E. Henson, of Andrew Yule & Company, expressed the view that the results were incommensurate with the expenditure. He contended that too much was spent on advertising and too little on subsidising traders, and complained generally that 'while such stress is being laid by this Association on the necessity of advertising our teas in America, orders

secured have positively had to be neglected for want of tea to fill them'. He advocated the compulsory sale in Calcutta of a percentage of all teas so that outmarket demands could be met direct. Nevertheless, the view of the overwhelming majority was, that the American campaign was justifying itself by results and that the vigorous attempts of Japan to expand exports to the United States of America made it essential for the Indian Tea Association to continue its campaign in that country.

In 1899 the Indian Tea Association, both in London and Calcutta, executed a *volte-face*. They noted the effects of the United States of America war tax on tea imports; they considered that in any case the new American strictness over excluding poor tea favoured the prospects of India and Ceylon; and more important still, they considered that:

> there are now so many well-established and powerful Agencies at work in the United States and Canada, whose interests it is to push British-grown Tea, both by means of travellers and by the distribution of samples through the post and otherwise, that the Committee consider the further expansion of the trade may safely be left in their hands, and that it is not necessary for the Association to continue a special agency for the purpose. Any further assistance that may be required should, your Committee think, take the form of subsidies.

Blechynden's services were therefore discontinued. It is not easy to understand the logic of this abandonment of the American campaign, particularly in view of the remarks of the chairman of the Indian Tea Association at the annual meeting in 1899 that 'if ten million pounds more of Indian tea had found other markets than London we should not have seen the great slump in prices last season and to this end we should not relax our efforts in seeking for new markets'. It is difficult not to feel that, in this matter of market expansion, the Indian tea industry lacked pertinacity – perhaps there were too many 'die-hards' who disbelieved in general tea propaganda and considered that each distributor should be left to fend for himself. The link with Ceylon in the United States of America was nevertheless retained and in 1899 £2,000 was spent by the Indian Tea Association in the United States of America and Canada through the agency of Mackenzie, the Ceylon representative. Results in those countries were encouraging, and in 1899 8,500,000 lb of Indian tea and 8,250,000 lb of Ceylon tea were sold there.

OTHER CAMPAIGNS

After the abandonment of the American campaign, the Indian Tea Association still proposed to levy a propaganda contribution, but it was to be spent on the expansion of the market for Indian tea in other parts of the world. The Indian Tea Association had indeed already been active in this field. The attention of members had been drawn to the

opportunities for the sale of tea in Hungary in conjunction with S. J. Tellery & Company, as well as to the proposal from one J. E. Little of Warsaw for the introduction of Indian tea into Russia. This was of particular importance in view of the Russian Government's plan to start a tea plantation in the Caucasus, and the despatch by that Government of a deputation to India, China, Ceylon, and Java to collect plants, labourers and information.

Harington was appointed to enquire into tea market expansion possibilities in Russia, Germany, Turkey, Greece, Italy, and Holland and plans were also made for the representation of Indian tea at the Paris Exhibition in 1900. On this occasion, for the first time, the United Planters Association of Southern India appeared on the propaganda scene and took the initiative in asking the Indian Tea Association what they intended to do. The United Planters Association of Southern India had, of course, coffee in view as well as tea. The Indian Tea Association now approached the Government of India for financial assistance and pointed out that the Melbourne Exhibition in 1880–1 had been the starting-point of the sale of Indian tea in Australia. A substantial grant was given and India and Ceylon worked in close co-operation. Presumably all went well, though strangely enough the only reference to France in the Indian Tea Association's Report for the following year is that 'the depot at 48, *Faubourg St Honoré*, Paris, is doing an increasing business'.

Persia also received consideration at this time as a large potential customer, but, unfortunately, Indian tea producers suffered in regard to their Persia interests from the shipment of much cheap and unsound tea. It appears to have been exported from Indian-owned gardens in the Kangra Valley and according to the Report of the Indian Tea Association the situation was made worse by 'the malpractices of native dealers in Bombay, who flooded the market with damaged and adulterated leaf that no planter would designate by the name of tea'. This is of particular interest in view of the large industry which grew up outside Bombay between the two world wars for the adulteration of Indian tea with black gram husk.

In spite of the failure of some of these campaigns, it is at least clear that by the end of the century, the industry was becoming propaganda minded.

CHAPTER THIRTY-NINE

THE INDIAN TEA CESS COMMITTEE: I. UP TO 1914

The new awareness of the importance of publicity soon led first to the formation on a voluntary basis of the Indian Tea Market Expansion Commission and then to representations asking Government to introduce a statutory cess for tea propaganda purposes.

THE INDIAN TEA MARKET EXPANSION COMMISSION

A sub-committee appointed by the Indian Tea Association in March 1901 drew up a scheme based on the assumption that producers would contribute tea to a distributing agency to be known as the Indian Tea Market Expansion Commission. Messrs Andrew Yule & Company undertook to work the agency for three years and a grant of Rs 40,000 was made from the American and Foreign Market Fund of the Indian Tea Association. The attention of the Commission was directed mainly to India. A superintendent and 'at least two smart European travellers' were to travel round the country and push the trade in every possible way, and special attention was to be given to work at railway stations, mills, factories, and coal mines. The sub-committee made inquiries as to the most likely areas for work. They concluded:

> It seems to them that in the Upper Provinces the demand is probably greatest. In fact they think there is little doubt that large quantities of tea might be disposed of in the principal northern centres, such as Delhi, Cawnpore, Lucknow, Agra, Meerut, Amritsar, Umballa, and elsewhere. It is also asserted by dealers and others that brewed tea could be extensively sold at the chief junction and terminal stations in the Punjab, the North-west Provinces, and in Bengal. Other parts of the country, to which the attention of the Sub-Committee has been drawn by a most competent authority, are the Districts of Eastern Bengal and the Western Punjab. In Eastern Bengal there is a population of approximately twenty-five millions of Mohammedans. They are well-to-do agriculturists; and are said to be better able to afford small

comforts such as tea than any other rural population in India proper. The Western Punjab is also a promising field. The people there number about ten or twelve millions. They are practically all Mohammedans; and will, it is stated, readily take tea if they can procure it. The markets of Southern India – where the Travencore Planters will co-operate with the Agency – are likewise reported to be capable of development.

After a second appeal, sufficient support was forthcoming to justify the commencement of operations. The Indian Tea Market Expansion Commission got to work vigorously and we learn from its report at the end of three years' operation that perhaps the most important of the methods adopted by the Commission was the issue of *pice packets* as a means of placing tea within the reach of the poorer classes. Attempts were made to induce the postal authorities to allow these *pice packets* to be sold through the regular post offices in the same way as quinine, but this concession was not granted. The Commission nevertheless was able to make use of the many part-time, or non-departmental post-masters who were not government servants. A monthly prize distribution was arranged in connexion with the packets and they seem to have been popular.

Attempts were also made to establish a tea service on the principal Indian railway lines, through the medium of contractors. The publicity value of this method of work is obvious, but the Commission reported that 'the returns were very inadequate as in spite of a regular staff of inspectors it proved impossible to secure reliable accounts from the vendors and there is no doubt whatever that a considerable quantity of tea was sold and not reported'. Demonstrations were also arranged at fairs and *melas*, particular advantage being taken of the Coronation Durbar at Delhi and the Calcutta coronation festivities. Daily distribution of brewed tea to the principal government and mercantile offices was arranged and a night service was organized outside theatres in the winter. These activities were supplemented by tours of the two European travellers with the object of persuading local grocers to take tea for sale.

The work seems to have been done intelligently and vigorously, but, nevertheless, it was brought to an end in 1904, presumably because the Indian Tea Cess Committee had been formed to take over, *inter alia*, this kind of operation. The Indian Tea Association reported 'that it cannot be said that the results of three years working indicate the existence of a proper tea market in India'. Only 738,792 lb were disposed of in the three years and perhaps the chief permanent result of this campaign was the discovery of some of the methods and techniques of propaganda which were to be used later on by the Indian Tea Market Expansion Board.

The earlier attempts to develop markets in Persia, Afghanistan,

Russia, and Central Asia were continued by the Commission for a while, but in 1902 the Indian Tea Association considered that these campaigns should be abandoned:

> Business in Persia is not conducted on a cash basis, credits frequently extending for two or three years; and sales of tea at twelve months credit were effected by the Kangra Valley agents with difficulty . . . The possibility of a profitable trade being developed was very remote.

Work in Afghanistan was equally discouraging. In 1902 it was reported that importation of Kangra tea into Afghanistan had almost ceased and scarcely any Indian tea now entered the country. Prohibitive import duties were perhaps the main trouble. The reports of possibilities in Russia were depressing; while as regards China, Turkestan, and Tibet, the official view of the Indian Tea Association, after considerable efforts and exhaustive enquiries, was that no progress appeared possible. Later attempts by the Tea Cess Committee to promote exports to some of these countries by means of a bonus fared no better.

GREEN TEA IN THE UNITED STATES

While the Indian Tea Market Expansion Commission was conducting the campaigns described above, the Indian Tea Association turned its attention to the promotion of the sale of green tea in the United States. It had been felt for some time that a ready market existed in that country for green tea and that it should be possible to develop this market without weakening the market there for black tea. In March 1901, the Indian Tea Association Committee, London, had adopted the following resolution on the subject:

> That one and a half annas per lb up to a maximum of 200,000 lb to be manufactured this season be allowed out of the funds of the levy on shipments for the American market sent there direct from India, such funds to be distributed as a bounty at the discretion of the Calcutta Committee, the definition of the term green tea for the receipt of the bounty being taken to be tea made from the ordinary leaf plucked on the gardens such as would be ordinarily made into black tea, but which in its altered manufactured state will not compete with the sale of black tea in America or elsewhere. The bounty to be paid on the same quantity as before sanctioned, viz, 200,000 lb until it is seen what success is attained in the manufacture of green tea. The Association in Calcutta to be requested to notify the Committee promptly if a larger quantity than 200,000 lb is likely to be specially prepared for shipment to America.

The initial response to this suggestion was poor and in 1901–2 bounty was only paid on 72,703 lb of green tea, though there were prospects of early expansion of its manufacture. Information was received from London that the success of the scheme would partly depend on a measure of uniformity in the quality of the green tea produced and the

Indian Tea Association, Calcutta, set up a sub-committee to consider how that could be achieved. The sub-committee recommended in August 1903 that arrangements should be made with a limited number of producers to send green tea to Calcutta at regular intervals during the season, and that these teas should then be bulked for despatch to the USA, total sales proceeds being divided amongst the producers on the basis of the Calcutta valuation of their teas. Immediate results were encouraging and in the year 1902–3 bounty was paid on 720,000 lb of green tea. In 1903–4 the rate of bounty was lowered to six pies per lb and a target of 4,000,000 lb was fixed. In fact bounty was paid on 2,750,000 lb.

The Indian Tea Cess Committee, formed in 1903, agreed to continue this scheme, but opinion was much divided as to its wisdom and at the annual meeting of the Indian Tea Association, Calcutta, on 31 May 1905, Norman McLeod stated the case against it:

> While in America I looked into the question of our manufacture of green tea. I am very diffident in expressing an opinion, which I believe is contrary to that of many who are interested in the trade, but I cannot help saying that it appears to me we are spending a lot of money in promoting the manufacture of an article which only competes with the lower grades of China and Japan greens, and, moreover, retards the introduction of our Indian black teas; by which we must, ultimately, stand or fall. If we could manufacture green teas of a class like the good grades of China and Japan, then it might be different, but as yet we are removed from anything of the kind. Let us by all means spend money on finding out if we can manufacture fine green teas, but why pay it away on what is doing us no good, and possibly rather the reverse. What will pay us in the end is the widespread diffusion of the habit of drinking black tea, in large quantities, over the Continents of Europe and America, and to this end we should spare no trouble or expense.

A. Tocher disagreed and thus stated the case for the policy which had been followed:

> In the United States and Canada the consumption of green tea is, I believe, something like 40,000,000 lb from Japan, besides a large quantity from China: I am not able to state the exact figures for China, but I am, I think, right about Japan. At any rate the total represents a very large quantity. Now Mr McLeod will not expect us to convert, in a day, all those drinkers of green tea to black tea. I should be disposed to think that it would be very much easier to convert them to the use of Indian and Ceylon green tea. Mr McLeod's objection seemed to extend to the quality of Indian green tea: we cannot, he says, compete with the best tea from Japan. That is perfectly true, but I would like to ask him whether it is not the case that the bulk of the green tea consumed is very much the kind of tea we make here in India and in Ceylon. If so, then it seems to me that the object which we have in view should be accomplished. It is to get rid with the least possible delay of the extra weight

of tea which buyers in the United Kingdom will not take except at their own price.

McLeod won the day and the scheme was dropped.

FORMATION OF THE TEA CESS COMMITTEE

We must now retrace our steps. The year 1901 was of great importance in the history of tea propaganda, since it was in that year that a proposal was submitted to the Government of India for the imposition of a cess on tea exports from India, the proceeds to be used for increasing the consumption of Indian tea both within and without India. In making this proposal, the Indian Tea Association was largely influenced by the example of Ceylon, where an export duty of ten cents per 100 lb, imposed in 1892 to provide funds for the adequate representation of Ceylon tea at the Chicago Exhibition, was converted into a permanent duty. The rate was then increased to twenty cents per 100 lb and at the beginning of the twentieth century this brought in about Rs 3 *lakhs* per annum. The need for a similar cess in India was thus stated in a memorandum prepared for submission to the Government of India:

> In India a voluntary levy for the same purpose instituted and administered by the Indian Tea Association is and has been in force since 1893, but the subscribers to that levy hitherto have not represented more than about seventy-five per cent of the Indian Tea Growers and the sum collected has been considerably less than half that realised under the Ceylon tax. The Indian Tea industry therefore has been compelled through want of funds to confine its attention mainly to the markets of North America, while Ceylon on the other hand has been able to make sustained efforts to satisfy and increase the demands for its Teas not only in the American markets, but also in the other markets in the world, with the result that India has only been able, owing to lack of funds to make considerably less progress than Ceylon, the figures of last year showing that while Ceylon, with a production of about 150,000,000 of pounds of tea, sent over 49,000,000 pounds, or nearly thirty-three per cent, to foreign countries, India with a production of 190,000,000 of pounds, sent only about 33,500,000 pounds, or about eighteen per cent, to foreign markets.
>
> Owing to the great increase in the production of Indian and Ceylon Teas during recent years the supply to the markets of the United Kingdom has been largely in excess of the demand, and it has only been possible to find an outlet for a portion of this surplus by a continued reduction of price, while the world's stock of British-grown Tea materially increased.
>
> Taking the position as it at present stands, the result so far has been that the average price of India Tea has been continuously falling until a considerable proportion is being sold below cost of production, and it is clear that Tea growing in India on a remunerative basis can only be continued by comprehensive measures being promptly taken to open new markets.

It was pointed out by the chairman, in his speech at the annual meeting of the Indian Tea Association in 1902, that whereas foreign markets

in 1896 took 12½ per cent of the Indian crop, and 21½ per cent of the Ceylon crop, in 1900 the Ceylon crop was sold to the extent of 33 per cent in foreign markets whereas similar markets took only 17½ per cent of the Indian crop. India was clearly falling behind in the race and the chairman had no hesitation in linking this fact to the figures, which showed that since 1893–4, Ceylon had spent Rs 29 *lakhs* on propaganda abroad against less than Rs 6 *lakhs* spent by India. At the time of the chairman's speech the proposals for the cess had been supported by 73 per cent of the Indian tea industry calculated on an acreage basis, but there were a small minority who opposed the proposal on the grounds that it would involve governmental interference. The chairman dealt adequately with that view:

In regard to the question of Government interference, I really do not know what to say, because the assistance which we have asked from Government is so very small. It really amounts to nothing more than that they should lend us their machinery for collecting the cess; and that when the money is collected it should be returned to us, less perhaps any expenses which might have been incurred. In the case of Ceylon the cess is collected free of cost.

Ultimately more than 80 per cent of the industry supported the scheme and a memorial requesting that the necessary legislation should be introduced was submitted to the Government of India on 10 March 1902.

On 1 August 1902 the Government of India stated in a resolution, after consultation with the Secretary of State who at that time exercised close supervision over legislation and administration in India, that they had decided to introduce the proposed legislation if it were shown to the satisfaction of the Government of India that the tea industry was substantially of one mind on the subject. The Association claimed in reply that practical unanimity had been reached and that the support for the scheme amounted to 100 per-cent in South India, 86 per cent in the Dooars, 85 per cent in the Assam Valley, and 84 per cent in the Surma Valley.

The Indian Tea Cess Bill was introduced into the Imperial Legislative Council on 30 January 1903.

Opposition within the industry was still vocal and at the annual meeting of the Indian Tea Association in February 1903, it was necessary for T. McMorran to answer some of the objections still current. In view of developments nearly fifty years later, it is of interest to record some of McMorran's remarks.

It has also, I understand, been objected to the Cess Bill that power is retained by Government to make rules to carry out the purposes of the Act. It is argued that it is dangerous to confide to Government the making of rules, and that it would be sounder in principle to have these included in the Bill

itself. There is something to be said in favour of such a view where legislation is imposed by Government of its own initiative, and where the rules it retains power to frame may impinge on the rights of those concerned. But the Cess Bill is in an entirely different category, because, in the first place, it is introduced at the request of the tea-growers themselves; and in the second place, its purpose is clearly defined. That purpose is to collect certain funds, to return them to certain persons to further certain objects. The collection is defined, so is the returning, so are the persons, so are the objects. Everything essential in principle has been included, and there need be no fear of interference from Government in giving effect to the clearly-defined purpose of the Act.

As proposed by the Indian Tea Association, the Bill provided for a cess of one fourth of a pie per lb – that is about 2 annas per hundred lb as compared with the 20 cents in force in Ceylon. The administration was vested in the Indian Tea Cess Committee; a committee of twenty members, three to be appointed on the recommendation of the Bengal Chamber of Commerce and one on the recommendation of the Madras Chamber of Commerce; seven to be appointed on the recommendation of the Indian Tea Association; and nine to be appointed on the recommendation of such bodies interested in the production of tea in India as the Governor-General in Council might select. The proceeds of the cess were to be applied to 'meeting the cost of such measures as the Committee may consider it advisable to take for promoting the sale and increasing the consumption in India and elsewhere of tea produced in India'. The Bill became law on 1 April 1903, and the foundations of systematic propaganda for Indian tea were thus laid.

The nine seats to be allocated on the recommendation of bodies selected by the Governor-General in Council were in fact distributed between the Assam and Surma branches of the Indian Tea Association, the Darjeeling and Terai Planters Associations jointly, the Dehra Dun Planters Association, the Kangra Valley Planters Association, and the United Planters Association of Southern India. The committee was thus composed entirely of non-officials and in spite of its statutory basis, it was completely autonomous in the use of its funds for propaganda purposes. The participation of Government was confined to the collection of the cess. Apparently the Indian Tea Association (London) was employed as the agent of the Tea Cess Committee for certain purposes, such as the control of the tea campaigns on the continent of Europe.

THE AMERICAN CAMPAIGN

The Indian Tea Cess Committee held its first meeting in Calcutta on 1 June 1903, and the Hon. Mr Cable was elected as its chairman. In view of the discouraging experience of the Indian Tea Market Expansion Commission, the new body did not initially direct its attention to India.

The most obvious area for its activities was thought to be the United States. For a time the committee continued the green tea campaign described above. When that scheme was abandoned, a vigorous campaign for Indian tea in general was started in the United States of America under the control of Richard Blechynden and in conjunction with Ceylon. The amount spent from the joint fund was £12,000 annually of which four-sevenths was contributed by India and three-sevenths by Ceylon. The campaign, which was directed to the support of Empire-grown tea generally, was regarded by producers as efficient and profitable, but it would be difficult to maintain on the basis of published figures that at the time it resulted in increased sales of Indian tea in the United States. Exports of black tea from India to the United States of America between 1905 and 1909 were as follows:

	(lb)
1905–6	2,156,171
1906–7	1,603,947
1907–8	2,057,073
1908–9	2,057,413
1909–10	2,441,396

The scope and methods of the work in this period are briefly summarized as follows in the Report of the Indian Tea Cess Committee for 1909:

> The country over which the scheme extended comprises the four States of Missouri, Indiana, Ohio, and Illinois, an area of about 200,000 square miles. The head-quarters of the Commissioner are at St. Louis, Missouri. Newspaper advertising is a prominent feature of the scheme, no fewer than eighty-five newspapers in forty-four towns having been utilised last year. Special travellers and salesmen are employed to call upon grocers for the purpose of interesting them in British-grown teas. Post-cards, show-cards, and 100,000 samples, have been issued during the year, in addition to more than 150,000 post-cards despatched from Calcutta.

In 1909 the Ceylon tea cess was discontinued and the joint operations ended on 31 March of that year. The Indian Tea Cess Committee carried on the work in the USA alone. In 1908, in addition to the joint campaigns of India and Ceylon, a separate campaign for India had been launched by the Indian Tea Cess Committee in the territories of the United States contiguous to the joint fund areas. That campaign, too, was placed under Blechynden's charge and after the withdrawal of Ceylon, the two campaigns must have been conducted in very close relation to each other. The methods followed by Blechynden in the Indian campaign during the next few years were well described in the Indian Tea Cess Committee's report for 1914–15.

His headquarters remained at St Louis, where they had now been located for some years. The object of his efforts is to promote the sale of Indian Tea in places where tea is less well known, and where it is not being pushed and advertised by private agencies such as packet tea houses. He endeavours to secure the co-operation of large distributors in conjunction with whom his system of advertising is worked. The advertising takes six different forms: (a) newspapers; (b) domestic post-cards to grocers' customers; (c) samples of tea with measuring spoons to grocers' customers; (d) shelf canisters; (e) foreign post-cards despatched from Calcutta to consumers; and (f) a supply of measuring spoons to grocers. He also provides travellers, who are known as 'speciality' men, and who travel with the salesmen employed by the distributors, or with the salesmen of the houses selected by the latter. These 'speciality' men explain to grocers the details of the advertising scheme, and bring the retailers to the buying point; but the distributors' salesmen make the actual sales to the grocers.

TEA PROPAGANDA IN INDIA

When the Indian Tea Cess Committee came into existence, it had been generally concluded, as we have seen, that the Indian field was not profitable. Three or four years later the question was again examined, and the Indian Tea Cess Committee commissioned Messrs Lyall, Marshall & Company to work on their behalf in India 'so as to ensure good tea being brought within the reach of all classes of the population'. Work was begun in July 1907 and was continued until 31 August 1908. 'The area traversed was about 3,592 square miles, within which 710 villages were visited by the travellers employed. A small quantity – 4,650 lb – of tea was sold, but the scheme did not promise to be sufficiently successful to justify its continuance.'

It is clear that at this stage none of those concerned had any definite idea as to what to do about propaganda in India, and a suggestion that now appears fantastic, was made in 1909. The blame for it must rest with London. In December the Indian Tea Association, London, suggested that an attempt should be made to push the sale of compressed tea in India. 'By compressed tea is meant either leaf or dust tea pressed within a small compass to facilitate distribution. It is manufactured largely at Hankow for the Russian market, and is believed to be in demand in Africa and elsewhere.' The committee considered the suggestion at their half-yearly meeting held on 29 January 1909, when they resolved that:

> A bonus of nine pies per pound should be offered on a million pounds of compressed tea to be manufactured and sold in India during the current year. The Executive Committee at once placed themselves in communication with distributors, and they have reason to believe that a beginning will shortly be made with the manufacture of the tea. Delay has been caused by the difficulty of obtaining suitable machinery, but it is hoped that a machine will soon be sent to India.

Needless to say, the scheme was a failure and was finally abandoned in 1913.

In almost every year from its foundation until 1914, the Indian Tea Cess Committee expressed the melancholy view that 'to devise satisfactory measures for pushing the sale and increasing the consumption of tea in India is undoubtedly the most difficult branch of the work of the Cess Committee'. The chief difficulty seems to have been a lack of initiative and originality and it is far from easy to understand why no attempts were made to try once again the vigorous measures of the old Indian Tea Market Expansion Commission. A Blechynden or a Harington was badly required in India.

THE CAMPAIGNS IN EUROPE

More vigour was displayed in the campaigns in Europe under the guidance of Harington. The general nature of the work can be illustrated by an extract from the Report of the Indian Tea Cess Committee for 1909:

> The work of pushing the sale of Indian tea in Continental Europe has continued to progress during the year. It is directed by Mr J. E. M. Harington, the representative of the Committee, who has made Antwerp his head-quarters. Operations are confined principally to Germany and Belgium, and the general scheme is such as to bring the advantage of the Indian product directly under the notice of the consumer. In their last report the Committee mentioned that well-appointed Indian tea rooms had been opened by Mr Harington on 6 April 1908 in a fashionable quarter of Berlin. These rooms have been visited throughout the year by more than 108,000 persons, and the daily average attendance has been upwards of three hundred. In October Mr Harington opened branch rooms in Charlottenburg, Berlin. These also have been successful, although they are of course on a smaller scale than the principal rooms. At Hamburg an Indian tea room, which was opened by Mr Harington on 24 October, was visited by upwards of 32,000 persons during the first five months. The accommodation has since proved insufficient, and an extensive enlargement has had to be undertaken. At Brussels, a tea room was opened in June 1908 as a private enterprise by two ladies. This room was assisted from the Cess funds, and was decorated in Indian style, and became an Indian tea room. But ultimately difficulties arose among the proprietors, and it is now doubtful if the room will be carried on. A shop for the sale of dry tea was opened at Antwerp in the *Marché aux Souliers* in September 1908. It was attractively fitted up in Indian style, and a great show of tea was made in the window. It is purely an advertisement, and has attracted much notice, and the sales show a tendency to improve, if slowly. In addition to these various enterprises, the propaganda has been actively carried on in other directions. Indian tea has been displayed at two minor exhibitions, one in Germany and the other in Belgium. About forty tea-making demonstrations by Indians in costume have been given all over Germany. Samples, circulars, and postcards have been distributed, use has been made of sandwichmen, of coloured posters, and of articles and advertisements in newspapers and other

publications. Greatly increased attention has been drawn in consequence to Indian tea, both among traders and private consumers in all parts of Europe. And Mr Harington has expressed the opinion that there is all over the Continent an undoubted tendency towards the increasing use of tea. The recent official adoption of tea as an alternative to coffee in the German Army is a concrete instance of this.

In 1913–14, there was some change in the methods of propaganda adopted.

In the year under review the methods of advertising have been considerably modified. There has been no outlay on Exhibitions, newspaper advertisements have been largely curtailed, and tea-rooms have played only a minor part. Advertising has been concentrated on the pushing and making known of special brands of Indian tea by competing distributors. Under this system the tea itself forms the chief advertisement; whilst the rivalry between individual firms ensures wide distribution of variety of advertising method. The latter is so controlled and directed from the central office at Hamburg as to draw public attention to the Indian character and origin of the tea offered. This applies more particularly to Germany, where several large wholesalers now interested in the work are modifying their blends and advertisements in such a way as to make their Indian brands the most prominent.

The First World War put an end to all these activities in Europe and the efforts of the Indian Tea Cess Committee in that continent naturally had to be directed to war purposes. The work in Germany and Belgium had been vigorously and intelligently conducted for more than a decade, but it must be admitted that it had not produced any substantial increase in exports of Indian tea to those countries.

THE CAMPAIGN IN THE UNITED KINGDOM

Work in the United Kingdom on behalf of the Indian Tea Cess Committee began in 1908, where at the suggestion of the Indian Tea Association (London) the Indian Tea Cess Committee allotted £2,000 to that Association for an Indian tea advertising campaign in the United Kingdom in opposition to the Chinese tea propaganda. It was later decided that this was not necessary but that 'much useful work might be done in the way of pushing British-grown teas in the United Kingdom by judicious advertisements in the shape of leaflets, pictorial postcards or pamphlets'. Lectures in schools and institutes and to the general public were also planned. A. E. Duchesne took charge of the work, subject to the control of the Indian Tea Association (London) and got off to a good start with a display of a model tea garden, a bungalow, and a tea kiosk at the Festival of Empire Exhibition at the Crystal Palace in 1911. In 1913 the Indian Tea Cess Committee expressed satisfaction with the work done in the United Kingdom, since it cost little and kept the name of Indian tea prominently before the trade.

By the beginning of the First World War the position as regards tea propaganda and its results can thus be summarized as follows. In India all attempts had ended in failure and on the whole the Indian Tea Cess Committee had displayed lack of initiative; in the neighbouring countries, political difficulties had made progress impossible; while in the United States and in the continent of Europe, well directed efforts may have maintained consumption levels, but had not raised them. In the United Kingdom, useful work on a small scale was being done and consumption was steadily rising.

In spite of the absence of spectacular success, the Indian Tea Cess Committee had won the confidence of Indian tea producers and its life was therefore extended with their wholehearted support at the end of each five-year period.

CHAPTER FORTY

THE INDIAN TEA CESS COMMITTEE: II. 1914–36

THE FIRST WORLD WAR

Whereas the Second World War would in due course be accepted by the industry as a great challenge, the First World War almost brought tea propaganda activities to a standstill except in India. In the United States of America, the Indian Tea Cess Committee's campaigns were suspended just after war broke out and although they were resumed in March 1915, it was soon considered that war conditions made all the methods previously used either useless or impracticable. Campaigns were contracted in the first two years of the war and thereafter they were put on a care and maintenance basis, with the Commissioner on half pay. All real activity in fact was suspended. It is interesting to note that the Dutch took a very different view and thought the time propitious for a campaign in the United States of America in support of Java teas. 'It now seems', stated the Indian Tea Cess Committee, 'that the competition may be much more severe than was originally anticipated' and it might have been thought this would compel the Indian tea industry to do more than had been contemplated. Unfortunately, a curious paralysis seems to have descended on the Indian tea industry with regard to its American activities at this time and towards the end of the war it was dolefully stated that even prior to the war expenditure on tea propaganda in that country was insufficient and that since commodity prices had advanced so greatly, it was useless to go on with so restricted a scheme.

In 1919, the Tea Association of America proposed a joint campaign on behalf of tea generally and suggested that it should be financed partly by American importers and partly by producers in India, Ceylon, and Java. For some reason or other the proposal hung fire for a while, after which the American trade withdrew their offer of participation and propaganda in the United States of America for the time being came to an end. In the Report of the Indian Tea Cess Committee for the year

1920–1, and again in 1921–2, it was simply stated that 'no propaganda work of any description has been undertaken by the Committee elsewhere than in India'.

It is easy to understand that war conditions made normal propaganda in Europe impossible. In the first year of the war, tea propaganda work was limited to gifts of dry tea to field hospitals and to Belgian refugees in the United Kingdom, and in the following year gifts of tea to Allied troops in France were also organized. The Indian Tea Cess Committee suggested that steps should be taken to show French soldiers how tea should be brewed. The Indian Tea Association, London – as agents for the Indian Tea Cess Committee – reported that 'it proved to be so beset with difficulties that they did not go on with it'. This continued to be the position in Europe throughout the war, and it was not until 1922 that work on the Continent was resumed.

The course of events in the United Kingdom was no more encouraging. In 1914–15 work was carried on by means of newspaper advertising, distribution of booklets, and the like, and personal calls on grocers and dealers. At the end of that year, the Indian Tea Association decided to consult an advertising expert. He put up a scheme based almost entirely on advertising in a limited number of largely circulated newspapers, together with distribution of pamphlets and postcards. It is difficult to understand how any so-called expert could have expected success from such a scheme, particularly since the possible order of expenditure was so small. Two tea experts then examined the scheme and disagreed with each other. The Indian Tea Association therefore threw over the recommendations of the advertising experts first consulted and reverted to their previous methods. Dealers apparently took an interest in the propaganda, but the Indian Tea Association soon decided that in view of the restrictions on imports, it was desirable to restrict the work. The campaign in Britain was almost entirely discontinued from 1917–18, and except for participation in the British Empire Exhibition in 1924 and the contribution of tea to the relief of distressed miners in 1928–9, it was not seriously resumed until 1930–1.

It is difficult not to feel that the industry failed to respond to the challenge of the war in the matter of market expansion and even after the war a number of valuable years were lost. Work in India provided an exception to this depressing state of affairs. In 1915 the Indian Tea Committee seemed to receive an access of energy with regard to India. They resolved to appoint a qualified well-paid Commissioner with a suitable staff:

> to undertake what may be described as an educational propaganda in a selected district. They would lecture on the advantage of tea drinking, the best method of brewing tea, and similar subjects. They would also prepare and

distribute pamphlets, leaflets, hand-bills and other literature, in the vernaculars, and where necessary in English. They would interest dealers and shopkeepers in the sale of tea; and would work in conjunction with recognised tea distributors. They would keep a careful watch on the sale of tea-waste and of low-quality and adulterated tea.

It was also decided to subsidize recognized distributors by free grants of tea and at the same time it was laid down that 'there should be no attempts on the part of the Cess to enter into competition with the regular distributors'. H. W. Newby, who had been the Calcutta manager of Lipton Ltd, was appointed as Commissioner. Newby was obviously a live wire and began to work on the active principles of the old Indian Tea Market Expansion Commission. In March 1917 work was thus summarized:

The starting point of his scheme is to induce people in the largest towns and ports of India to become habitual tea drinkers. He takes first of all the large towns with a population of say upwards of 100,000 afterwards dealing with the smaller centres. In those towns where the tea-drinking habit is already established he does nothing, believing that the habit will spread of itself. He has a considerable number of representatives working in various places, their principal duty being to persuade suitable persons to open tea-shops for the sale of liquid tea. Many shops have been started in this way. In Madras, for example, Mr Newby reported in January last that no fewer than 166 new shops had been opened as a result of only four months' work; and at Delhi, Lucknow, Benares, and Cawnpore similar progress was being made. In Calcutta also the work is being vigorously pressed forward, it being estimated that in the shops for the sale of liquid tea no less than 158,000 lb is being sold yearly. In every shop, information is given, by means of posters and handbills, as to the best method of preparing tea. And some of the large distributors are beginning to appreciate what an influence the shops are, and are themselves advertising their own teas in the shops and keeping stocks there. The shops therefore directly promote the sale of dry tea, and the literature distributed by means of them suggests the way in which the tea may be satisfactorily brewed. Mr Newby has also undertaken a good deal of useful work at the large mills and factories, particularly in Calcutta. Tea shops have been established on the mill premises, and the sale of liquid tea is distinctly encouraging. But the quantity consumed in the mill or factory is not the ultimate object. It is to be expected that the employee, having learnt to drink tea at his work, will take the habit with him to his home, and so accustom his family and friends to tea. In the coal-fields also work is being started; and it is with particular satisfaction that the Committee have to record distinct progress in the task of introducing tea to the Indian Army. The military authorities have rendered every possible assistance to Mr Newby in this connection, and the results so far are encouraging.

It is interesting to notice that it was the Indian Tea Cess Committee which first taught distributors in India to appreciate the importance of

contact with the retail shops. *Pice packets* grew rapidly in popularity and were an essential feature of the campaign. Attention was also devoted to persuading retailers not to discontinue tea sales in favour of sherbet and mineral waters in the hot weather, but neither then nor in more modern times were tea propagandists successful in persuading people in the Punjab and the United Provinces generally to drink tea in the hot weather. Special attention was also given to tea propaganda in army recreation rooms.

THE INDIAN CAMPAIGN AFTER THE FIRST WORLD WAR

In 1921 Newby stated that 'no fewer than sixty-five towns had at that time practically attained the condition when no further effort on his part in respect of them was necessary'. Later experience and statistical examination suggests that may have been a propagandist's exaggeration, but there is no doubt that Newby's work was of value. The sums spent in India were gradually stepped up from a little over half a *lakh* of rupees in 1915–16 to Rs 4½ *lakhs* in 1920–1.

In March 1922, Newby left India to begin work with the Indian Tea Cess Committee in France and Belgium and his assistant, John Harper took over his work in India. The campaigns continued on the same lines as before, but increased attention began to be given to work on railways, and the committee also tried to take steps as regards to the growing trade in tea unfit for human consumption. In this connexion on 13 March 1924 the following resolution was passed:

> That the members of the Indian Tea Cess Committee strongly deprecate the practice whereby tea concerns make local sales of sweepings and inferior quality tea and tea waste unfit for human consumption; and that they are prepared heartily to support any action that the Indian Tea Association may decide to take with the object of putting a stop to this practice.

It became an important part of the duties of the Indian Tea Cess Committee to detect sales of adulterated tea.

In 1926–7, Harper estimated that by the end of the year 'tea drinking would have been satisfactorily established in ninety per cent of the small towns in Central India, the Central Provinces, United Provinces, and Bihar and Orissa'. Unless the words 'satisfactorily established' are given a very loose interpretation indeed, this statement was not even approximately correct. When more rigorous statistical methods were applied in the late thirties, the average annual consumption of tea in the small towns of the provinces named was found to be very low. In the Report of the Indian Tea Cess Committee for 1927–8, the criterion which justified discontinuance of work in any particular area was thus defined:

> It is discontinued only when (a) good stocks are available; (b) tea is available in all parts of the town; (c) tea is extensively advertised in all parts of the

town; (d) stockers are familiar with the sources of supply; (e) *pice packet* sellers know the dealers from whom supplies are available; (f) demonstrations have been held in every quarter of the town; (g) both stockers and *pice packet* sellers know how to keep their supplies properly; and (h) at least fifty per cent of the inhabitants are tea drinkers.

If 'tea-drinker' is given a reasonable definition, it is doubtful if any towns in the provinces concerned could have satisfied the criterion. It is, however, probable that the exuberance which makes a good propagandist seldom goes with objective appraisal of results and it was for this reason that some twelve years later, statistical observers, who had no responsibility for the success of the campaign, were brought in by the Indian Tea Market Expansion Board to assess results. Nevertheless, but for the work of Newby and Harper, the results might not have been there to assess.

The confidence of the industry in this work grew and as a result the allotment for expenditure in India was gradually increased and in 1931 stood at Rs 7¼ *lakhs*. In that year the Indian Tea Cess Committee allotted Rs 1¼ *lakhs* for what they described as their 'packing factory scheme', the object of which was to penetrate to the villages off the rail and bus routes by distributing 'standard tea' in motor lorries. Railway work was discontinued since it was felt that 'tea stall arrangements on the major railway system had progressed to such an extent that further supervision on the part of the Tea Cess Inspectors was unnecessary'. There may have been an element of exaggeration in this claim, but it was certainly true that from that time onwards a better cup of tea could in general be had at the platform tea stalls than in the first-class restaurant cars on the trains.

In 1932 Milligan, who was now Adviser to the Indian Tea Association, applied a versatile mind to the problems of tea propaganda and produced a report which was the basis of operations for some years. Attention was particularly directed to the work in factories and mills, to the establishment or improvement of liquid tea shops in places where people gather together, to the assistance of liquid and dry tea shops in their early stages, to railway work, and to informative publicity about tea in the schools of Bengal. Prevention of the sale of tea waste, unfit for human consumption, was given a prominent place in the work of the Indian Tea Cess Committee and this work was facilitated by the agreement of rupee and sterling interests only to sell tea waste to three firms, who could be relied on to use it for its legitimate purposes. At this stage, W. H. Miles became the Commissioner in India, and his appointment coincided with the time when the selling activities of the Indian Tea Cess Committee were discontinued and efforts were concentrated entirely on propaganda. The Report of the Indian Tea Cess Committee for 1933–4 thus describes the main activities carried on:

So far as Northern India is concerned, this propaganda work was concentrated in the United Provinces, in the larger towns and centres of which, the parties withdrawn from districts in the Punjab, Central Provinces, and Behar, were posted. In October arrangements were made to extend the Cess activities to villages located in the interior of Eastern Bengal along the river-routes and waterways by means of houseboats suitably equipped for the work. Tea, as a beverage, is little known in these densely populated rural areas and, as the boats visit all the local *hats** in turn, contact is being established with thousands of villagers who congregate at these places on special *hat* days.

The new policy was to take tea to the prospective drinkers instead of waiting for them to come to the tea cess centres. Work was also to be concentrated rather than widely extended. Special efforts were made in certain towns in South India where coffee was almost the only hot beverage consumed on a large scale – though great care was taken never to develop a hostile attitude towards coffee. The last Report of the Indian Tea Cess Committee on work in India is an impressive document which was the foundation of all future work.

The Indian Tea Cess Committee still continued endeavours at direct promotion of the sale of good tea and this aspect of its work is thus described in the Indian Tea Cess Committee's Report for 1935:

> . . . with this object in view they have devoted their activities for the most part (a) to the booking of orders for those gardens which are willing to sell tea locally and (b) to the elimination of supplies of pilfered and low grade teas which are available in the bazaars at prices which make the sale of good quality teas unremunerative. The Commissioner for India again reports that his staff could have disposed of a far greater quantity of tea than was actually offered by gardens and steps have recently been taken to enlist the co-operation of the tea industry in making available an adequate supply of good tea at reasonable prices.

In 1936 this intensification of work, together with the more scientific approach to the task of propaganda, necessitated the establishment of a staff training school. At about the same time, a trained publicity officer, Dr P. Guha Thakurta, was appointed, primarily for the purpose of organizing publicity in the Indian language newspapers.

In the last year of work of the Tea Cess Committee, distribution of liquid tea reached the impressive figure of twenty-six million cups as compared with ten million in the previous year. No fewer than eight million *pice packets* were sold. It must be explained that the sale of *pice packets* was only intended to prepare the way for the retailer and simultaneously with the propaganda, a campaign to persuade local grocers to stock *pice packets* was carried on. The results of this policy were encouraging and wherever tea cess propaganda was conducted new dry and liquid tea dealers appeared.

* *hats* = markets.

In the smaller places which Tea Cess workers visited, stocks originally placed there had not only been maintained without assistance, but had actually increased, and in a very large number of cases, the smaller dealers, who were originally encouraged to stock a small quantity of tea which they procured from the neighbouring large towns, were able to place small orders direct with distributing firms.

It is only necessary to compare the work of the Indian Tea Cess Committee in 1936 – the last year of its existence – with the energetic but unscientific work of some thirty years earlier – to realise how much had been learned about the science of tea propaganda.

PROPAGANDA IN EUROPE

In 1922 it was decided to resume work in Europe and to put Newby in charge of it, but neither in his time nor in that of Taylor, who succeeded him at the end of 1923, did the campaign prove successful. The first attempts were directed to France and the methods adopted were more or less similar to those which had been followed in India. As early as 1924 the Indian Tea Cess Committee expressed doubt as to the value of this campaign – particularly as the system of distribution of tea in France was said to be poor. In 1924 the committee was still doubtful, but the Indian Tea Association (London) suggested persevering for another year. At the end of that period the committee still found it 'difficult to come to any conclusions as to the value of the campaign as the consumption of tea in France is still very small'. It had in fact risen from 2,457,180 lb in 1921 to 3,851,100 lb in 1922. In 1926–7 it was 'difficult to say that definite progress was made' and it was felt that the high price of tea in France put it out of reach of the poorer classes. At the end of the year, the campaign was discontinued.

A campaign in Germany was then considered. It hung fire for two years and at the end of 1929–30, the first year of operation of the scheme, the Indian Tea Cess Committee resolved that 'unless the prospects of this campaign in Germany improve very materially during the year 1930–1931, there should be no question of making a further allotment for work in that country after 30 March 1931.' The prospects did not improve and the campaign was discontinued at the end of 1930–1. No further work on the continent of Europe was undertaken until after the formation of the International Tea Market Expansion Board in 1935.

THE AMERICAN CAMPAIGN

The tea campaign in the USA was resumed in 1924 when a fairly considerable campaign of advertising carried on by Messrs C. S. Higham Ltd, under the general supervision of the Indian Tea Association, London, was planned. A proposal to appoint a Tea Commissioner for the United States of America was turned down in 1926 and it was de-

cided to devote the available funds almost exclusively to newspaper advertising and the Philadelphia Exhibition of 1926. In the following year doubt was expressed by the Indian Tea Cess Committee as to whether newspaper advertising was the most promising method, and Norman McLeod of the Indian Tea Association (London) visited the USA to report on the work. His main recommendations were as follows:

(a) that the newspaper advertising should be continued, but modified, intensified and curtailed; (b) that advertising in magazines should be undertaken to a limited extent; (c) that an official emblem should be adopted to distinguish Indian tea advertising; and (d) that a Trade Bureau should be established, with a Trade Director and a Fiscal Agent, or Treasurer, to carry on the work.

L. Beling was appointed trade director with effect from 1 January 1928. It is clear that though expenditure in the USA was stepped up, the Indian tea industry was still groping in the dark in these matters. Attention was given to the habit of afternoon tea in offices and factories, demonstrations were arranged through the medium of domestic science classes, and in 1930–1 the attempts to popularise Indian tea 'as a refreshing beverage taken either hot or cold' were redoubled. In 1933 the Indian Tea Cess Committee were congratulating themselves on the fact that Indian tea imports into the United States of America had more than held their own 'while Ceylon would appear to have been mostly affected by the sudden increase in Java and Sumatra tea'. In 1933 the Indian tea cess was increased and expenditure in the USA was correspondingly enlarged. Nevertheless, imports of Indian tea into the USA in 1934 dropped as compared with the previous year, while Java and Sumatra imports increased. This change was attributed 'to the competition from those other countries whose teas are not now entering Great Britain on account of the preferential duty there'. Energetic propaganda was carried on to counteract this tendency and imports of Indian tea into the USA increased in the following year.

In 1935 the International Tea Market Expansion Board took up the overseas campaigns of the Indian Tea Cess Committee. The formation and work of that Board has been discussed in an earlier chapter. It will be convenient here to review the statistical position of Indian tea in the United States at that time.

IMPORTS INTO USA FOR CONSUMPTION

	(lb)
1932	94,329,000
1934	74,454,000
1935	85,588,000

THE CAMPAIGN IN BRITAIN

Tea propaganda in the United Kingdom was resumed in 1931–2 under the charge of John Harper, formerly Commissioner of the Tea Cess in India, and with the co-operation of the Indian Trade Commissioner and the Empire Marketing Board an intensive campaign to increase the consumption of Empire-grown tea was launched. Canvassers were employed to approach retailers in order to encourage the stocking and display of Empire-grown tea and considerable progress was made in this direction.

Valuable support was received from most of the leading distributors and the success of the campaign has in no small measure been due to the active co-operation of the wholesale suppliers. By means of advertisements in the leading newspapers and trade journals an extensive publicity campaign was undertaken and arrangements were also made for the display of Empire Grown Tea at many exhibitions held throughout the United Kingdom.

In that year a UK duty on the import of tea was introduced with a preference in favour of Empire tea and the question was raised as to whether, in view of this protection, there would be any further need for the Empire tea campaign. It was rightly decided that it must be continued, and Empire slogans embracing India, Ceylon, and East Africa in their appeal were vigorously displayed by co-operation between the Indian Trade Commissioner and the Empire Marketing Board. Attempts were also made to enlist the co-operation of hotels, clubs, and shopkeepers in pushing Empire tea, while special attention was given by the Indian Tea Cess Committee to the display of Indian teas at exhibitions in the United Kingdom. In October 1933 'the Ceylon tea interests joined with the Indian tea interests in a joint India–Ceylon advertising campaign in the name of Empire Tea Growers to popularise Indian and Ceylon teas in the United Kingdom'. Ceylon contributed £15,000 and the Indian Tea Cess Committee allotted £10,000 to this purpose.

RATE OF CESS

In March 1934 the Indian Tea Cess Committee advocated the raising of the tea cess to one Rupee per hundred lb of tea produced in India.

By 1935 it was clear that developments in India, together with the new plans for international propaganda, would require additional finance. It was therefore suggested that the cess should be increased and that it should be levied on all tea produced in India and not only on, as hitherto, exports. The question as to whether all producers or only exporters should pay tea cess has been a matter of controversy for many years, but in view of the practical difficulties of levying the cess on production, it was agreed by the Indian Tea Association that it should be continued to be collected only on exports from India. At this stage a con-

troversy arose as to what should be the incidence of propaganda cess in various producing countries. The matter was explained in detail in the Annual Report of the Indian Tea Cess Committee for 1935–6:

The International Tea Committee most strongly recommended in 1935 that the Indian Tea Cess Committee, the Ceylon Tea Propaganda Board, and the Amsterdam Tea Association should each take immediate steps to raise their propaganda resources to a common level of one Rupee, or the equivalent, per hundred lb of tea exported.

Two factors affect the position of these three bodies in very different degrees of importance, namely,

(a) the difference between total actual production and export under the control scheme, and
(b) the amounts spent by these three bodies on campaigns in their own respective countries of production.

In the case of Ceylon and the Netherlands East Indies, the difference between total production and export is negligible when compared with the difference between total production and export in the case of India. It was therefore felt that if Ceylon and the Netherlands East Indies were going to raise cess at one Rupee it would be only fair that India should raise her rate to R 1/4. It is also a fact that in the Netherlands East Indies the basis of cess collection is total production, so that if and when the rate in Java is raised to the equivalent of one Rupee, cess will be actually raised at that rate on the total production.

The amount annually spent in India for increasing the consumption of Indian tea enormously exceeds the comparatively small amounts being spent in Ceylon and the Netherlands East Indies' similar domestic campaigns. Very strong objection has been made by Ceylon and the Netherlands East Indies to the proposition that India's expenditure on her domestic campaign should be regarded as a part of the international propaganda for which the three countries were urged by the International Tea Committee to increase their propaganda resources to a common level to one Rupee. While the Indian Tea Cess Committee adhere to their contention that success in India will, by finding markets for a large bulk of the world's manufactured tea, be contributing to the ultimate solution of the problem of the industry, it must admit that

(a) so long as export control continues the immediate benefit of success in the Indian campaign will be reaped by the Indian producers, and
(b) the amounts to be spent and the policy to be followed in the Indian campaign cannot be submitted to the control of any outside body.

For these reasons, and in view of the obligation imposed on India by the advantage she enjoys in the matter of a large home market, the conclusion is inevitable that India is bound to raise cess at a higher rate than the other two countries if she is to be true to the spirit of the International Agreement into which she has entered.

The cess was in fact raised to 12 annas per 100 lb with effect from 13 April 1935.

CHAPTER FORTY-ONE

THE INDIAN TEA MARKET EXPANSION BOARD AND AFTER

The Act under which the Tea Cess Committee was constituted expired in 1936. The Bill to replace it was of particular interest to the writer, since he was then the Chief Government Whip in the Indian Legislative Assembly and had the privilege of watching Milligan, a non-official member, who for all practical purposes took charge of the Government measure. Milligan's gift for handling this kind of situation was unrivalled. The Bill made one change of name and an important change of substance. In the first place, the Indian Tea Cess Committee was renamed the Indian Tea Market Expansion Board; secondly, the Indian element, both on the board and on the executive committee was strengthened.

The board was to consist of twenty-seven members, seven representing Chambers of Commerce; twelve representing the Indian Tea Association and its branches; two representing the United Planters Association of Southern India; one representing the Indian Tea Planters Association, Jalpaiguri; five representing other Indian planters.

It was clearly Government's intention – though this was not stated in the Bill – that the Indian Board, while being a sanctioning authority for the budget of the International Board, would not interfere with the day to day administration of that board's affairs and that the Indian Board itself would enjoy a similar degree of autonomy *vis-à-vis* the Government of India. Indian members of that board sometimes chafed under the restraints on their powers of control over the International Board, but the representatives of the Indian Tea Association always stood for the freedom of the International Board, subject to budget sanction, to run its own affairs. In practice this remote control worked well until, after the transfer of power, new theories of the functions of government in all these matters led to a demand by India and Ceylon for more direct control over the operations of the International Board.

We must now turn to the home affairs of the Indian Tea Market Expansion Board and it is perhaps worth while recording the views of a leading firm of Calcutta tea brokers as to the market background against which the board would have to work.

All markets, both export and internal, are showing greater discrimination and are demanding a type of tea suitable to their own particular requirements. It is therefore becoming increasingly necessary to produce true grades, properly manufactured and cleanly sorted. It appears likely that this will become of increasing importance year by year.

During the restriction years (i.e. since 1933) it has been most marked the way India has developed as a discriminating market, selecting her own types and refusing to be satisfied with others. In the early years of restriction, it was considered sufficient to offer in India any teas unsuited to export markets, and 'rubbish' was accepted and consumed. This year it has been most noticeable that whereas suitable tea (well-made clean leaf grades, black leaf Broken Pekoes and Broken Pekoe Souchongs and small Fannings) have always met a ready market at steady rates, stalky tea and tea of mixed appearance have met a weak market and fetched prices so low that it has frequently paid the estate to buy Export Quota and sell the teas for export instead of for consumption in India.

The board inherited considerable experience and a trained staff from the Tea Cess Committee. In the first year of the new board's work no great change occurred, but emphasis was put on rural rather than urban work. The number of rural propaganda centres was increased, attempts were made to take advantage of the introduction of prohibition of alcohol in certain important areas, and film propaganda was intensified.

In 1938–9 it was the privilege of the writer, who became vice-chairman of the Indian Tea Market Expansion Board in 1937, to examine the whole basis of work and to advise that the emphasis should in future be on a particular type of urban propaganda, based on the principles of repetition and continuity, rather than on the necessarily scattered rural work which had recently become the main feature of the board's activities in India. The reasons adduced for the proposed change were set forth as follows in the board's report for 1938–9.

(a) Since the Board can hope to 'contact' a certain very limited number of India's vast population, this should be done not by scattered parties in the more thickly populated regions of India, but by inter-connected parties in densely populated areas of convenient size;

(b) It is in the towns that people are to be found in sufficient numbers, receptive to new ideas, with money available for new items of expenditure and exercising the greatest influence on the habits and customs of the people; and,

(c) The work actually to be conducted in towns could more efficiently be supervised, maintained and directed and would lend itself to economies in the

avoidance of difficulties of travel, of stores, equipment, and supervision inevitably attendant upon rural work in India.

It had been shown that with certain exceptions townspeople in India were not tea drinkers and with this fact established a *prima facie* case had been made out in support of the proposal that the Board's work should in future be concentrated in towns.

Expert opinion was divided as to the wisdom of substituting urban for rural work and it was therefore decided to start five urban campaigns as an experimental measure. Bangalore, Hyderabad, Secunderabad, Lahore, and Cawnpore were chosen for this purpose, and work in those areas on the new lines started in July and August 1939. It was clear that this work would require close objective study and that a more scientific statistical basis for any conclusions that might be drawn was required. A statistical branch of the board was established and recourse was also had to the Indian Statistical Institute, then under the charge of Professor Mahalanobis, for a statistical study of tea-drinking in Calcutta.

At this stage, there were many signs that the long-continued propaganda in India was having its effect and that people were becoming more tea-minded. Thus in 1938–9 the Commissioner for tea in India, W.H. Miles, reported as follows:

> The general tea position in all spheres of our activities continues, in my opinion, to be most satisfactory. The distributive trade regularly canvass all markets, and shortage of stocks, which in small places a few years ago were the rule rather than the exception, are now practically unknown. In my report for the year ending 31 March 1938, I referred to the very large increase which is taking place in the sale of tea in small packets, not only in the large places but also in small markets where a short time ago no more than a few pounds of loose tea would have been available. This feature, I suggested, indicated a general all round increase in tea-mindedness, for it surely demonstrated that the consuming public were exercising more discrimination than in the days when they were satisfied with a few pice worth of loose tea, which was more often than not out of condition. . . . Another encouraging development on the part of the distributive trade is the introduction of a *pice packet* containing leaf tea. For many years past, the principal distributors have marketed what is known as a *pice packet* of dust tea of which ninety-six go to make up one pound. The price of these packets, however is not in reality one pice each, but varies according to the general demand in the place in which the sale is being made and frequently they can be had at the rate of two for one pice. As far as I am aware, this is the first time that any serious attempt has been made to market a genuine *pice packet* containing leaf tea. The contents of these *pice packets* is greater than the *pice packets* which we sell, and they represent exceptional value in that the tea is reaching the consumer in this minute quantity at 11 annas a pound.

This increase in tea-mindedness was especially marked when the new urban campaigns began to get under way. The importance of that work

justifies a somewhat lengthy quotation from a description of the methods adopted. In his report for the period 1 April 1939 to 31 March 1940 the Commissioner stated:

Urban work differs from rural work in the important respect that it is concentrated in one area and aims at converting to tea drinking only those people who reside in that area, whereas rural work hopes, by means of placing tables at sites visited by village people, to convert not only those people who visit the tables – but also their friends and relations to whom tea may be introduced by *pice packets* taken back to villages from our tables.

The chosen town is divided into areas, each of which is worked by one demonstration table. Every house in the area is numbered and each street or lane in which the houses are situated is marked with the times at which the demonstration table should be working in that particular lane and with arrows to show the direction in which the demonstration party is moving. This greatly facilitates supervision and enables inspecting officers to check up whether the staff are working to their programme. Thus it will be seen that the houses in which propaganda is being conducted receive and drink tea at the same time every day. As compared with rural work the number of people with whom a demonstration unit comes into contact is considerably less, but of course the degree of repetition which is obtained in urban work is much higher than in rural work.

As far as possible we aim at brewing the tea inside the house so as to teach the householder the correct method of preparation. The degree to which we have been able to carry out this has varied from place to place, but on the whole has been most encouraging. Before the campaigns were started, I personally did not feel that this would ever be possible, but experience has shown that even in the more orthodox and conservative places quite a number of households will allow our staff to demonstrate right inside the house.

The experiment in urban work was considered to have justified itself and in 1940, six new towns were selected for operations. Urban work was in fact the most important element in the board's campaigns from this time until, in 1944, difficult war-time conditions made its continuance impracticable. The fact that the new technique involved visiting prospects instead of waiting for them to come to the board stalls gave rise to new problems of approach. One of these problems arose wherever the custom of *purdah* was prevalent – particularly as the demonstration parties visited the houses at hours when the menfolk were commonly at work. Contrary to expectation, in the houses of many *purdah* ladies the parties were allowed to enter the courtyard and brew tea while the *purdahnashins* watched the process from behind a screen. This facility was partly due to the good reputation early acquired by the board's staff and it is interesting to note that very young men, who could be regarded by middle-aged ladies as more or less children, had easier access to these houses than older men. In some high-class *purdah* areas, educated lady demonstrators were employed with considerable

success, but there were localities such as the Moslem quarters of Lahore, where neither male nor female demonstrators could gain a footing.

Religious orthodoxy also presented a problem in some towns, and the only solution was patience, combined with a scrupulous respect for religious feelings and customs. The Commissioner made some interesting observations on this subject in his report for 1940–1.

> Trichinopoly is a stronghold of rigid orthodox Brahminism, and we naturally expected considered opposition from those districts in which the population was predominantly Brahmin. There certainly was some resistance, but on the whole the attitude of these orthodox people was extremely friendly, even though in some areas they quite definitely refused to accept tea from our demonstrators, in spite of their protestations that they and the Sub-Inspectors were just as good Brahmins as themselves. This attitude was particularly marked in the area surrounding the Srirangam Temple, one of the most important Brahmin centres in South India, and it is therefore greatly to the credit of the Assistant Superintendent in charge of the campaign that we were – due to his efforts – able to obtain permission to distribute tea within the actual precincts of the Temple. The fact of our being able to do this must have had a very marked effect on those of the Brahmin community both in Srirangam and elsewhere who were doubtful as to the propriety of accepting tea from our staff.

In order to estimate the success or failure of these campaigns, the board's staff developed a regular technique consisting of four elements. The first and simplest test consisted in watching the progress of *pice packet* sales. Where the parties were successful they gradually established in each household the habit of expecting tea at a certain time every day. Since Sunday was a day of rest, it was suggested to the householder that he should buy *pice packets* of tea on Saturdays and make tea for himself on the Sunday. Sales of Saturday *pice packets* thus gave an indication of growing tea-mindedness.

The second test was provided by the maintenance parties which continued to visit urban areas when the demonstration parties had discontinued their work. This maintenance work was thus described by the Commissioner in 1941.

> The duty of these maintenance officers is to keep contact with all the houses to which tea has been distributed and to endeavour to discover to what extent the householders continue to drink tea. They ask the same questions at each house and classify householders into one or other of the following four groups:
>
> Households known to drink tea daily.
> Household known to drink tea irregularly.
> Households believed to drink tea.
> Households known not to drink tea.

Before being placed in either of the first two categories, the householder has to produce reliable evidence, such as a packet of dry tea or pot of liquid tea just prepared for consumption, and if he is not able to do this, he is placed in the third category. A household, however, even though it regularly consumes tea, may not always be able to produce such evidence at the time that our inspector pays his visit, and consequently the first two categories of householders will tend to be underestimated.

In order to test the accuracy of the information collected by maintenance officers, our Superintendents are required to pay independent visits to a random selection of houses which have already been visited by the maintenance officers. An analysis of information collected from these two independent sources is carried out in this office by our Statistical Department, and has shown that differences between the two sets of information are not statistically significant and probably occur by chance. Consequently we are able to regard the data collected by our maintenance officers as reasonably accurate.

A third test was carried out by means of random sample surveys of tea-drinking habits before and after operations in particular urban areas. The staff responsible for these surveys had no connexion with the running of the campaign and moreover their observations were from time to time checked by the board's statistician.

A fourth criterion of success or failure was provided by the stocks in the shops of grocers in the areas worked.

These four criteria were applied independently and the results were then collated. This whole process can be regarded as one of the first really large-scale applications of scientific methods to commodity sales in India.

The Commissioner's reports on this subject from 1938 to 1944 make fascinating reading. It is only necessary to record here that, except for one or two towns, the urban campaigns were admitted even by those who had originally doubted their wisdom to have been successful, and distributors were always most anxious to synchronize their own campaigns with those of the board.

In order to provide funds for the urban work, after 1939 the board gradually contracted its rural campaigns. Village work in East Bengal was, however, continued in view of the great density of population in that region and the readiness of the people there to take to tea. The Commissioner indeed regarded this as the most fruitful of all areas for tea propaganda and his view was justified by the fact that when the campaign was closed there in 1947, the percentage of tea-drinking families in the areas worked was double that which existed before the board's operations. Whether an equal or greater expansion of consumption could have been obtained by the application of the sums used in East Bengal to urban work elsewhere is a matter of controversy, but it was probably right to continue one large rural campaign side by side with

the urban campaigns which formed the backbone of the board's work at this time.

At an early stage in its existence, the board intensified its work in industrial establishments. The changing attitude of employers towards their employees, the growing consciousness of the labourer of his own rights, and the need to keep workers contented, particularly after the outbreak of war, all provided the right conditions for this aspect of the board's activities. The board began by trying to persuade employers to give rest pauses, with free tea, to workers in mills and factories, and with this aim it secured permission to distribute free tea at the board's cost for a period of four or five months in a number of such concerns. In 1939, this distribution was carried out in thirteen mills in South India with a good deal of co-operation from the employers, who recognized the value of the practice. Nevertheless, the results were disappointing inasmuch as most of the mills were unwilling to undertake free distribution themselves, although some did so for the night shifts. The general attitude of managers was stated by the Commissioner as follows:

> The managements fully realise that the workers enjoy and appreciate the tea and they are alive to the desirability of having a contented labour force, but there are few managers who do not consider that the many concessions to labour which they have already been forced to make are neither justified nor fully appreciated by the workers. Consequently, owing to the depressed conditions under which the industry is at present working, they are not prepared to incur any additional expenditure for the purpose of providing further benefits for the labour force.

In view of this failure, the Commissioner next aimed at ensuring that a good cup of tea should be available to mill and factory workers at one pice per cup containing five liquid ounces of tea. This involved eliminating the outside contractors, who in many cases paid heavy rent to the mill authorities and therefore had to charge 2 pice per cup containing four liquid ounces. Employers on the whole responded well to this co-operative canteen system and progress was rapid in Bombay, Ahmedebad, and South India. The board's staff organized the canteens and handed them over as going concerns to the mill or factory managements, who ran them thereafter. In some industrial establishments the canteens also provided light refreshments and in 1941 the Commissioner reported very favourably on the progress made:

> There is ample evidence to support the statement that these canteens are becoming more and more popular with both management and workers. The former are beginning to regard the established canteen as an integral part of the mills' welfare work and practical evidence of this is to be found in the fact that a number of mills at which we have opened up canteens are now either building – or are contemplating building – new canteens out of

accrued canteen profits, whereas, of course, under the old regime such profits went into the pocket of the contractor and did not in any way benefit the worker.

Industrial work in and around Calcutta progressed more slowly, since managers were often averse to disturbing the hawkers and contractors who had served them well for a number of years. Even as late as 1945, the Commissioner had to report that 'the support received from industrialists in Bengal – particularly the Calcutta area – has been rather disappointing and consequently the number of canteens which we have been able to establish in this very important area have fallen short of expectations'. Not until 1947 was the Commissioner able to report a marked improvement in the attitude of managements in East India towards this problem. By that time the position as regards sugar and food grains had become acute and building materials were also hard to get. Considerable delay, therefore, occurred in extending the canteen system. Nevertheless, the battle had been won and throughout India the tea canteen had been accepted as an important element in an industrial concern.

During one of his visits to Ceylon, the writer was most impressed with the success of the Ceylon Tea Propaganda Board in informative publicity amongst school children, as well as in arranging distribution of tea in schools of all kinds. He therefore suggested that similar methods should be tried in India, but he has now to confess that they were on the whole a failure. Dacca and Bangalore were chosen for this experimental work. The Commissioner in 1942 said:

> Both tea maps and special educational literature have been distributed to schools . . . and our special officer has delivered periodical lantern lectures on various subjects connected with tea and the tea industry. Essay writing and map drawing competitions were held . . . and the Board awarded prizes . . . these consisted mainly of cash or some form of school accessory . . . such as a fountain pen plus in all cases a packet of dry tea.

The free distribution of tea in certain schools was also arranged. In Bangalore the campaign was partially successful, but in East Bengal there was a good deal of resistance to the idea of tea propaganda in schools and in due course it petered out.

Economic and other difficulties in the latter half of the war naturally impeded the board's normal work. European staff were required for military duties, equipment became difficult to get, and by 1942 the transport shortage in certain areas was acute. It was in 1943 that the full impact of war conditions was felt and in that year the Commissioner wrote as follows:

> It would be difficult to imagine conditions more unfavourable to successful direct consumer propaganda than those which prevailed throughout the year

under review. There was an acute shortage of all commodities, the prices of which soared to unprecedented heights, and tea and other essential ingredients such as sugar and milk were no exception. At one period of the year all the leading Distributors' cheap packet teas rose to R 1/11/0 per lb, which is exactly three times the price which we have become accustomed to regard as normal for these blends. Such conditions undoubtedly had an adverse effect on tea consumption, both as regards creating new consumers and also in respect of the amount of tea consumed by those accustomed to the beverage. Fortunately, towards the end of the year Distributors' prices eased somewhat though they were still very high.

In the second half of 1944, conditions were so adverse that urban work was temporarily discontinued. At that time the Commissioner investigated the effect of war time conditions and high prices on the tea position and reported as follows:

The first of these investigations was to find out, if possible, what influence rising costs of living exercised on the results of our campaigns. Are people less receptive to propaganda during periods of rapidly deteriorating economic conditions or do their reactions remain the same in spite of the change in their economic circumstances? The prices of consumer goods commenced to rise steeply during the last quarter of 1942 and by the middle of 1943 were very high and still rising. We had seven towns (four in Southern India and three in Central and Northern India) where surveys had been held both prior to the last quarter of 1942 and again in the first half of 1943 and were, therefore, able to compare the results achieved in both periods. We found that in the four South Indian towns the differences between the percentages of tea-drinking families in the two periods showed no definite trend for either increase or decrease; in fact, there were wide swings on both sides. In the case of the Central and North Indian towns, it was different and there was a definite trend, for in every case the percentage of tea-drinking families registered was lower in the period during which the cost of living was rising. If these two findings are examined in conjunction with the trend of the official cost of living indices, their significance is clear. Over the same period, namely September 1942 to June 1943, the cost of living indices in the four South Indian towns rose by roughly fifty points whereas in the three Central and North Indian towns, the increase was nearly 150 points; therefore it seems clear that rising cost of living did have a derogatory effect on the results of our campaigns to the extent that fewer non-tea-drinking families were converted to the habit. Having ascertained this, we proceeded to examine the effect of worsening economic conditions on the tea position of areas already worked. Figures relating to identical areas of nine towns collected in surveys held first in the early part of 1943, and then again towards the end of 1944, show that so far as the percentage of tea-drinking families is concerned, there is no particular trend either upwards or downwards, and it would seem, therefore that bad economic conditions do not seriously affect the number of families which drink tea, once the habit has been acquired. The position in regard to the amount of tea consumed by them is, however, different. Here we

found that with one exception where there was a narrow decrease, all the other towns showed that more tea was being consumed by a tea-drinking family in 1944 than in 1943. The trend was unmistakable and is most interesting because although the general cost of living was much higher in 1944 than in 1943, the retail price of tea was lower. It may well be therefore that the average family does restrict consumption when prices are very high and increases it as prices fall.

Although the war created supply difficulties, it also provided opportunities and the Indian Tea Market Expansion Board was not slow to take them up. It will be remembered that there was a considerable time lag between the outbreak of hostilities and the full impact of the war on India, and it was not until 1941 that opportunities for participation in the war effort were available to the Indian Tea Market Expansion Board. It was then decided to provide tea cars, similar to those used by the YMCA in England and France, for work amongst Indian troops in India, particularly in isolated areas where canteen amenities might not exist. Four cars were accordingly commissioned in the North-west Frontier Province and another was located in the Bombay docks. The cars were divided into two compartments so that Hindus and Moslems could be served separately. Indian gramophone programmes were arranged and the cars were undoubtedly popular. Their number was gradually increased and in 1945, thirty-seven Indian Tea Market Expansion Board cars distributed twenty-one million cups of free tea to troops in every part of India. Five of those cars followed the Fourteenth Army into Burma in 1945. Tea canteens were also organized for service amongst ARP workers in Calcutta, Howrah, and Madras, and in 1943 Civil Defence and ARP services were included in the areas worked by the tea cars. In 1944, the work of the cars was discontinued in Madras and Bangalore 'as it was considered by the authorities that the danger of air raids was so slight as to make the provision of petrol and tyres for these cars a luxury rather than a necessity'.

Canteens for troops were also established in important centres in North-east India and were much appreciated by the military authorities. Some idea of the proportion of the resources of the Indian Tea Market Expansion Board devoted to war service can be gathered from the fact that, in the year ending 30 September 1945 out of a total of Rs 27½ *lakhs* spent by the Board in India, Rs 11½ *lakhs* were allotted to work with the military or in the ARP organizations. This expenditure was, of course, additional to the large financial contribution of the Indian Tea Market Expansion Board to the war effort through the channel of the International Tea Market Expansion Board.

The Indian Tea Market Expansion Board and its Commissioner, Miles, can thus be said to have met the challenge of the war with determination and imagination. It carried on intensive urban campaigns

in spite of increasing difficulties up to 1944; it built up the new technique of organizing canteens in industrial establishments; and it contributed generally in work and finance to the war effort.

When the war came to an end, economic conditions still rendered any immediate return to the normal activities of the board difficult. The restrictions in transport and the shortage of essential materials proved even more acute than in war-time, while, according to the Commissioner for India, the retail price of distributors' blends of common leaf tea in India stood at a higher figure than ever before. Congestion in the docks and elsewhere, accentuated by the docks strike of 1947, together with the serious communal troubles in Calcutta and Bihar, resulted in a definite shortage of common teas in many towns and the position was made worse by the shortage of sugar. *Jaggery* was often used in place of sugar, but the Commissioner reported that urban demonstrators frequently had great difficulty in persuading people to accept *jaggery tea.*

In spite of these difficulties, in 1946–7 it was decided to recommence urban work on a large scale. Work was to be carried out in the smaller towns with populations of between ten thousand and fifty thousand rather than in the cities. The reasons for this change of policy were thus stated by the Commissioner.

> Firstly, all available information indicated that the incidence of tea-drinking was less than in the large cities; secondly, the inhabitants of the smaller towns are less sophisticated and therefore more susceptible to our propaganda than city dwellers; thirdly, life in the smaller towns is usually more closely integrated with the social and economic structure of the surrounding villages than it is in large cities and it was, therefore, considered that work in smaller towns would probably also have an appreciable effect on the incidence of tea-drinking in the surrounding rural areas.

Random sample surveys were carried out to discover the incidence of tea-drinking in the thirty-one selected towns. Some were found to require no propaganda and ultimately twenty-nine towns in North India and thirty towns in South India were chosen for the new work.

The Commissioner at once came up against staff difficulties which he thus described:

> When plans for the new urban campaigns in North India were first prepared, it was intended to put our senior and experienced rural staff in East Bengal through a course of urban training in North Bihar prior to using them as the nucleus of trained staff for the three new Urban Divisions in this Province. Unfortunately, this scheme did not work out strictly according to plan. After proceeding to Bihar and undergoing their urban training, a very large proportion of these assistants decided that they did not like urban work or found the social conditions prevailing in Bihar not to their liking with the result that they either tendered their resignations or had to be dismissed for leaving their headquarters and returning to Bengal without permission. The

loss of these assistants left us very short of experienced staff and the recruitment and training of suitable replacements necessitated our repeatedly altering the starting date of several of the Central Bihar campaigns. On top of these difficulties we had to contend with the serious and wide-spread communal disturbances in November last which, unfortunately, occurred at a time when we had just launched a series of campaigns in the Monghyr and Bhagalpur Districts which were two of the worst affected areas. Although these disturbances did not actually cause any lengthy stoppage of work, they did result in one particular community evacuating their homes in large numbers and created an atmosphere of acute tension over a wide area which made it virtually impossible for our demonstration staff to obtain unrestricted access to the homes of the people which is so essential in this type of propaganda. These events did not have any serious effect on the campaigns in North Bihar, which started in July and September and were, generally speaking, outside the main centres of the communal disturbances, but they delayed and interfered with our activities in the Monghyr and Dinapore Divisions, and it was not until January this year that our staff were able to settle down to normal work in these areas.

Work followed the lines established before the war, but the high price of tea compelled the Commissioner to abandon the traditional *pice packet* and replace it by a half-anna packet containing one-quarter of an ounce of dry tea. The packet subsequently had to be reduced to one-fifth of an ounce. The families affected thus had to pay Rs 2/8 per lb for their tea. Nevertheless, the campaign made a good start and sales of packets were higher than before the war.

In 1948, conditions were in many ways better than in 1947, but financial stringency compelled a reduction of the number of towns worked from fifty nine to thirty. These campaigns, however, were only planned to run for eighteen months and as that period had expired in twenty-nine towns, no campaigns had to be discontinued prematurely.

One interesting change in technique resulted from careful observation and statistical analysis as the results of campaigns. This is best described in the Commissioner's own words:

> In all campaigns a certain proportion of the families who had been converted to tea-drinking during the currency of the campaigns, discontinued the habit after its close. Of these families who discontinued preparing tea, it was clearly shown by the surveys that more than seventy-five per cent did so within one to six weeks after the withdrawal of our propaganda operations. After this period, it was found that the percentage of families who discontinued the habit was negligible. It was, therefore, apparent that we were either working the sites for an insufficient length of time or that our method of withdrawal was too abrupt and that some form of post-demonstration contact with families was necessary for a period of time after free distribution of tea and normal house-to-house demonstration were discontinued. Previous experience in urban operations extending over a number of years, coupled with a very detailed analysis and study of half-anna packet sales, has clearly

shown that a period of four months intensive operations is quite sufficient for any individual series of sites and that if free distribution is continued after the end of the four months, little or no further progress is made. There was, therefore, reason to believe that the falling-off in the number of tea-drinking families was due to the fact that our present method of withdrawal was too abrupt and that judicious contact and propaganda talk for a further period after the cessation of free distribution was necessary in order to establish tea-drinking permanently in the homes of a certain percentage of the population. For financial reasons it was not considered desirable to extend the duration of operations at individual series of sites beyond the existing period of four months unless this was proved to be absolutely unavoidable and it was, therefore, decided to curtail the period of free distribution of each series of sites to three months as an experimental measure and to devote the fourth month's operations to what has come to be known as 'post-demonstration contact work'.

The period of post-demonstration contact work thus described was divided into two phases. In the first fifteen days the staff continued to sell half-anna packets, though at the same time they tried to direct the custom of as many families as possible to local dry-tea shops. In the final fifteen days, the sale of half-anna packets by our staff was discontinued and attention was concentrated wholly on the sales of local shops.

Methods of work necessarily had to vary from place to place according to circumstances, and the case of the Nagarathars of Karaikudi and Devakottai in Ramnad well illustrates the flexibility of approach required in this kind of work. Says the Commissioner:

When work first commenced, it quickly became apparent that our normal method of approach was not having any effect upon this wealthy and influential community, which forms such an important section of the population of the towns of Karaikudi and Devakottai. The Nagarathars, who live in great luxury, treated our staff with the greatest courtesy and, on the surface, appeared to be responding to propaganda by accepting our free tea and buying an occasional half-anna packet. More searching enquiries, however, revealed that the majority of these families were, in fact, giving the tea to their servants because they resented being served with tea which in their opinion, had been prepared in the homes of neighbouring families whom they considered to be their social inferiors. In order to overcome this prejudice we arranged a special demonstration unit consisting of an experienced and senior Sub-Inspector and an Attender who arranged private demonstrations in the homes of certain selected families amongst the community. Our ordinary method of approach of bulk preparation in the tea urn was abandoned and we utilised the normal tea-making equipment – the teapot, milk jug, sugar basin, and china cups and saucers. Before any demonstration of this type was made, a senior inspecting officer of the Board visited a number of the families and made definite appointments for demonstrations to be held in their houses. These demonstrations quickly came to be regarded as something in the nature of a social event and practically all members of the family were present during

the demonstration and received tea made and served by our special party. This method of work was, perforce, very much slower than our ordinary methods, but we believe that by our ability to contact the wealthy and conservative elements of this community, we probably exercised considerable influence amongst the remainder of the community. Altogether, by the end of the year under review, we had contacted 240 Nagarathar families and, of these, we have converted 220 families to be regular tea drinkers. These 240 families were specially selected because of their high social standing and influence amongst the remainder of the community and we believe that the cumulative effect of this work is likely to have a very considerable influence on the Nagarathar community as a whole. Evidence of this has already come to hand in the form of a statement from the two leading firms of distributors that their sales of high grade teas in these two towns have very materially increased since our work commenced.

Generally speaking, these post-war urban campaigns produced excellent results and were an important cause of the rapid increase of tea consumption in India. In this period, press publicity – which had always been an important element in the board's work – was intensified and expenditure on advertising space amounted to Rs 4 *lakhs*.

THE CENTRAL TEA BOARD

Unfortunately, in the next few years several factors combined to give a set-back to the excellent work done hitherto in the promotion of the sale of Indian tea. In the first place doctrinaire considerations led the Government of India to replace the Indian Tea Market Expansion Board by the Central Tea Board. The ITMEB had been run entirely by representatives of the industry and had proved itself a very live body. Although the Central Tea Board included representatives of the industry, it was for all practical purposes an offshoot of the Government of India and soon lost the dynamism of the old board. As an ex-Indian civil servant, the writer would be the last person to disparage the administration of India, but experience throughout the world shows the unsuitability of official or quasi-official organizations for carrying on propaganda. The slowness and ponderousness of the official machine and the necessity for obtaining financial sanction from officials with no practical experience of the kind of work involved, inevitably damps down the spirit of enterprise and the willingness to experiment on which lively propaganda depends. The Central Tea Board did good work in those spheres of policy and control with which the official world is familiar, but in the department of propaganda the machinery quietly ran down. In this period few new ideas were produced, though excellent tea rooms were established in Lucknow, Kanpur, and other industrial centres, while a number of cafeterias were set up in collaboration with the All-India Women's Central Food Council.

In April 1954 the Central Tea Board was replaced by the Tea Board, of which U.K. Ghoshal, ICS, became chairman. Ghoshal had a lively appreciation of what was required and at his request in 1957 the writer made a survey of the situation. The writer's assessment of the work done was summarized as follows:

In the first place, I find the Board's staff in general dispirited and suffering from a sense of frustration. They feel that they are mere cogs in a rather soulless machine and they are not therefore animated by that desire to initiate new ideas and methods which is the essence of propaganda. The Chairman has done his best to dispel this lassitude, but the weight of the elaborate governmental system imposed on the Tea Board has made his task difficult, if not impossible. The staff have developed a frame of mind in which the avoidance of accounting mistakes and errors of procedure appears more important than securing positive results.

Secondly, the main method of field propaganda now employed is one which was discarded as a result of experience many years ago. It infringes the vital principles of repetition and concentration; it makes no great impact on the public; and it would be surprising if it led to any rapid expansion of consumption.

Thirdly, the Board has not yet evolved any satisfactory method of assessing the growth of consumption in the areas where it conducts propaganda. It is true that any direct correlation of the cost or extent of particular operations with results is neither practicable nor desirable. Nevertheless, approximate methods of studying results are essential to any sound judgement either of the methods employed or of the proper duration of operations in a particular area.

The writer went on to make proposals for the reorganization and revivification of the work.

Ghoshal was very responsive to these proposals and a new liveliness soon appeared in the propaganda work of the board.

At this stage a change in the economic policy of the Government of India brought work to a virtual standstill. It was obvious that India was running into serious difficulties over foreign exchange and that it was essential to increase her export earnings. The Government of India at this time did not realize the relative inelasticity of the world tea market and assumed that India's capacity to sell tea abroad was unlimited. The new policy therefore aimed at discouraging any rapid expansion of Indian consumption in order to make the maximum quantity available for export. In 1960–1 field tea propaganda work in India was therefore discontinued – or put on a care and maintenance basis – and at the same time press publicity was stopped. Work in two important zones was discontinued altogether and the Madras Tea Centre was closed. For all practical purposes, except for work in industrial canteens, tea promotion activities came to an end.

The reasons which led to this change of policy were understandable,

but it is doubtful if they were sound in a long view. Much young tea has been planted of recent years and production is likely to increase faster than the world demand for Indian tea. The home market will then become of great importance and greater offtake there would enable the producer to lower his cost per kilogram and so off-set the continual increase in wage rates. Fortunately, tea consumption in India is growing spontaneously, but it could be made to grow more rapidly by a return to the dynamic promotion campaigns of the days before independence.

The decision of the Government to concentrate on exports should logically have led to a large-scale tea promotion campaign in collaboration with other producing countries. Unfortunately, for reasons which need not be discussed here, in September 1952 India had withdrawn from the International Tea Market Expansion Board. She continued to participate in the work of the Joint Tea Councils in the USA and Canada and in 1954 in collaboration with the West German Tea Propaganda Corporation. Ceylon joined that corporation in the following year.

For nearly a decade, however, official India completely neglected her most important consumer, Britain. Ceylon was naturally determined to profit by the absence of India from the field. She continued the work previously done in Britain by the International Board through the Empire Tea Bureau, but she placed much of the emphasis of her propaganda on Ceylon tea rather than on tea in general. The results of India's neglect were evident from the statistics which showed Ceylon's rising proportion of tea consumption in Britain.

After a few years' experience the Government of India began to realize that its policy had been mistaken and in 1959 and 1960, Indian Tea Promotion units were opened in Cairo, Sydney, New York, and London. In Britain, where the great bulk of tea is sold to the public in blends containing proportions of Indian, Ceylon, or other tea which may vary from month to month, the real need was for the resumption of the international campaign for tea as such, rather than for sectional campaigns. It was, however, not until well after the period with which this book is concerned that this need was realized and on the whole it is not unfair to say that in the sixth decade of the century the Government of India made no serious effort to promote world consumption of Indian tea.

Section 9

TRANSPORT AND COMMUNICATIONS

CHAPTER FORTY-TWO

TRANSPORT AND COMMUNICATIONS*

I. ASSAM

(a) INLAND WATER TRANSPORT

One of the most difficult problems facing the pioneers of the Assam tea industry was that of transport. In the rains, tea chests could be taken in canoes down the small streams flowing into the Brahmaputra, but in the cold weather these streams dried up and as bullock carts scarcely existed in Assam at that time, chests had to be carried by coolie or by elephant. Two coolies could carry one chest, but though labour at that time was cheap, it was scarce, and could only with difficulty be spared for this task. Elephants were hard to come by in the early days – Bruce reports great difficulty in procuring them – and according to the report of the Superintendent of the Assam Company in 1847, *howdahs* strapped to an elephant's back would take only six chests. The Assam Company partly coped with the problem of bringing tea in from the tea gardens of Nazira by designing a four-wheeled elephant wagon. Antrobus, the historian of the Assam Company, tells us that such a wagon capable of holding fifty four chests cost Rs 1,200. It was, he says, cumbersome and could not be used in the rains.

Even when the tea had been brought as far as the Brahmaputra, the difficulties of transporting it to Calcutta were great. The normal method of transport between Calcutta and Assam was by means of country boats, regarding which Brame, the historian of the India General Steam Navigation Company Ltd, tells us that 'the boats were generally dragged along the bank by ropes when ascending the river unless the wind was favourable, when sail was set and the weary crew had a welcome rest'. A country boat proceeding from Calcutta to Assam probably went by the River Bhagirathi to Pabna, thence to what is now called

* In this chapter we have drawn extensively upon the excellent histories of the Assam and Jorehaut companies by Antrobus, and Brame's history of the India General Steam Navigation Company Limited.

Goalundo, and on through Sirajganj to Goalpara and Gauhati. Progress was extremely slow and the journey between Calcutta and Gauhati seems to have taken anything from two and a half to three months.

Fortunately a quicker means of transport was found. In communications, as in so many other matters, the East India Company was remarkably progressive, and it is noteworthy that Lord William Bentinck, the Governor-General of India, introduced a government steamer service on the Ganges as early as 1834 – only fifteen years after the first ocean voyage with steam anywhere in the world. The first of the East India Company's inland water vessels was appropriately named the *Lord William Bentinck*. Brame gives an interesting description of these early steamers.

> The steamer carried cargo only and provided quarters for the ship's officers, while the 'accommodation boat' conveyed passengers, who occupied cabins of various classes, but messed at the captain's table on the steamer, the communication between the two vessels being provided by a gangway. Both steamers and boats carried masts and sails to assist the progress when the wind was favourable.

The steamers carried not only military and governmental stores and personnel, but also commercial goods. The journey from Calcutta to Allahabad was scheduled to take three months, while for that to Dacca a month was allowed. 'Such far away places as Assam or Sylhet', says Brame, 'were beyond the range of any fixed timing.' There were, nevertheless, occasional services to Assam and by the time the Assam Company commenced operations they had become a little more frequent, though still very irregular and moreover they did not go beyond Gauhati. The Assam Company's tea had to be taken down from Nazira to that point in wooden country boats known as *bowlahs*, *chilmarees*, *budgerows*, or *panchnays*. According to Antrobus, 'they were cheap enough to build and operate, but they could only bring down about 150 chests of the Company's produce at a time'. The substitution of the government steamers for country boats from Gauhati onwards to Calcutta reduced the time of transit in theory, but the irregularity of the service often meant that tea chests had to wait a long time at Gauhati before they could be loaded.

The Assam Company therefore decided to make themselves independent of the government vessels and in 1842 placed in service the iron steamer *Assam* propelled by two fifty-horse-power engines. A 'flat' or 'accommodation boat' named the *Naga* was built in Calcutta for the steamer *Assam*, but that steamer was in fact 'designed to have sufficient capacity in itself for a full complement of stores and cargo – the idea being that without the "accommodation boat" the steamer would be faster and less expensive in coal'. The *Assam* was soon found to be useless for the purpose for which she had been built. Her steering apparatus

was unsatisfactory and navigation with her in the shifting channels of the Brahmaputra proved to be impossible. For a time the *Assam* was used on the Ganges route, but this does not seem to have been profitable and in 1847 the Assam Company sold her to the newly formed India General Navigation Company. The vessels of the new company did not ply on the Brahmaputra until 1860, and in the meantime the tea industry had to depend on the government steamers. The Assam Company soon found itself in difficulties. The company's wooden country boats had been neglected after the purchase of the *Assam* and the *Naga* and were worm-eaten. They were duly repaired and the company now began to buy iron boats, in which tea was 'tracked down' either to Gauhati for transhipment, or to Calcutta if no steamer were available.

A few years later, government steamers began to ply up the Brahmaputra as high as Dibrugarh. The service was nevertheless quite inadequate and when William Roberts went to India in 1859 to take over the properties of the Jorehaut Company, one of his first efforts was to establish an inland water steamer company. He was apparently not successful, but a new development was at hand. The Indian General Navigation Steam Company, which by then had ten steamers and ten 'flats', had begun to face serious competition on the Ganges route from the East India Railways as well as from the five other British steamer companies and a few Indian-owned steamers. The company therefore turned its attention to the Brahmaputra and in 1860 arrived at an understanding with Government by which the government steamers would be withdrawn and the company would run a steamer and a 'flat' once every six weeks from Calcutta to Dibrugarh. The experiment was a bold one. Assam at that time was sparsely populated and its inhabitants were self-supporting, and no traffic other than that of the tea industry was likely to be forthcoming. Nevertheless, the venture was successful. In 1862 seven trips were made from Assam and back and in 1863, the frequency of the services was increased to one a month. The service was in fact a tea line.

The steamer services were now fairly regular but as will appear from the following report of the Superintendent of the Jorehaut Company in April 1862, transport from the gardens to the steamers often presented difficulties.

> I regret to say that owing to the shallowness of the Dhanseera and the difficulty of procuring small boats of which to make *mahs* a considerable portion of the teas still remain at Oating, and it has been thought advisable to retain what had already reached Numaligarh so as to make one shipment of the whole, to prevent confusion. As we have had heavy rain since the 1st, the river will most likely have risen high enough to admit of the iron boat going up to Gola Ghat and that the *Lucknow*, advertised to leave Calcutta on the 7th instant will take all.

Commercial development in India now began to proceed at a new tempo and the demand for transport facilities grew rapidly. The India General Steam Navigation Company rose to the occasion. It bought out or amalgamated with most of its competitors and embarked on a considerable expansion of its block. By 1869 it had sixteen steamers, thirty-two 'flats' and five barges, and the names of many of the steamers clearly indicate their connexion with Assam. The Allahabad route had indeed lost much of its importance and was not used at all in the cold weather. The Assam line thus became the company's most important service. Of the five rival companies which had competed for the Ganges traffic in 1860, the only survivor apart from the Indian General was James Cleghorn & Company. The proportions in which the India General Steam Navigation Company and James Cleghorn shared the traffic to Assam at the time do not appear, but that Cleghorns were operating to that province is clear from the records of the Jorehaut Company, which show that in 1862, 150 chests of the company's tea were consigned to Calcutta by the Cleghorns' steamer *Berhamputer*.

In that year a new rival company – the River Steamer Company,* afterwards known as the Rivers Steam Navigation Company, was founded by J. H. Williamson – one of the remarkable Williamson trio mentioned in an earlier chapter, and the founder of the well-known tea firm of Williamson Magor & Company. This new company was at first interested in the Ganges route, but as in the case of the India General Steam Navigation Company, the Rivers Steam Company soon found that Assam traffic offered better prospects than that to Allahabad. By 1869 it was evidently well established on the Assam route, for Antrobus tells us that in that year the Jorehaut Company made a two-year agreement for the carriage of its teas and stores by the Rivers Steam Company at reduced rates in consideration of the whole of its goods being reserved for the boats of that company.

In the meantime the tea industry had grown rapidly in Cachar, and in 1863 the India General Steam Navigation Company considered it worth while to experiment with a venture to that district. The first voyage was made in August 1863, and earned a small profit. The River Surma was unfortunately only navigable by steamer for about half the year, and for some years Cachar was only served by steamer during the rains. A skeleton service to Dacca was started about the same time as that to Cachar and in the initial stages it was operated by 'flats', that is unpowered cargo boats, dropped empty at Narayanganj or Sirajganj by the Assam steamers and picked up again on the downward journey. This improvised service was soon replaced by a regular line of steamers.

At that time railways were developing rapidly in Eastern India and

* Not to be confused with the earlier, Bengal Rivers Company which was bought by the India General Steam Navigation Company.

by 1864 the East Bengal Railway had been carried as far as Kushtia, a little more than a hundred miles north of Calcutta. In 1869, the India General Steam Navigation Company and the railways came to an arrangement under which goods from Calcutta would be carried to Kushtia by rail and then transhipped on the steamer for Assam. 'It was considered', says Brame, 'that it would be an advantage to avoid the tedious and dangerous navigation of the Sunderbunds.' For reasons which are not clear, this plan was discontinued in 1871 and steamers for Assam again plied from Calcutta. A similar experiment was tried in relation to steamers for Dacca and Cachar when Port Canning was connected to Calcutta by railway – but it, too, was discontinued.

The eighth decade of the century was a period of rapid development of communications. In 1873 the East Bengal Railway was extended to Goalundo – though it must be pointed out that Goalundo was merely the point where, for the time being, the shifting channels of the Ganges and the Brahmaputra happened to meet. Henceforth, passengers for Assam went by train from Calcutta and boarded the steamer at Goalundo, but goods were generally despatched all the way by river. The frequency of the service was increased and by 1875 there was a weekly service to Assam and a fortnightly one to Cachar. Feeder services from the Brahmaputra to gardens on the Desang, Dekoo, and Dhunseri rivers were also established and numerous additions were made to the 'flats' of the India General Steam Navigation Company and the Rivers Steam Navigation Company. More efficient engines were installed and this led not only to economy in coal consumption but also to a shortening of journey time.

The service to Cachar was run by the India General Steam Navigation Company alone, but both that company and the Rivers Steam Navigation Company operated to Assam and they worked, at least in theory, on a common schedule of rates and fares. In 1880 the two companies drew a little closer together and agreements were entered into with the tea industry, by which shippers had the option of sending their goods by the steamers of either company at a considerable reduction over ordinary rates.

So far, the interests of the steamer companies had been identical with those of the tea industry, but a divergence occurred in 1879, when the joint companies protested against the competition of a steam flotilla recently acquired by the East Bengal Railway. This competition might have led to lower freights and so benefited the tea industry but the Home Government considered that railways subsidized by the State should not run in competition with private enterprise – and the railway flotilla was withdrawn. It was in fact chartered by the India General Steam Navigation Company.

The railways were not the only competitors, for in 1883, Andrew

Yule & Company floated the Indian Flotilla Company which, after one or two unsuccessful voyages to Assam or Cachar, plied mainly to the jute districts. Two years later, the Indian General Steam Navigation Company bought the flotilla, and the resulting accession of fleet strength was considerable.

An interesting experiment in organizing a steamer service specifically for the tea industry was now tried. In 1883 the newly formed Assam Railways and Trading Company purchased a flotilla to carry the coal which they mined in Upper Assam to all parts of Assam as well as to Eastern Bengal and Calcutta. The arrangement turned out not to be an economic proposition and the flotilla was laid up. Dr Berry White, a director of the Assam Railways and Trading Company and a member of the London Committee of the Indian Tea Association, put forward a scheme for establishing a planters line, supported by the Indian Tea Association and utilizing the block of the Assam Railways and Trading Company. In the words of Brame, 'the industry was to be freed for ever from the iron grasp of the steamer companies'. The proposal came to nothing, partly because the tea companies themselves were satisfied with existing arrangements. Ultimately, the RSN Company bought the fleet and there was no more talk of a planters line. In fact the tea industry was now adequately served by river transport, particularly since the RSN Company had, in 1882, entered into a contract by which, in return for a government subsidy and preference for the transport of emigrants and government stores, the company undertook to establish a daily service of mail steamers between Dhubri and Dibrugarh. The new service, known as the Assam Mail Service, soon justified itself and the directors of the IGSN must have reproached themselves severely for not having agreed to participate in the original arrangement. In 1886 they sought to regain lost ground by putting on very fast steamers 'replete with every convenience for Europeans and native passengers and commanded by European officers' for the Assam despatch trade. This was one of several causes that led to a bitter struggle between the IGSN and the RSN at that time, but it brought about a great improvement in the facilities available to the tea industry and to merchants trading in Assam.

In 1889 the two companies came to a settlement and a considerable measure of joint working was established. It is not necessary to trace in detail the later history of the companies. They had already provided the tea industry with a good service and in later years it was extended as the demand grew, while rival companies also entered into competition. Problems of a different kind now appeared concerning the conditions of carriage and the general relations between inland water transport and the industry. Those problems cannot be discussed here, but they loom large in the annual reports of the Indian Tea Association.

(b) *Roads*

At the beginning of the nineteenth century three roads led from Bengal to Assam. The mail was carried overland from Calcutta via Murshidabad, Dinajpur, and Rangpur to Goalpara; a second route ran by way of Dacca; while a third road passed through Sylhet and Cherrapunji to Gauhati. They were all practically impassable during the rains and even in the cold weather ordinary travellers preferred the river route.

Within Assam, road communications of that time can only be described as wretched. This had not always been the case. In the sixteenth and seventeenth centuries, the Ahom kings had built many roads and a Moslem chronicler of the period, though bitterly prejudiced against the Ahoms, describes a broad causeway 'raised for the convenience of travellers from Salagereh to Ghergong, which is the only uncultivated ground to be seen; each side of this road is planted with shady bamboos, the tops of which meet and are entwined'. After the decline of the Ahom power, chaos supervened and roads were allowed to fall into such a state of disrepair as to be almost useless. One of the most important of the old roads was the Dhodarali, which runs from near Mariani through Nazira to Jaipur, and in 1840 the Assam Company found it necessary to spend a considerable sum of money on this road between Nazira and Gabruparbut. The company asked the Government to reimburse them for this expenditure and to undertake further repairs, but though the district officer, Lieutenant Brodie, stated that the work 'was of great benefit to his district', the Government declined to pay. Eighteen years later, even a strong recommendation by Jenkins, the Commissioner, failed to produce a significant response, and for the first two or three decades of its existence the tea industry had to depend on its own efforts for any improvement of roads. Sylhet and Cachar were in even worse case than the Assam Valley.

The first important step taken by the Government in this connexion was the construction of the Assam trunk road in 1866. In 1868 the public Works Department was established in Assam and from this time onwards a little more attention began to be given at least to the main roads, but little real progress was made until the establishment of local boards in Assam in 1880. These boards were financed by means of a cess on land and also received grants from the Provincial Government. From 1883 onwards local communications were one of the responsibilities of these bodies and as the planters were well represented on the boards, they were able to press effectively for improvement – but funds were limited and a still greater obstacle to progress was a shortage of labour.

In some of the tea districts it was customary for managers to receive grants from the Government or from the local boards and to undertake the repair of the roads by means of their own labour. In a number of

cases planters were unable to spare labour for the purpose and the grants thus went unused. In the first year of its existence, the Indian Tea Association took this matter up with the Government of Assam and suggested that the Government should import at its own expense a 'coolie corps of trained road makers, complete in itself, having its own officers, its own commissariat and its own medical staff'. Reference was made to the excellent roads in Ceylon and the Indian Tea Association pointed out to the Government that the coolie corps system was in fact in existence in that island. The suggestion was not adopted and the Government stated that coolies had been imported by them for Public Works Department work in the Lakhimpur district, but that the system had not worked well.

Complaints about roads form a regular feature of all the early reports of the Indian Tea Association, and in 1892 in his speech at the annual meeting, the chairman of the Indian Tea Association took up the charge with regard to the Surma Valley and complained that:

> the district of Cachar in an area as large as one sixth of Scotland cannot boast of one good road of a mile in length. How can it when the Provincial grant for road construction is about Rs 1,600 per annum, or probably less than the sum expended in putting *soorkey* round Government House before His Excellency returns from the Hills? I do not complain, sir, of the latter expenditure, but of the inadequacy of the former contribution. When riding, during the rains of 1890, from Silchar station towards Luckimpur, I was advised to make a detour through rice lands rather than continue on the Government road, although the horse was thereby plunged to the girths in mud and water. There is surely reason to complain of such continued neglect. The projected railway will doubtless materially assist through communication, but to be thoroughly useful there must be auxiliary roadways leading to the line; and the age and importance of the Industry has surely earned for it the right to press upon the Administration the necessity for these communications: not earth heaps but cart roads, made fit for traffic.

There were, of course, endless wrangles as to the proper allocation of funds for roads between different districts, or as to the relative priority of roads, education, and sanitation – all of which simply meant that India was a very lightly taxed country and that there was therefore not enough money to do all that was required. It is not necessary to follow these wrangles in detail, but they were often heated, and the following letter from a Cachar planter quoted in the Association's Report for the year ending 28 February 1894 provides an interesting illustration of the strength of feeling involved.

> There are three districts in Assam – Tezpur, Jorehat, and I think Debru, all giving, I think, about the same outturn of tea or within a few tons of each other, and Cachar gives, I think, just a few tons above any of them. They get a Government grant for their roads of from Rs 84,000 to Rs 82,000 per annum, and we get under roads Rs 2,000, but we got this year, I think Rs 2,500.

When planters went to Assam they found roads ready made. Here there were absolutely none. Cachar gives a surplus revenue over and above all expenses, including the cost of a Regiment and the Frontier Police, of over one *lakh* of rupees. Sylhet gives a surplus of over seven *lakhs* of rupees. All our money goes to Assam, and we only get this ridiculous grant before mentioned. All Mr Ward's service was in the Assam Valley. His words and sympathies are all there. We are not treated fairly, and this we feel and resent, and the time has come to try and change this policy. Two years with a grant similar to that given to either of the three financial districts in Assam would put our roads in permanent good condition.

Roads that were 'a disgrace to the authorities', complaints regarding ferry services, lack of bridges that were essential, and the like, were in fact a constant theme of chairmen's speeches in Calcutta and in the District Associations. The planters' difficulties were real and are illustrated by the reference in the chairman's speech in 1900 to a group of gardens started in 1896 and including about 4,500 acres of tea, from which the only communication with the outside world was a bridgeless jungle tract, eight miles in length. It must often have seemed to those concerned that nothing was being done. Nevertheless, within the limits of the available funds, steady progress was being made, though tea gardens often had to bear a larger share of the cost than managers or proprietors considered fair.

We need not follow the progress of road construction, but shall refer merely to a few special landmarks during the next few decades. In the Assam Valley and Surma Valley road priorities were put on a more systematic basis in 1911 when in response to a request from the Government, the Indian Tea Association prepared a list of suggestions for new roads and details of much needed improvements in existing roads. In the following year the Province of Assam was re-formed and the Chief Commissioner, holding that the improvement of communications was the greatest need of the province, decided to distribute with the least possible delay as large a proportion as possible of the grant for the development of the province, which the Government of India had allotted to it at that time, and he called a conference to decide on a programme. In the following four years, no less than forty-one *lakhs* of rupees were distributed as special grants for roads and rapid progress was made.

The attention given to communications at this time is illustrated by the detailed resolution on the subject by the Chief Commissioner of Assam in 1917. He recognized that the advent of the motor-car made earlier standards of road maintenance meaningless. 'The real wonder', he wrote, 'is not that motor-cars experience difficulties on unmetalled roads in the rains, but that they can travel on them at all in that season, especially in a Province with a heavy rainfall like that of Assam. It is the

light Ford car which has solved the difficulties to a large extent at any rate.' The Chief Commissioner was not in any sense making excuses and indeed the Assam Administration showed considerable vigour in the matter of communications at this time, though the Chief Commissioner held that from certain areas the only feasible method of moving tea chests in the rains was by tramways and light railways.

In 1925 the Assam Branch of the Indian Tea Association took the initiative in proposing a voluntary road cess on the industry, but the Indian Tea Association in Calcutta and London disapproved of the principle involved and it was not pursued. In 1927, the Assam Government constituted a Tea Rates Road Fund, into which were to be paid the proceeds of an additional rate levied under the Assam local rates regulation on land under tea cultivation. The fund was to be administered with the advice of a board, the majority of the members of which were nominated by the Assam Valley and Surma Valley branches of the Indian Tea Association.

The establishment of this fund was an important step forward and ensured that the improvement of communications would be both rapid and continuous. This improvement was facilitated a few years later when the engineers of Assam discovered the value of the shingle road, the raw material for which was so readily available in a province fully covered by rivers. Today communications by road in Assam can be regarded as reasonably good. It is unfortunate that the Shillong–Sylhet road, constructed in 1936 by 'Freddie' Cormack to link the Surma Valley with the rest of Assam, has now lost much of its original purpose as the result of partition – since Shillong is in India, and Sylhet is in Pakistan, and customs barriers separate them.

(c) *Railways*

Although the construction of railways in India began in 1853 and was pursued with vigour, it was not until the ninth decade of the century that Assam was brought into the system. In 1879 the East Bengal Railway which had been taken as far as Kushtia in 1862 was extended to the River Tista, and the Indian Tea Association observed in its annual report that:

> from the Teesta to Doobree on the Bramapootra river there are yet about forty miles to be sanctioned by the Government of India, the construction of which would be a great boon to Assam as . . . great facilities would then be offered to travellers and labourers in proceeding from Calcutta to Assam.

The line was in fact continued to Dhubri in 1881.

Up to this time railway construction in India had gone through three phases. From 1853 to 1869 it had been carried out by private companies who enjoyed a government guarantee of the interest on their capital. From 1870 to 1880 the Government itself undertook the construction and operation of new lines; while from 1881 recourse was again had to

private enterprise, though some lines such as the Eastern Bengal Railway, originally constructed under government guarantee, were subsequently taken over by the Government.

In accordance with the new policy a private company was authorized to construct and operate a metre-gauge line from Dibrugarh to Margarita, with a branch to Talap on the way to Sadiya. These cold words convey nothing of the determination and readiness to face hardship that were required before this line could be driven through miles of dense, uninhabitable jungle. One extract from the account of an eye-witness, reproduced by W.R. Gawthrop in his excellent history of the Assam Railways and Trading Company, deserves quotation.

> The train plunged into the heart of the primaeval forest, and surely never from any other railway carriage windows in the world was such a scene viewed as greeted our eyes. South American lines have penetrated tropical forests before now, and have had 'considerable jungle' to tackle. But I question if even any of these lines could show such magnificent timber with such a matted and tangled undergrowth, dense cane brakes, inextricably confused creepers and parasitical growths, as the virgin forest on the Makum branch exhibits ... Here and there on the line a few huts, and, perhaps a damp, dripping, disconsolate-looking tent appeared, the temporary home of a gang of workmen and their superior. The desolate dreary look of these patches of humanity in the gloom of the primaeval forest, particularly on such a dark, drizzling day, gave us a vivid idea of the life led by the working pioneers of this great enterprise. One could picture the cheerless return 'home' of these men after a hard day's work, spent with toil, lacerated with thorns, their life-blood half drained by leeches, and often, notwithstanding the exertions of those concerned to keep the commissariat arrangements in working order, with poor fare to look forward to.

This line, known as the Dibru–Sadiya Railway was completed in various stages between 1882 and 1885, and though its length was only seventy-eight miles, it served a large number of important tea gardens and provided an outlet for the coal and oil from Makum. In 1885 a railway known as the Government Steam Tramway, on a two-foot gauge, was opened between Kakilmukh on the Brahmaputra and Mariani near Jorhat, in order to serve tea gardens whose unmetalled roads to the river were impassable in the rains and in the Jorehaut Company's Report in June 1886, it was stated that this had afforded great facilities for the carriage of stores and tea. In 1887 the Jorehaut Company found it worth while to construct their own system of tramways linking their gardens with the railway.

In 1895 the Tezpur–Balipara Light Railway – twenty miles long and with a two-foot-six gauge – was opened and performed for the area around Tezpur a service similar to that afforded on the South Bank by

the Government Steam Tramway. It was constructed by a private company with a subsidy from the district board.

A much more important work of this period was the construction of the Assam–Bengal railway. This was a large-scale undertaking, 740 miles in length, and it was to consist of three sections – one from Chittagong to Cachar, a second along the Brahmaputra valley from Gauhati to Tinsukia on the Dibru–Sadiya railway near Dibrugarh and a third connecting the other two lines and passing from Lumding across the North Cachar hills to Badarpur, near Silchar.

This railway system would obviously be of great value to the tea industry, but according to Antrobus, planters were far from happy at the proposal to construct it.

> There is no doubt that the planter did have genuine fears that the railway would affect his labour force adversely. He foresaw, as he thought, his labour being induced away from his garden to work on the railway, not only on its construction but on its maintenance in the future. He was concerned also that the railway would introduce bad characters and disease into the neighbourhood.

In spite of these fears, the project was undertaken, construction being done by a private company working under a government guarantee. The Chittagong–Cachar section was completed by 1898 in spite of the difficulties resulting from the earthquake of 1897. The Gauhati–Tinsukia branch ran through heavy jungle and disease played havoc with the labour force at work on it. Nevertheless, 'these difficulties', writes Antrobus, 'paled in comparison with the monumental task of the hill section which took eleven years to build.' According to the *Imperial Gazetteer* of India:

> This section runs for the most part through shale of the worst description, often intermixed with bands of Kaolinite, which swells when exposed and causes heavy slips, or exerts immense pressure on the sides of the tunnels. To counteract this pressure, very heavy masonry was required, cuttings had to be arched in and special measures then taken to allow the drainage to escape.

This line contained twenty-four tunnels and seven covered ways, in addition to seventy-four major bridges and Cornish workers were imported to do the tunnelling. Many of these Cornishmen died in the process, but work went on in spite of the great difficulties arising from the absence of local labour and of food supplies, and the section was completed by the end of 1903.

Shortly thereafter, the link between Dhubri and Gauhati was opened and the network of rail communications between Calcutta and the Province of Assam was then completed.

II. NORTH BENGAL

River communications are of much less significance in the tea districts of North Bengal than in Assam, and in this section we shall be concerned mainly with the opening up of Darjeeling and the Dooars by road and rail.

(a) *Darjeeling and the Terai*

When Hooker, the author of the famous *Himalayan Journals*, visited Darjeeling in 1848, he travelled by *palki** from Calcutta, and his description of the discomforts of that mode of travelling deserves quotation:

> The novelty of *palkee*-travelling at first renders it pleasant; the neatness with which everything is packed, the good-humour of the bearers, their merry pace, and the many more comforts enjoyed than could be expected in a conveyance *horsed by men*, the warmth when the sliding doors are shut, and the breeze when they are opened, are all fully appreciated on first starting; but soon the novelty wears off, and the discomforts are so numerous, that it is pronounced, at best, a barbarous conveyance. The greedy cry and gestures of the bearers, when, on changing, they break a fitful sleep by poking a torch in your face, and vociferating 'Baksheesh, Sahib!' their discontent at the most liberal largesse, and the sluggishness of the next set who want bribes, put the traveller out of patience with the natives. The dust when the slides are open, and the stifling heat when shut during a shower, are conclusive against the vehicle, and on getting out with aching bones and giddy head at the journey's end, I shook the dust from my person, and wished never to see a *palkee* again.

Hooker took a circuitous route, but according to the *Darjeeling Gazette* the normal length of time for the journey from Calcutta to the foothills of Darjeeling was a little over four days. This involved continuous travelling and depended on the assumption that the arrangements for relays of bearers would always work according to plan. Hooker travelled from near Siliguri up the old military cart road, which was built between 1849 and 1852, and which proceeded through Pankhabari to Kurseong and thence via Dow Hill to Ghoom – a route of which Hooker says that it zig-zags extraordinarily in and out of the innumerable lateral ravines, each with its watercourse, dense jungle, and legion of leeches. The road was impracticable for wheeled traffic and as the cost of transporting goods by coolie from Pankhabari to Darjeeling was Rs 2 per maund, it was soon found necessary to construct the hill cart road. The section from Kurseong to Darjeeling was opened in 1865, but the stretch between Kurseong and Pankhabari proved very difficult – the *Gazetteer* records that although it was only six miles long, it required three hundred bridges and cost Rs 2½ *lakhs*. The entire road between Darjeeling and Siliguri was open for traffic in 1869. The needs

* Palanquin.

of the tea industry, which was now growing rapidly, together with the increasing importance of Darjeeling as a hill station, soon led to the construction of a new hill cart road, on a somewhat better alignment, missing the awkward Pankhabari stretch altogether.

In the meantime, communications between Calcutta and the Darjeeling district had been improved considerably. In 1860 the East India Railway was extended to Sahibgunj on the Ganges, and about that time a cart road was constructed from Karagola, opposite Sahibganj to Siliguri, whence passengers from Darjeeling generally proceeded by *tonga*. In 1878 the northern section of the East Bengal Railway known as the North Bengal State Railway, was extended to Jalpaiguri, and a few months later to Siliguri. This robbed the journey to the hills of much of its tediousness, though until 1915 the broad gauge stopped on the River Ganges and passengers had to change there on to a narrow-gauge line to Siliguri.

In 1881 the Darjeeling Himalayan Railway, owned by a private company, managed by Gillanders Arbuthnot & Company, was opened between Siliguri and Darjeeling. It was a magnificent feat of engineering, of which the author of the Darjeeling *Gazetteer* writes as follows:

> Difficulties of ascent are overcome by ingenious devices. One is the loop, where the line passes through a tunnel, runs in a complete circle and over the roof of the tunnel again, so that the alignment follows a large spiral. Another is the reversing station where the train is shunted backwards on an ascending gradient for some distance, so that the alignment climbs the hillside in a zig-zag like a hill footpath. The contour of the hill-sides provides many special problems in alignment for a railway which, at many places, has to negotiate curves as sharp as sixty feet in radius.

The writer first travelled up this line on his honeymoon and the alarm of his young bride when the train began to slide down-hill was perhaps a better testimony than the cold official report to the skill of the engineers.

Passengers in the early days were carried in open trucks, with hoods and curtains for protection against bad weather, but no doubt this somewhat primitive rolling-stock seemed the last word in luxury compared with the old wearisome journey by *tonga*. Two other sections of this line, one from Siliguri to Kishenganj and one to Kalimpong Road, were opened in 1914 and 1915 respectively.

Rail communications to the interior of the district were out of the question and the development of the road system was therefore of first importance. The construction of roads in a hill district, where heavy rainfall results in constant liability to landslips was not easy, but neither the local authorities nor the tea-garden proprietors were easily baffled and progress was rapid, culminating in the construction of numerous steep and narrow tea-garden roads, alarming to the stranger, but along

which the experienced planter today drives a light motor-car with nonchalance. It can be said without exaggeration, that the advent of the Austin Seven, with its special hill gears, transformed the social life of the Darjeeling planter and his family.

(b) *The Dooars*

The early Dooars planters were fortunate in that they commenced operations at a time when India was very railway-minded and their district benefited greatly by this progressive mood. As we have seen, the first Dooars garden was put out in 1874, but it was not until the eighties that substantial areas were planted. By this time the extension of the North Bengal State Railway to Jalpaiguri and Siliguri had taken place, but road communication was very poor and in this respect the district authorities seem to have been less progressive than those in Darjeeling. In 1889 the Indian Tea Association informed the Government of Bengal that the roads to tea gardens from Jalpaiguri and Siliguri were in a worse state than ever before and that 'carts took three weeks travelling a distance of thirty miles and return to the garden'. In the same letter the Association complained about the ferries in the district and passed on a report from a manager to the following effect:

> At the Chel river directly below Dam Dim he found that there was only one Government boat to do all the work of the District and he learned that not fewer than a hundred carts were kept there at one time waiting to be crossed over, his own teas being kept there five days as well as those of others.

This statement regarding the roads was perhaps a little exaggerated and it met with the usual official denial, coupled with the admission that the condition of the roads was not as satisfactory as it might be. Want of funds was the primary trouble and a special grant of Rs 15,000 for the current year and a similar sum for the following year was sanctioned by the Government for the improvement of roads in the district.

In the Dooars the author of the Jalpaiguri *Gazetteer* rightly says that 'the country is split up into sections by large rivers, which frequently change their courses, road-making is a work of considerable difficulty and communications are often interrupted'. The best chance of relief from these difficulties in the early days lay in the construction of railways and it was with great satisfaction that the planters learned in 1891 that Octavius Steel & Company had entered into a contract with the Secretary of State to construct the Bengal–Dooars Railway.

> Government agreed to give the land needed for the railway free of cost, to supply free timber for sleepers from the reserved forests during the first construction, and to hand over to the railway the working of the Abduar ferry on the Tista between Barnes Junction and Jalpaiguri; it was also provided that the Jalpaiguri District Board should pay such amount, not

exceeding Rs 4,000 per annum, as might be required to raise the net profits of the undertaking to five per cent per annum on the capital outlay.

The line from Barnes Junction on the East Bank of the Tista to Dam Dim (with a sub-line to Latiguri) was opened in 1889, and extensions from Dam Dim to Bagracote on the west and Madarihat on the east were completed in 1902 and 1903 respectively. A line from Barnes Ghat to Lalmanirhat had been completed shortly before these two extensions, and a little later the Cooch Behar State Railway linked Jainti and Madarihat to Gitaldaha on the Dhubri branch of the East Bengal State Railway. It could now be said that the district was fairly well opened out, though so far physical difficulties which could only be overcome at vast expense have left the Tista unbridged at Jalpaiguri, and there was thus a gap in the network of railway communications between that town and the railhead of Barnes Ghat on the opposite side of the Tista.

These railways afforded good facilities for the despatch of tea which had previously been carted along generally poor roads to Jalpaiguri or Siliguri, but they created a new demand for roads at right angles to the railways, and this in its turn necessitated the construction of innumerable bridges. On this point the comments in the *District Gazetteer* are of interest:

> In the Western Duars it has been found that masonry bridges will not stand the tremendous rush of water when the rivers come down in flood. The water is checked by a masonry pier, and creates a swirl on the downward side of it which scours out the pier and causes the bridge to fall in; *sal* piles do not offer so much obstruction to the water and will stand when masonry piers are swept away. The usual type of bridge now built in the Western Duars has *sal* piles and iron girders with a plank footway; the type of bridge stood well in the floods of 1906. Many of the older bridges are constructed of timber throughout; they last from ten to fifteen years, but the beams gradually rot, and they have to be rebuilt. The newer bridges with iron girders have a much longer life and need fewer repairs.

It is clear that at that time the needs of the tea industry were the most important single factor in determining road planning in the district and it was perhaps for this reason that, as reported in the *Gazetteer*, all the nine roads maintained by the Public Works Department were constructed in the interest of the tea industry. In spite of – or perhaps because of – the many complaints from planters throughout this period, progress was steady.

In 1920 a more systematic approach to the problem of construction of roads in the Dooars was made by the Government of Bengal. Government suggested that in view of the fact that Rs 22 *lakhs* had already been spent on roads for the tea estates, the industry might contribute towards the cost of the roads now proposed. The Indian Tea Association did not

consider that the financial position of the tea industry justified acceptance of this proposal and it appears to have been dropped. A similar suggestion was made in the case of Darjeeling with the same result. The idea was revived by the Government in 1925, but was again rejected.

By this time India had become transport-minded and ever-increasing grants for roads were made by the Central and Provincial Governments, while commercial considerations led to a continual improvement of the rail and river transport systems in the North Indian tea districts. The effect of this opening up of communications on the life of the planter was marked. He ceased to be isolated from his fellows and the overwhelming majority of the planters today have easy access to Calcutta or to the local club.

III. THE EFFECTS OF PARTITION

The partition of India in August 1947 seriously disrupted communications with what had been the Province of Assam. The Sylhet District was allotted to Pakistan, while the rest of Assam was included in India, and both areas found themselves cut off from their normal outlets. The only important market for Assam tea, whether for export or for consumption inside India was Calcutta – and the rail and road communication with that port was through Pakistan. Sylhet was in worse case. In pre-partition days much of her tea had been shipped through Chittagong to England for sale, while tea for consumption inside India had been auctioned in Calcutta. Pakistan was not prepared to depend on India for the supply of tea and clearly she must establish auctions in Chittagong. These changes would probably have been considered desirable even if relations between India and Pakistan had been good, but in the prevailing atmosphere of antagonism they were essential.

India's need to be independent of Pakistan led to the construction of the Assam Link joining Assam to Kishanganj in the Province of Bihar. The Bengal Dooars Railway had been an important means of communication in the Dooars for some decades, but there was a gap between its western terminus at Bagrakot and Siliguri, and moreover some portion of it now ran through what had become Pakistan.

The engineers thus had four problems to tackle. In the first place they had to replace the sixty-six mile, two-foot gauge railway from Kishanganj to Siliguri – which was wholly inadequate to carry any great volume of traffic – by a metre-gauge line. This presented no particular technical problems except those arising from the unhealthiness of the terrain and the large number of rivers rushing down from the hills which had to be bridged.

The second stretch from Siliguri to Bagrakot – a distance of twenty-two miles – involved the construction of over a hundred bridges and

the formidable task of bridging the swift-running, glacier-fed River Tista.

The Tista Valley is a lepidopterists' paradise and the scenery above its forest-clad banks is of great grandeur, but an engineer's heart might well quail at the thought of the difficulties of bridging the river. In the words of the Official Report:

> The width of the gorge near Sivok is 300 feet or so and on debouching into the plains the river suddenly fans out to a width of 1,500 yards in a distance of less than a mile. Inside the gorge, the slopes on both sides of the river are very steep and hewing out the approaches to the bridge would be a formidable task and in the plains the control of its wide and wandering flow through a reasonable size bridge would be a difficult and expensive problem. It was, therefore, apparent during reconnaissance that the obvious site for bridging the Tista is at or as near as possible to the place where it just leaves the gorge. A site 700 yards below the gorge was selected where the width of the main channel is only 800 feet and the overflow channel to the east was proposed to be blocked.

The report tells us too of the difficulties encountered even after the bridge had been built, when the line had to be taken through nine and a half miles of country intersected by numerous streams which 'debouch suddenly from hills into the plains and rise and fall with great rapidity', frequently changing their courses and doing much damage.

It was however, in the next section, from Madarihat – the eastern terminus of the Bengal–Dooars Railway to Hasimara on the Gitaldaha–Dalsingpara line – that the greatest engineering difficulties were encountered. The distance between the two stations is only eight and a half miles, but a bridge had to be built over what has been described as the 'wild and untamed Toorsa'. It is thus described in the official report.

> The river like the Tista rises in Tibet where its name is Amochu and after a course of 160 miles through Tibet highlands and Bhutan hills emerges into plains at Baladhar, about ten miles upstream of the new railway. Even in dry weather it is a fierce swift river and though the depth of water is not more than five feet or so at most places it is fordable only on elephants with very great difficulty. In floods the river carries large masses of flotsam, generally the uprooted *sal* trees full with branches, and in the bed it rolls boulders and shingle at velocities up to fifteen feet per second.

In the British days a proposal to construct this line was examined more than once, but the idea was abandoned on account of the apparently insuperable difficulty of bridging the Torsa. It was left for S. Karnail Singh, of the Indian Railways to achieve the impossible, and in one working season a bridge of nine spans of 150 feet each was constructed. The fourth section of the line, from Alipur Duar in Bengal to Fakira-

gram in Assam, presented fewer engineering difficulties than the Tista or Torsa crossings, but in the area round Raidak, bears constantly molested solitary labourers – and indeed in many places throughout the line the danger of attacks by wild beasts made it necessary to stop work an hour before dusk.

In spite of all these difficulties, the line was constructed with great speed. The decision to construct the Assam Link was taken on 27 January 1948, and the project was completed by Republic Day, 26 January 1950 – a feat that will seem almost incredible to those who know the terrain. In the following monsoon, flood water of unusual violence swept away one span of the Torsa bridge, and those who had scoffed at the project in the first place began to crow. Within a few weeks, Karnail Singh had constructed a new defensive spur and rebuilt the missing span – and the line remains to this day a monument to his ingenuity and determination.

The capacity of the line was, however, very limited and on the journey to Calcutta transhipment of goods at Manihari Ghat was necessary – a process which often meant that the tea chests were soaked in heavy rain. In fact the river steamers continued to be the main means of transport between Assam and Calcutta, though the unco-operative attitude of India and Pakistan towards each other in the early years of independence often led to serious delays at the Customs frontier and sometimes to complete stoppage of traffic.

The transport difficulties facing the authorities in East Pakistan were different in kind from those with which Karnail Singh had to cope. They had in fact two problems – the first was to get an increased volume of tea by rail to Chittagong and the second to expand the port of Chittagong to create warehousing and auction facilities.

The railway to Chittagong consisted only of a single metre-gauge line, and at the time of Partition it was in a bad stage of repair as a result of the exceptionally heavy traffic carried during the Burma campaign. An improvement of the track was soon taken in hand, a new type of diesel engine was put into operation and tighter schedules were introduced. As a result of these measures the carrying capacity of the railway was greatly increased, but for some years the Pakistan Tea Association had to regulate despatches of tea from the gardens.

It was not until 1895 that Chittagong had possessed deep-water facilities for loading cargo, but in that year a riverside jetty was constructed for the discharge of cargo from, or the loading of cargo into, sea-going ships.

In 1947 only four such jetties existed and they handled about 500,000 tons of cargo a year. The determination of East Pakistan to be economically independent of India necessitated a very considerable increase in the cargo to be moved, and almost immediately after Partition plans for

this purpose were put in hand with great determination. Within a few years, Chittagong possessed seventeen cargo berths and seven moorings. New marshalling yards were laid out, additional cranes were installed and by 1960 the port was capable of handling two and a half million tons of cargo a year.

In the meantime, in 1949 a tea warehouse was erected at Fouzdar Hat, about seven miles from Chittagong and tea auctions were started. A few years later, the port authorities constructed two tea sheds in the extension area, for although Pakistan now exports practically no tea, the demand in West Pakistan is considerable and much of the tea for that wing is shipped from Chittagong.

The port of Chittagong stands on the narrow and difficult Karnaphuli River, and in spite of all that has been done in the way of dredging, that river is a constant source of anxiety. Steps were therefore taken to open a new anchorage at Chalna, at which perhaps fifty per cent of East Pakistan's imports and exports are now handled. Loading and unloading are effected mainly by lighters and at the time of writing the permanent site for a port had not been settled.

IV. SOUTH INDIA*

Whereas in our account of transport in North India we were almost equally concerned with road, rail, and river, in the South India tea districts there are no inland waterways, the rail mileage is small, and we need only direct our attention to roads.

Except for a few areas near Coonoor and Ootacamond practically all the original planting of tea was in dense, isolated forests far away from centres of population. The pioneers depended on bridge-tracks and their means of transport were coolies, pack ponies, and donkeys. The bridle-paths from the low country to the hills were anything from five to fifteen miles long and in many cases went up to heights of five thousand feet or more.

In the High Range the original entry and exit for all goods was by bridle-path from Bodainaiakera to the top station. Incredible as it may seem, a railway line and locomotives were carried up this path and laid from its head to the centre of the district. About the end of the First World War an aerial ropeway was built from the plains, and an internal circular ropeway was constructed to feed this outlet. Tea was carried by the ropeway to Bodainaiakera and was taken thence by bullock cart to Kodaikanal Road Railway Station, whence it was taken by rail to Dhanuskodi and Tuticorin for shipment. A few years later the railway was extended from Kodaikanal Road to Bodainaiakera. In 1928 the new deep-

* Documentation for some of the statements in this chapter is not available, but they are based on an account by a respected leading planter.

water port of Cochin was opened and a good road about eighty miles long was constructed from Munnar in the High Range to Cochin. Since that time all High Range tea goes by this route.

In the Anaimalais planters had to make do with bridle-tracks until in 1907 the Government built a road from the plains through the big market town of Pollachi to Valparai. Since that time hundreds of miles of good roads have been built in the Anaimalais, but the credit for their construction must go to the owners of estates and not to the Government.

For some years all estate produce went by bullock cart through Pollachi to Coimbatore, but early in the present century the District Board of Coimbatore built a metre-gauge railway from Pollachi to Coimbatore, financed by a cess on landholders in the Pollachi area. Tea sent by this route then had to be transhipped at Podanur on the broad gauge for the west coast. In the early thirties a line was constructed from Dindigal through Pollachi to Olivakot and transhipment was no longer necessary.

Previous to this development, however, in 1927 estate owners had formed the Anaimalais Ropeway Company Ltd, which erected a ropeway ten miles long with five stations. Produce was taken by lorry from estates to the top station and from the bottom station to Pollachi.

It had always been obvious that the correct outlet from the Anaimalais was westward to Cochin – a distance of some sixty miles – rather than by the long route to the north-east. Periodical surveys for roads or railways were made, but unfortunately the Governments of Madras, Travancore, and Cochin were all concerned and for many years the proposals hung fire. Shortly before the second World War the Cochin State Public Works Department built a road up to Malakiparai – the only estate in the Anaimalais which was in Cochin State. The road was apparently badly built and was not much used. After the war a first-class road was constructed between Valaparai and Cochin. The ropeway became useless, but the Anaimalais Ropeway Company organized the lorry services to Cochin.

The Nilgiris was the most fortunate district for transport. Ootacamond was the summer seat of the Government of Madras, and good road and rail communications were therefore constructed at an early date. The Wynaad and the Nilgiri-Wynaad were also fortunate inasmuch as they were on a plateau in a pass to the west coast which had been used for centuries. In the High Wavy Mountains in Madurai district, on the other hand, right up to 1947 all goods were carried by coolies along one of two steep bridle-tracks which rose some five thousand feet in six to seven miles. In 1947 the company concerned built its own mountain road, without help from the Government.

We need not pursue this subject further. The difficulties which the planters have had to face and the extent to which they have had to help themselves will have become clear.

V. OCEAN-GOING SHIPPING

The fascinating story of the East Indiamen and their successors the clippers, is unfortunately not relevant to our purpose, since it was the China trade and not the export of tea from India that ushered in the golden age of sail. Only two aspects of those developments concern us. The East India Company had not owned its own ships, but had chartered them for a specified number of voyages from the ships' 'husbands'. When the company lost its monopoly of the China trade it ceased even to charter ships and a number of independent British lines of sailing ships between England and the East came into being. The Americans entered into competition with these lines after the abolition of the navigation laws and there began to be keen competition to reduce the time of the journey. This was to be of considerable importance to the infant Indian tea industry, since the considerable time lag between manufacture and sale in London often resulted in serious deterioration of the tea.

By no means all this delay, however, was due to the length of the ocean voyage. Inadequate labour for making and packing tea chests and considerable delays in river transport to Calcutta were equally important factors, and in the sixties of the last century it was not uncommon for Assam teas not to be sold until thirteen or fourteen months after their manufacture. Antrobus thus quotes a case which illustrates the delay.

> At the third annual general meeting of the Jorehaut Tea Company in July 1862 it was reported that out of the crop of 1861 only thirty per cent had been received in London. Forty-five per cent was in sailing ships on its way to London, while the balance was still in Assam or on its way to Calcutta. The normal time for the ocean voyage in this period was from four to five months.

The use of steamships first appears in the records of the Jorehaut Tea Company in 1861, but at that time the need to keep coal consumption to a minimum on the long journeys round the Cape limited speeds and steamships had little advantage over sailing vessels. The great shortening of the journey effected by the opening of the Suez Canal completely changed the position and when Alfred Holt established the Blue Funnel line, it was clear that a new era of ocean-going transport was at hand.

The expanding tea trade soon attracted the attention of the competing steamer lines, and before long five lines were concerned. Figures

for the early years are not available, but the share of the different lines in the carrying of tea from Northern India in the three years before the Second World War is shown in the following table:

LIFTINGS IN DEADWEIGHT TONS

	1936–7		*1937–8*		*1938–9*	
	Total	(%)	*Total*	(%)	*Total*	(%)
Clan	36,462	35·3	40,264	34·9	44,091	35·8
City	20,029	19·4	23,069	20·0	25,208	20·5
BI/P & O	18,569	18·0	16,464	14·3	16,661	13·5
Brocklebank	15,380	14·9	19.206	16·6	20,165	16·4
Harrison	12,791	12·4	16,462	14·2	16,974	13·8

At that time Indian lines were not effectively competing for this trade. During the Second World War all shipments were made by the Tea Controller. The importance of utilizing all available tonnage, together with the desire of the Government of India to encourage Indian shipping, led him to allocate to Indian lines a proportion of all teas for export. When the bulk purchase came to an end, the Government of India was anxious that the Indian lines should not lose what they had gained during the war. The Indian Tea Association were therefore urged to agree to export 19·3 per cent of their tea by Indian lines. The Association disliked artificial arrangements of this kind, but on the other hand had no preference for or against the lines of any nationality provided the facilities offered were satisfactory. The Association, therefore, acceded to the Government's request and entered into a gentlemen's agreement accordingly.

In January 1955 the Government of India stated that Indian lines had not been receiving the agreed share. The Indian Tea Association could clearly take no responsibility for shipments by buyers, but were able to show that as far as producers' teas were concerned, the percentage shipped by Indian lines were twenty-two per cent in 1953 and twenty-five per cent in 1954. Nevertheless they felt bound to acquiesce – albeit reluctantly – in an increase in the agreed percentage to twenty-five.

From this time onwards the tonnage of Indian shipping was increasing rapidly, and the service provided was proving satisfactory. Not surprisingly, therefore, from time to time it was suggested that the Association should increase the conventional percentage, but no further changes were in fact made during our period. Shipment by Indian lines nevertheless continued to increase and the following table shows the liftings of tea by the various lines in 1961. The first four lines are British and the remainder Indian.

LIFTINGS IN DEADWEIGHT TONS

	Total
Clan	27,661
City	18,153
BI/P & O	13,035
Brocklebank	30,896
ISS	13,246
SCI	5,191
Scindia	15,751
Hansa	1,209
HBB	604
SJS	347
POL	86
PSL	61
Total	126,240

Section 10

SALE AND MARKETING

CHAPTER FORTY-THREE

SALE AND MARKETING*

The early history of the marketing of tea is concerned with China rather than Indian tea and we can, therefore, only make passing reference to it in this book. The East Indian Company imported high-quality green tea from China, but even in the middle of the eighteenth century the quantity brought in legally for home consumption never exceeded about fourteen million lb per annum. By this time the tea habit was catching on in England and the fact that demand always exceeded supply led to adulteration as well as to smuggling. Mention of these two practices has already been made in an earlier chapter and it is only necessary to note here that the adulteration of tea became a profitable industry. Ukers indeed, tells us that 'small factories were established in London for the manipulation and colouring of leaves of the willow, sloe and elder and for the collection of spent tea leaves' – a practice which was apparently not against the law until the Tea Adulteration Act was passed in 1725. It is interesting to note that when a more stringent Act with the same purpose was passed in 1785, His Majesty's Government were only incidentally concerned with the effect of adulteration on public health, equally important considerations being 'the injury and destruction of great quantities of timber, wood and underwoods . . . the diminution of the revenue, the ruin of the trader and . . . the encouragement of idleness.' This trade in spurious tea was too profitable to be easily suppressed by legislation, and it did not decrease significantly in volume until the end of the East India Company's monopoly led to a substantial increase in tea imports. Adulteration, indeed, was not fully controlled until after the passage of the Food and Drugs Act 1875, when the practice of examination of tea by experts in the customs house was introduced.

The widespread practice of adulteration had the curious effect that for a time what we should now call blending, but was then called

* The indebtedness of the writer in this chapter to Ukers and Antrobus will be obvious.

'mixing', was regarded with suspicion, and it was not until late in the nineteenth century that blending became customary.

Early in that century tea had become the most important item in the sales of the small grocers, who provided its main channel of distribution. They had to face the difficulty that the East India Company, which at this time was the sole legal importer, sold its tea in lots somewhat larger than a small grocer would require, but informal co-operation amongst individual grocers provided the solution. At first they sold tea loose, but in 1826 the firm of Hornimans decided that the only way of preventing adulteration by dealers or grocers was to sell tea in 'packets of guaranteed pure tea and of a definite weight'. For some time grocers strongly resisted packet tea and Hornimans found themselves compelled to put up advertisements showing the few shops in various areas where their packet tea could be obtained. It was not until nearly sixty years later, when the Mazawattee Tea Company ran a big advertising campaign to support their packet tea, that the resistance of the grocers began to be overcome. Nevertheless, by the time that tea from India began to arrive in England, the tea habit was well established in the public mind, taste was beginning to turn from green to black tea and grocers were enthusiastically pushing sales.

The great bulk of Indian or Pakistan tea today is sold by auction in Calcutta, Cochin, Chittagong, or London, though forward sales of particular grades and private sales of tea already produced also account for a not insignificant proportion of Indian production. Auctions are not held in the United States, but tea for that country is either bought in auctions in Calcutta or London, or purchased privately. Similar arrangements apply to the other consuming countries. Different types or grades of tea are preferred in different markets, and producers tend, therefore, to send certain teas regularly to the Indian auctions and others to London, but there is a certain flexibility about this practice and prevailing prices in London and India to some extent govern sale policy.

We must now turn to the history of the various auctions.

LONDON AUCTIONS

Up till 1834 the East India Company sold its tea in India House privately but after it lost its monopoly of the India trade all tea was sold in the Commercial Sale Rooms in Mincing Lane. Ukers quoting Stow's *London*, written in the sixteenth century, tells us that 'men from Genoa and those parts, commonly called galley men, as men that came up in the galleys, brought up wines and other merchandise', and lived as a colony in Mincing Lane. The association with the sale of foreign produce continued and in 1811 some London merchants built the Commercial Sale Rooms, primarily for the sale of West Indian products. For the first five years after 1834 the tea sold in Mincing Lane was exclusively

from China. On 10 January 1839 the first commercial consignment of Indian tea was sold in the Commercial Sale Rooms by the East India Company. This was an event of such importance in the history of Indian tea as to justify a fairly extensive quotation from the report of the sale in the *Asiatic Journal and Monthly Register* of February 1839.

The first importation of tea from the British territories in Assam, consisting of eight chests, containing about 350 pounds, was put up by the East India Company in public sale in the commercial sale rooms, Mincing Lane, on the 10 January, 1839 and excited much curiosity.

The lots were eight, three of Assam souchong, and five of Assam pekoe. On offering the first lot (souchong) Mr Thompson, the sale-broker, announced that each lot would be sold, without the least reservation, to the highest bidder.

A 'CORNER' IN EMPIRE TEA

The first bid was 5s per pound, a second bid was made of 10s per pound. After much competition it was knocked down for 21s per pound, the purchaser being Captain Pidding. The second lot of souchong was bought for the same person for 20s per pound. Third and last lot of souchong sold for 16s per pound. Captain Pidding being the buyer. The first lot of Assam pekoe sold after much competition for 24s per pound, every broker appearing to bid for it; and it was bought for Captain Pidding. The second, third and fourth lots of Assam pekoe fetched the respective prices of 25s, 27s 6d, and 28s 6d per pound and were also purchased for Captain Pidding.

For the last lot (pekoe) a most exciting competition took place – there were nearly sixty bids for it. It was at last knocked down at the extraordinary price of 34s per pound. Captain Pidding was also the purchaser of this lot, and has therefore become the sole proprietor of the first importation of Assam tea. This gentleman, we understand, has been induced to give this enormous price for an article that may be produced at 1s per pound by the public spirited motive of securing a fair trial to this valuable product of British Assam.

There is a widespread belief in tea circles that the first Indian tea to be sold in the London auctions was that of the Assam Company. This is, of course, incorrect, for the Assam Company had not even been formed at the date of the sale just described. The tea sold was that produced by the East India Company.

A further sale of the East India Company's tea took place on 17 March 1840, and according to the pamphlet published on the occasion of the centenary of the earlier sale:

Several Tea Brokers and Tea Merchants valued it at from 2s 11d to 3s 3d per pound. Among them were such well-known firms as Messrs W. J. and H. Thompson, Joseph Travers & Sons, William and James Bland, Richard Gibbs, Mr Stevenson, and Messrs Twining. Patriotic buyers pushed prices up to between 8s and 11s per pound.

The first London sale of the Assam Company's tea took place on 26 January 1842. Antrobus tells us that the tea sold comprised the company's entire crop for 1840 amounting to 10,201 lb, of which 146 chests contained black tea and twenty-five chests green tea. 'Infinite care', says Antrobus, 'was taken to ensure the safety of this first offspring of the Company's enterprise. In fact, for his shipment, the Secretary in Calcutta obtained from the ship's agent a guarantee not to ship any sugar in the same vessel.' William James Thompson was the broker employed to sell the tea, but 'it was not left to the brokers alone to prepare this precious consignment for sale. A Committee of three Directors, Twining, Fox, and Travers, was formed to advise on the subject'. The average price realised was over three shillings a lb – a good deal less than the fancy prices paid by Captain Pidding three years earlier, and considerably less than the general retail price of tea at that time. Another sale in 1843 was reasonably successful, though prices were lower, but this was followed by three or four years of badly manufactured tea, some of which was found to be unsaleable.

We must now consider briefly the working of the London auctions.

On arrival in London tea is unloaded into bonded warehouses owned by private companies in many of which tea companies are important shareholders. The first privately owned Indian tea to arrive in London was warehoused at Cutler Street, and this warehouse was apparently used by the Assam Company for many years. The principal warehouses for tea today are Butlers Wharf and Colonial Wharf belonging to Wharf Holdings Ltd; Buchanans Warehouses; the Orient Bonded Warehouses; and Hay's Wharf. Some of these warehouses were primarily intended for the reception of commodities other than tea and today Buchanan's and the Orient Bonded Warehouses are the only ones concerned solely with tea.

According to an article by N. R. Crum-Ewing in *Hay's News*, it was by accident that Hay's Wharf came to be connected with tea. In 1861 the famous Tooley Street fire destroyed over half of the Hay's Wharf buildings and forced the owner, John Humphrey, to seek financial accommodation to rebuild them. For this purpose he went into partnership with Colin Smith and Arthur Magniac, who were agents for Jardine Matheson's China trade. As a result, Crum-Ewing tells us, Hay's Wharf became the unloading point for Jardine's clipper ships and in October 1862 the *Flying Spur* berthed at the wharf with a cargo of China tea. From that time onwards tea continued to bulk largely in the fortunes of Hay's Wharf. The connexion with tea became even more important when in 1920 Hay's Wharf bought Chamberlain's Wharf, which had been loading tea since the seventies of the last century.

The exact date of the foundation of Buchanan's Warehouses is not known, but it was between 1877 and 1881. The following extract from

the *History of James Finlay & Company* is of interest in this connexion.

It was, in fact, a hard time to start, but the firm survived largely through the personal force and practical knowledge of Patrick Buchanan. A warehousing business was established in Jewry Street, London. It was a small enough affair, but it was evidently thought to be the beginning of something much more important, for Andrew Buchanan, Patrick's younger brother, was appointed Superintendent. In 1885 a much larger building was leased. This was Oliver's Wharf, next to Wapping Old Stairs, which had a capacity of sixty thousand packages. Ultimately the freehold was purchased.

In 1900 a twenty-one-year lease was taken of a portion of Colonial Wharf, in Wapping High Street, the new acquisition being re-named Buchanan's Warehouse (Colonial Wharf), and in 1906 Central Warehouse was leased.

Orient Bonded Warehouses Ltd, is of relatively recent growth. It was established by the partners of Walter Duncan & Company, in May 1907, with an authorized capital of £10,000 of which only £500 was issued and fully paid. The company at once leased fifty-five thousand square feet at Gun Wharf and established the Orient Wharf there as a warehouse specializing in tea. The first consignment of tea arrived in June 1907. In 1909 more space was rented, and in 1912 a lease was taken of part of Mint Warehouse from the Port of London Authority. Additional space was leased in 1915 and again in 1916. In the Second World War the company was badly hit by the diversion of shipping from London to west coast ports, but it received cereals on government account and managed to survive. After the war, the company rapidly recovered and in 1923 it acquired the freehold of the Orient premises, except for the Mint premises which it continued to rent.

Butler's Wharf has a long history behind it, but it did not become of importance to tea until, after some complicated mortgage transactions, in 1882 its proprietors formed a private company. Ten years later, that trade was of such importance to the business that Butler's Wharf became a public company, in which the principal tea agency houses were important shareholders. After the period with which this book is concerned, Butler's Wharf joined forces with the Colonial and Eagle Wharves, and the merger resulted in the formation of Wharf Holdings Limited. The company handles many commodities besides tea – fresh fruit, wine, and rubber being prominent amongst them.

The tea is examined in the warehouses by government analysts to see that it satisfies the provisions of the Sale of Food and Drugs Act, and any tea which fails to satisfy them is denatured and may subsequently be sold for the manufacture of caffeine. The warehousemen weigh the tea – allowing a one pound draft for deviations from the declared weight – and the owner of the tea then instructs his broker to 'print' those teas which he wishes to sell immediately.

When the tea has been weighed the owner's broker – or his inspector

– samples the tea by boring a hole in the chests. If there is undue variation in the samples he directs it to be rebulked, but otherwise he 'prints' the tea – i.e. enters it in his catalogue which is sent to all wholesale buyers.

In the next stage the buyers send representatives to take samples and value the teas so that they can decide what to buy. When tea was dutiable, buyers had to return the amounts drawn as samples, but this practice has now been replaced by a flat payment per sample. Sampling and other operations in the warehouses are supervised by a body known as the Tea Clearing House, which was established in 1888, and which might be described as an intermediary between the wharfingers and the trade. It is managed by representatives of the Port of London Authority, the Public Wharfingers, and the Public Warehousemen.

The tea is then auctioned at the tea sale room, Mincing Lane. The order of sale is arranged by the brokers and sales of Indian and Pakistan teas are held on three days in each week. In theory there are 'selling brokers' acting for the owners of the tea and 'buying brokers' bidding in their own name, though really on behalf of principals. The distinction between the selling and buying brokers is largely theoretical, for the selling broker usually has a representative known as a market man who bids against other buying brokers. However, strange this arrangement may seem in the abstract, it works well in practice and has seldom given rise to complaints from any section of the trade. After the sale, the buyer may if he wishes postpone taking delivery for three months.

The pattern of tea auctions was set before Indian teas began to arrive in the London market and it has changed remarkably little in the intervening years. The early catalogues seem to have differed somewhat from those in force today. Antrobus, to whom this chapter owes a great deal, has examined in some detail a catalogue for a sale of China tea in 1838. He tells us that it was in a volume nearly three inches thick, entitled *Order of Sale for Monday April 2nd 1838* and he comments as follows:

> One might be led on the face of this opening announcement to assume that it was a one-day sale but on reading the details further that there were nine firms of brokers offering a total of 176,424 packages containing a total of over 12½ million lbs of tea, it is obvious that a one-day sale was a physical impossibility.

The catalogue in fact seems to have represented all the tea that was available during a six weeks' period. The lots were small, sometimes containing as few as three chests. The brokers were the key men as they are today, and it is interesting to note the names of those who sold in the auctions examined by Antrobus. They were:

Clement & Franks, 14 Billiter Street
Watkins, Smith & Hope, 133 Fenchurch Street
Richard Gibbs, White Hart Court, Lombard Street
Hulbert Layton & Company, 14 Mincing Lane
T. Styan & Sons
T. & R. Moffat
Ewart Maccaughey & Delafosse, 4 Copthall Court, Throgmorton Street
Wm Jas Thompson, 1 Dunster Court, Mincing Lane
Jas Moul & Sons, 106 Fenchurch Street

Tea men today will at once recognize the names of three of these firms. The firm of Thompsons, known today as Wm Jas & Hy Thompson, was established in 1760 by William James Thompson, a produce broker to the East India Company, dealing in tea, coffee, sugar, rice, indigo, and other commodities. Until the end of the century it handled nearly all the Assam Company's tea and played a notable part in establishing Indian tea on the London market. Ewart Maccaughey was the direct business descendant of James Arthur, who was in the field soon after Thompson and bought tea at least as early as 1793. Watkins, Smith & Hope – now Chas Hope & Son – were founded in 1821 and after the period of this book, merged with Ewart Maccaughey. The remaining six of the nine brokers named above have either dropped out of business or been absorbed by other firms, but other broking concerns came into existence in the second half of the nineteenth century and today there are fourteen tea-broking firm members of the Tea Brokers Association – five of whom do not now have catalogues.

It is not possible here to recount the history of all these firms, but the process of growth may be illustrated by reference to three of the best known amongst them.

In 1897 F. H. Cumberlege who had just retired from Carritt & Company of 9 Mission Row, Calcutta, together with W. H. Moss lately of the tea buying department of Balmer Lawrie & Company, Calcutta, founded the firm of Cumberlege & Moss at 27 Mincing Lane, EC3. At the turn of the century they were joined in partnership by J. Thomas & Company of 8 Mission Row, Calcutta, to form Thomas Cumberlege & Moss. In 1945 the firm amalgamated with Tenning Inskipp & Company, to form the present firm of Thomas, Cumberlege & Inskipp.

Another broking firm of importance is that of Lloyd, Matheson & Carritt which began business in Liverpool in 1837 under the name of Lloyd, Stuart & Brodribb. The head of the firm, Robert Lloyd, opened a London branch in 1842, and this gradually became more important than its parent in Liverpool. Soon after the opening of the London

branch, the firm was joined by Thomas Matheson, the name being changed to Lloyd, Matheson & Company. In 1884, Thomas Carritt became a partner, the name again being changed, this time to its present form of Lloyd, Matheson & Carritt.

Geo White, Sanderson (Tea Brokers) Limited was founded in 1872, as Geo White & Company by George White who had been associated for some years with an existing tea-broking firm in London. At the time of its inception the business was confined, mainly, to the sale of China teas but, as time passed, teas from India and Ceylon were also sold, and other partners connected with tea in India joined the firm.

In the early years of the twentieth century two senior partners from the firm of Carritt Moran & Company in Calcutta joined the London firm as partners; as did H. B. Yuille who had been a buyer for Balmer, Lawrie & Company, in Calcutta for many years.

The firm of Geo White & Company, continued as a partnership until 1931, when it became a private limited liability company under the title of Geo White & Company (Tea Brokers) Ltd.

After our period Geo White & Company (Tea Brokers) Ltd, amalgamated with the well-known London tea-broking firm of Sanderson & Company, under the title of Geo White, Sanderson (Tea Brokers) Ltd.

In 1889 the Tea Brokers Association, London, was formed primarily to protect the interests of the brokers, but it also fulfils the equally important function of arranging the order in which brokers take the rostrum on each sale day. There must have been some informal co-operation for this purpose before the formation of the Association, but details are not available. In 1925 a Tea Buying Brokers Association was formed, largely at the instance of J. L. Bunting. The functions of the Association are mainly domestic, but the buying brokers are, of course, of great importance in the organization of the tea industry, for quite apart from buying on instructions they also sample teas and advise clients.

The broker's principals may be blenders – who buy and resell after blending or packing – or dealers who merely sell again to big or small wholesalers. These in their turn may either blend and pack, or resell to even smaller parties who do their own blending, packaging, and distribution. The picture is not in fact as well defined as this description might suggest, since some of the dealers are also blenders and packers. The important distinction is between the big six – Brooke Bond & Company Limited, Allied Suppliers Limited (Liptons), J. Lyons & Company Limited, the English and Scottish Joint Co-operative Wholesale Society Limited, Ridgways Limited, and the Meriden Tea Company Limited (Ty-phoo) – who between them buy perhaps from eighty to eighty-five per cent of all teas sold in the London auctions – and the hundred or so

other primary buyers there. In about 1899 the Tea Buyers Association was formed. Its functions are mainly domestic, and practically all buyers belong to it.

Ridgways is by a long way the oldest of the Big Six and the story of this firm is well told in a brochure issued in 1959. By the end of the eighteenth century every important town had its own Tea Merchant and we are told that 'notable among the provincial merchants was Thomas Ridgway, who in association with a Mr Dakin, had a shop in the Bull Ring in Birmingham and also one at "The Sign of the Golden Canister" in Derby'. The partners fell into financial difficulties, but after an arrangement with their creditors, in 1836 they opened up a new shop in King William Street, London, under the style of Ridgway, Dakin & Company. Before doing so they issued the following announcement.

There are so many in the trade in London, that you may reasonably ask, why is a *new concern* wanted? This we will explain.

About two years ago, all the Tea that was sold was imported by the East India Company, who supplied the market just as they pleased and caused it to *advance* or *decline* as suited their interests.

Since that period, *the trade to China* has become free, the consequence of which has been, that *immense quantities* of Tea have been imported, not only into *London* but into other parts of GREAT BRITAIN and IRELAND.

With the *increase in quantity* there has been a *reduction* in the PRICE, to the extent of 20 or 25 per cent. Yet notwithstanding this EXTENSIVE DECLINE, the retail price, with few exceptions, *remains nearly the same* as ever thus proving that the requirements of the Public have not hitherto been complied with, that you *have never yet* derived the *full advantage of the destruction* of the EAST INDIA COMPANY'S MONOPOLY, and that there is *an opening* for an extensive TEA CONCERN founded on the principle of a SMALL PROFIT and LARGE SALES.

But as great *professions*, without *proof*, can entitle us to no confidence we shall state at what prices WE CAN SUPPLY YOU with the best quality, for READY MONEY ONLY.

The shop was an immediate success and the creditors were paid in full. Dakin soon left the firm and his name was dropped. Rivalry with other merchants soon developed and the criticism of other Tea Merchants led Ridgways to publish the following advertisement.

It is evident that such attempts at misleading the Public can only arise from a consciousness, on their parts, of the want of either resources or merits of their own, on which to found any claims to confidence, and are the highest tributes that can be paid to the general *acknowledged excellence* and *cheapness* of our Tea. Such proceedings further exhibit a surprising lack of talent and common prudence, inasmuch as it is clear that so many anxious *imitators* and *copiers* confess by the act their hopeless inferiority to the *original*.

However much obliged we may feel to these parties for adding so greatly to our celebrity, we should be justly blamed by our friends and the Public, if we did not place them on their guard.

We are told that until the London shop was properly established Ridgway employed two men, Samuel Page and Henry Cooper, who worked only for their keep. When Ridgway retired he made the business over to these two men and his son Isaac. In due course Isaac and Samuel Page retired and Cooper's son Alfred became sole proprietor. In 1896 Ridgways became a limited company, but before this development branches had been opened in the provinces, and, moreover, Ridgways had introduced into the United States their 'Her Majesty's Blend' identical with a blend which had been specially made for the personal use of Queen Victoria. Since that time Ridgways have been Tea Merchants to King George VI and our present Queen.

The parent of Brooke Bond & Company was founded in 1861 by Arthur Brooke, and carried on right from the start the business of a Tea Merchant. In 1892 it became a public company. In due course it acquired tea estates in India and Ceylon, and deals only in tea.

Next in the field was the English and Scottish Joint Co operative Wholesale Society, founded in 1863 for purposes much wider than those connected with tea.

The story of the growth of Liptons is part of the romance of commerce. Thomas Lipton's first grocery store was opened in Glasgow in 1871 and his venture was so successful that it is said that by 1889 he was opening a new Lipton shop every week. In 1890 Liptons began to acquire tea estates in Ceylon, thus enabling them to claim with pride that Lipton's tea was 'direct from the tea garden to the tea-pot'. Today Liptons Limited has branches or subsidiaries in many countries and forms part of the Allied Suppliers Group. Although tea at first represented only a small part of the business, Liptons soon laid themselves out very successfully to build up a considerable retail tea trade by selling good tea at prices below those of their main competitors.

The name of Lyons is associated in everybody's mind with tea-shops. In 1886, Montague Gluckstein – a partner of the tobacco firm of Salmon and Gluckstein – was impressed with the difficulty of obtaining light refreshments anywhere except in licensed houses, and decided to enter the catering business in partnership with his brother-in-law, Barnett Salmon and an acquaintance, Joseph Lyons. In the following year they took on the catering contract for the Newcastle Exhibition, and followed this up by catering at the Glasgow Exhibition, at the Great Fair in Paris and at Olympia. In 1889 they formed themselves into a public company by the name of J. Lyons & Company, but

further changes took place in 1894 and the present Company was formed. In that year the Company opened its first tea-shop, located in Piccadilly and we are rightly told that this 'made it possible for the Victorian families of suburbia to come to London town – hitherto there had been nowhere "respectable" for Mama and the children to have a cup of tea or a mid-day meal'.

The shop was an immediate success and within the next two years seventeen shops were established. It is not necessary for our purpose to follow the story further, but there is no doubt that the Lyons organization has been a great factor in the strengthening of the tea-drinking habit in Britain.

Ty-phoo Tea (Holdings) Ltd, was the successor of a family grocery business which was founded in the eighteenth century, but it was not until the present century that Sir John Sumner put Ty-phoo tea on the market. It was so successful that a separate Company known as Sumner's Ty-phoo Tea was formed in 1905. After severe damage to its premises in the Blitz of 1941, it was re-formed as Ty-phoo Tea Ltd, and in 1949 it was converted into a public company, Ty-phoo Tea (Holdings) Ltd. Since then it has gone from strength to strength.

Although the Big Six overshadow all other buyers, the hundred or so smaller men who buy regularly in the London auctions are of considerable importance in preventing the market from being sluggish.

The wholesale and retail sale of tea is outside the scope of this book and has, moreover, been dealt with in considerable detail by Ukers. We can therefore pass on to mention two developments affecting tea auctions in the first few decades of the twentieth century. The first of them was the removal, in 1903, of the restrictions imposed by the London Tea Clearing House on buying from non-members. The limitation was perhaps not very severe, since anybody connected with the tea trade could become a member, but it was resented by the tea buyers. The next development was the promotion, by buyers, of the Fine Tea Company, which was really an attempt to counter propaganda in favour of China tea. It ran from 1909 to the outbreak of the First World War.

That war naturally dislocated all branches of the trade. Britain at that time had no experience of rationing or otherwise dealing with shortages and the newly established Ministry of Food soon found itself in difficulties. Rationing was introduced in 1917, but it did not result in any permanent lessening of the public demand for tea and need not be discussed here. After the war a threat to Indian tea arose from the growing popularity of tea from the Dutch East Indies. India and Ceylon producers fought strenuously in Britain to insist on the marking of all tea as Empire grown or otherwise, but they were unsuccessful. They were, indeed, not relieved from the dangerous competition of

Java and Sumatra tea until the Second World War and the subsequent extrusion from what is now called Indonesia of the highly efficient Dutch, led to a considerable reduction in the export of tea from that country. Before that had happened, however, another danger arose from the competition of East African producers most of whom were branches or affiliates of sterling India producers. The danger increased as wages in India rose, and before long East Africa could land tea in Britain at a much lower cost than her India competitors. Towards the end of our period East African teas had indeed become a factor in depressing the price of common tea.

THE SECOND WORLD WAR

More important than any of these developments, however, was the impact of the Second World War.

The war-time arrangements for the export of tea from India and Ceylon have already been discussed, but it is now necessary to consider sale and distribution in the United Kingdom and here we cannot do better than reproduce the admirable account of the system given in the Report of the Monopolies and Restrictive Practices Commission in 1956.

Under the control of the Director of Tea, the London tea brokers were formed into a Tea Selling Section, which was responsible for valuing, grading, and allocating the tea and for all transactions with the trade. A Tea Distribution Committee drawn from primary wholesalers, i.e. those who received their supplies by direct allocation from the Ministry (see the next paragraph), acted as a liaison between the distributive trade and the Ministry but without executive functions.

Primary wholesalers were responsible for meeting the requirements of their wholesale and retail customers. Tea was allocated to primary wholesalers in proportion to the amount of tea on which they had paid duty during the datum period (1 January 1936 to 30 June 1939). From September 1939 to May 1940 the allocation was one hundred per cent. of datum, but as stocks declined owing to shipping and other difficulties, allocations were later reduced to seventy per cent. and were subsequently varied according to the supply position.

Control of Consumption – Consumer rationing of tea was introduced on 7 July 1940. The general level of the ration was 2 ounces a head a week throughout the war with no ration for children under five, but in 1943 a 3 ounce ration was introduced for persons over seventy years of age. From the end of the war until tea was decontrolled in 1952 the ration varied, according to the supply position, between 2 ounces and $2\frac{1}{2}$ ounces except for the last month when it was raised to 3 ounces a head. At first supplies to catering establishments were not restricted, largely because of the difficulty of meeting the fluctuating demands of war workers. Subsequently, it was decided to restrict supplies to caterers, the allocation being based on an allowance of one pound of tea to 280 cups.

Price Control – The first Order fixing the price of tea pegged retail prices in September 1939, to the prices ruling in the week ending 26 August 1939, and this principle of pegging retail prices to a datum price was preserved throughout the period of control. Tea prices remained unchanged during the first three years of the war, but increases were permitted in 1943 and again in 1947, 1951, and 1952. A subsidy was introduced in 1942 at the rate of 2d a pound. Whilst the subsidy remained fairly steady during the war years, with the re-opening of the Colombo and Calcutta tea auctions in 1947 buying prices rose steeply and thereafter the subsidy varied between 8d and 10½d a pound. A popular blend which in 1939 sold at 2s 8d a pound retail, was selling at 3s 10d a pound just before the subsidy was removed in May 1952. Its price rose to 4s 6d after the removal of the subsidy, but by the end of the year it had fallen to 4s a pound.

The war-time system worked well, but the industry experienced considerable difficulty in the transition from war to peace. In 1947 overseas markets were again open to private enterprise, and 'better class teas began to be diverted in increasing quantities to the auctions in the producing countries', with a resulting shortfall in bulk buying of the appropriate grades for the United Kingdom. In April 1951 the Ministry of Food therefore discontinued bulk buying and the London auctions were resumed. They were, however, so severely controlled as to make all concerned describe them as a 'phoney'. The situation is well described by the Monopolies Commission.

In the period from the re-opening of the London market in April 1951, until rationing and price control were discontinued in 1952, the retailer continued to draw his tea from normal suppliers through the permit system based on coupons cut from the consumers' ration books. From April 1951, until Ministry allocations ceased in November, 1951, distributors were free to purchase part of their tea in London or in Colombo or Calcutta. This gave the trade the opportunity to obtain some grades of tea not previously available under bulk contracts. The quantity that an importer could buy was limited by the permit system, and the operation of price control limited the price that the buyer could afford to pay in the auctions. After the Ministry allocations ceased in November, distributors obtained all their supplies through the market, but their freedom as regards quantity and quality was still limited by the permit system and by price control. At the final stage before de-rationing, the permit system was modified to enable distributors to stock up to the fullest possible extent. In the last month before de-rationing the ration was increased to 3 ounces a head.

It is easy to criticize the defects of the system or to contend that bulk purchase was continued too long after the end of the war. The important fact is that war-time England was not starved of tea and that all sections of the trade were enabled to continue at a reasonable level of profit and to embark with vigour on the post-war period.

We must now deal with two important controversies affecting the

London auctions namely those regarding the regulation of sales, and the condition of sale – which involved the 'prompt' date and the one pound draft.

REGULATION OF SALES IN THE LONDON AUCTIONS

The necessity for regulation of sales in the London auctions arises from the fact that in some of the producing countries tea is a seasonal crop and imports of tea into the United Kingdom do not therefore arrive uniformly throughout the year.

Before the Second World War each producing country was asked by the joint sub-committee to estimate its probable shipments during the year and the quantities concerned were then spread out evenly at auctions throughout the year. The war naturally interrupted this arrangement. Shortly after the resumption of auctions in 1952, the procedure was changed and sales were only regulated during the early part of the year, when seasonal arrivals were excessive. The scheme was purely voluntary in the sense that if an individual company chose to put up a quantity in excess of its allocation it could not be prevented from doing so, though moral pressure might be brought on it by other companies or agency houses. Even if allocations were exceeded no corresponding reduction was made in the quantity offered in later sales.

In September 1955 the Board of Trade referred the practice of regulation of sales to the Monopolies and Restrictive Practices Commission. The starting-point of the industry's case was the variation from month to month in the quantity of tea imported into the United Kingdom. That variation can be illustrated by the table reproduced in the Monopolies Commission report.*

The representatives of the industry went on to explain that if all tea were put up to auction immediately on arrival, it would be physically impossible for buyers and brokers to cope with the quantity which would be offered in the heavy seasons of the year. There was, moreover, an even more cogent argument in favour of some evening-out of sales, which was thus summarized by the Monopolies Commission as part of the producers' case.

> There is, however, according to the trade a second and more cogent economic reason for the even distribution of sales. From the point of view of both buyers and sellers it would be unsound to attempt to sell all the North Indian tea during the seven to eight months' period corresponding to the production season. If all the tea were sold in that period, buyers would at certain times have to purchase more than they could hope to sell in the immediate future and at the end of the season they would have to hold five or six months' stock in excess of their requirements. In practice, however, because of the financial burden of stockholding, they would probably refrain from bidding when their stocks reached a certain point and some spreading

* *Vide* page 673.

out of sales would then be forced on producers. It is better, they say, that this should be done in an orderly way, and the flow of tea on the London auctions has for many years been regulated, when necessary, by the Regulation of Sales Joint Sub-Committee on which selling brokers as well as all the London tea producers' associations are represented.

MONTHLY IMPORTS INTO THE UNITED KINGDOM

	1952	*1953*	*1954*
		(in million lb)	
January	65·7	37·2	72·1
February	56·8	41·1	47·4
March	40·3	39·0	41·4
April	28·6	36·8	29·1
May	33·2	34·5	22·2
June	23·2	27·2	29·8
July	25·8	31·2	38·8
August	45·1	34·8	41·3
September	41·8	49·0	55·7
October	44·3	57·0	19·8
November	41·5	47·3	66·7
December	50·7	57·9	77·9
Total	496·9	492·8	542·2

After an exhaustive inquiry the Commission found that regulation was a reasonable and practical measure which did not operate against the public interest. It concluded that 'there are advantages in some system of programming designed to even out sales over the year without limiting the total amount coming forward over the year as a whole and to prevent excessive amounts of tea from being offered at certain periods'. The Commission was impressed with the support given to this scheme by the buyers and opined that regulation had relatively little effect on the general level of prices.

With this clean bill the industry continued its regulation scheme until 1 March 1960. Under the Monopolies and Restrictive Practices Act of 1948 it was only necessary for the Commission to be satisfied that a scheme was 'not against the public interest'. The Act of 1956 applied a much harsher test. Under it the sponsors of a scheme such as that with which we are concerned had to satisfy the Commission not only that the regulation was not against the public interest, but that it was 'in the public interest'. The substitution for a negative of a positive test changed the situation considerably, and the phrase 'in the public interest' was interpreted so stringently by the Commission that hardly any of the parties in the cases of other industries which came before the Commission in the early days were able to satisfy it. The industry, therefore, reluctantly abandoned a scheme which had worked well for

many years and it is indeed a strange commentary on the present state of the law, that regulation had to be discontinued even though the Monopolies Commission had come to the conclusion that it was a reasonable and practical measure.

Another matter affecting sales which has been a matter of some controversy relates to what is known as the 'prompt' period. The London auctions are regulated in accordance with conditions of sale drawn up in agreement between sellers, buyers and brokers. Under Clause 3 of those conditions buyers are allowed ninety days in which to take delivery on payment of teas bought in auction. The last day of the period is known as the 'prompt'. Buyers taking delivery before the expiry of the period enjoy a discount, and the larger buyers do usually take early delivery. The reasons for the system, as set forth by the tea trade committee, were clearly explained in the Report of the Monopolies Commission as follows:

> Representatives of the trade explained that tea bought in the shops is essentially a blended article and it is the object of the blender and packer to produce a constant product all the year round. His difficulty is that although the end product has to be uniform, the raw materials are not, as teas of different quality arrive throughout the year. The system of 'prompt' enables the buyer to acquire, against the time when they are needed, adequate stocks of the different kinds of tea which he requires for his blends. It is a facility which is particularly appreciated by the smaller buyer since it enables him to purchase tea in quantity and take and pay for a few chests as he requires them instead of having to meet the cost of his whole purchase at once. Our attention was also drawn to the value of the system to the re-export trade inasmuch as it allows the buyer time to find his customer abroad and arrange for shipment before he has to pay for his purchases.

In 1952 certain producers suggested a reduction in the 'prompt' period. According to the Monopolies Commission Report this proposal was strongly resisted by the buyers and would have been particularly objectionable to the smaller buyers 'whose selling arrangements were so closely linked with the length of the "prompt" that, we are told, they would tend to go out of business if the period were substantially shortened'. The difficulties experienced by some producers in granting such long credit under modern conditions are obvious. Nevertheless, producers' associations came unanimously to the conclusion that any change would not be in the best interests of the tea trade, and the proposal was dropped.

The proposal to alter the 'prompt' period was accompanied by a suggestion that the one pound draft should be discontinued, on the grounds that grocers no longer held large stocks and therefore did not need the protection against loss afforded by the system. This change had indeed

been mooted as far back as 1900, when the proposal is said to have led to a boycott of the auctions. Reactions in 1952 were not so violent, but the proposal was nevertheless opposed by the buyers and was dropped.

THE CALCUTTA AUCTIONS

Teas for the Calcutta auctions go from the garden to one of the Port Commissioners tea warehouses or to a warehouse belonging to the agency concerned. The two public warehouses are the Sale Tea warehouse and the Hide Road Warehouse, built respectively towards the end of the nineteenth century and in 1916. For some decades the Port Commissioners administered these warehouses, but in 1943 this responsibility was taken over by Balmer, Lawrie & Company. The record number of chests received into the public warehouses in one year was over three million – in 1951 – and this accounted for over seventy per cent of the total arrivals in Calcutta during that year. Teas consigned to London go direct into the tea transit sheds and do not enter the warehouses at all. Nevertheless the pressure on warehouse space was at times considerable and some agency houses therefore established their own private warehouses either in their own *godowns* or in sheds rented from the Port Commissioner. This factor, together with the recent increase in the shipment of unsold tea, has reduced the demand for entry into the public warehouses, and there is room for doubt as to the economic soundness of the Government's decision to build a new warehouse to be known as the Libyan warehouse, near No. 3 King George Dock. Construction is not yet completed, but the Tea Board have guaranteed the rent of it for sixty years.

The brokers next appear on the scene. They sample the teas in the warehouses and samples are also sent to all approved buyers – i.e. anybody who cares to take a licence from the Commercial Tax Officer, Calcutta. The next step is auction sale under regulations laid down and enforced by the Calcutta Tea Traders Association.* The procedure at the auctions is of the standard pattern and requires no description, but it is necessary to state that the brokers guarantee payment to the producer at the expiry of the 'prompt' date – i.e. the date by which the teas must be taken up and paid for. In the case of the smaller producers the brokers sometimes finance them before the sale proceeds are received. The same broker may be, and usually is, a selling broker and a buying broker in respect of any particular teas, and he charges a commission of one per cent from the seller and Rs 1/4 per 100 lb from the buyer.

We are now in a position to glance at the history of the Calcutta auctions. It is generally stated that the first auction of tea in Calcutta was held in 1861, but in fact there was an isolated auction in 1841. Antrobus has gone into this matter with his usual throughness and has discovered that the tea concerned came from the tea areas retained by the East

* Founded in 1886.

India Company when they sold two-thirds of their tea property to the Assam Company. He assumes that the Government considered it unfair to sell these teas in London in competition with the Assam Company and therefore decided to sell them in Calcutta. Be this as it may, Mackenzie Lyall & Company of Calcutta advertised an auction on 26 May 1841 at their sale rooms on account of the Government of India. Antrobus goes on to tell us that the chairman of the Calcutta Board of the Assam Company proposed buying these teas from the East India Company before the auction, but his co-directors did not support the proposal and the auction duly took place.

The Assam Company normally consigned its teas to London for sale, but some of their teas manufactured in 1843, 1844, and 1845 were of too poor a quality to be so consigned. Some of the 1843 tea was twice unsuccessfully put up to auction by Mackenzie Lyall, but together with similar poor quality tea from the following two seasons, was sold privately in Calcutta. The quality of the company's tea soon improved, but although the bulk of it was consigned to London, it was found profitable to sell some of it privately in Calcutta, thus avoiding the long wait for the proceeds involved in a London sale.

Other companies were impressed with the profitability of sale in Calcutta, and on 27 December 1861 the first of the regular public tea auctions was held by J. Thomas & Company in the sale room at 8 Mission Row. Prices ranged from 10 annas per lb for fannings to R 1/5/6 per lb for Pekoe. The auction was evidently considered a success, for tea auctions were held frequently thenceforth.

Until recently there were only four tea broking firms in Calcutta – J. Thomas & Company; Carritt Moran & Company; W. S. Cresswell & Company; and A. W. Figgis & Company, Of these firms only that of J. Thomas & Company existed at the time of the auction in 1861. According to Ukers it was founded about 1851 by Robert Thomas and Charles Marten under the name of Thomas, Marten & Company and conducted its business in premises once occupied by General Clavering, one of Warren Hastings' councillors. It apparently dealt originally in indigo, but tea soon became the major part of its business.

The success of the auctions encouraged one W. S. Cresswell to start a broking firm in 1862. Thereafter fifteen years passed before T. & A. Carritt started the tea-broking firm of Carritt & Company, while in 1890 A.W.Figgis founded a fourth firm, known by his name, with premises in Clive Buildings. At some time before the end of the century there had evidently been another firm, that of Moran & Company, in the broking business, for in 1904 Carritt & Company, absorbed the brokerage busiňess of that firm.

As the number of tea-broking firms grew, some formal organization was obviously necessary for the conduct of the sales, and in 1879 the

Calcutta Tea Brokers Association was formed. In 1886 the brokers combined with the producers and buyers to form the Calcutta Tea Traders Association, the inaugural meeting being held under the chairmanship of D. Cruickshank of Begg, Dunlop & Company, a well-known Calcutta agency house. That association controls the procedure at auctions and fixes brokerage rates. It has worked with remarkable smoothness, and disputes have been few, perhaps because of a salutary rule that brokers may not buy or ship tea on their own account, and that producers and merchants may not be brokers.

During the century which has passed since Calcutta auctions began, four important changes have taken place, the first of which relates to the division of sales into internal and external auctions.

For many years sales were held only on one day a week, but there was an exception to this rule in 1913 when the size of the offerings necessitated the holding of sales on two days in one week. From 1928 onwards this became standard practice and it was agreed that all large breaks comprising eighteen chests or more should be sold on Mondays, and the small breaks on Tuesdays.

In 1933 the introduction of export control gave rise to the practice of holding separate sales on Tuesdays for consumption in India, and on Mondays for export. It must, however, be noted that there was no legal distinction between the two sets of sales. Teas bought on the internal auctions could be – and often were – switched for export and *vice versa*, provided that the overall export quota of the producer – which he either used himself or passed on to a purchaser or sold to a third party – was not exceeded.

The second change during our period was the introduction of regulation of sales. Until 1950, in normal years there was no regular limitation on the quantity of tea which could be offered in any particular Calcutta sale, the only rule being that laid down by the Calcutta Tea Traders Association to the effect that only teas which had arrived in the tea warehouse before 5 p.m. of the Tuesday of the week before the sale could be catalogued and offered. The object of the rule was to ensure that there would be ample time for inspection and sampling. In exceptional years when the market was sluggish, limitations had to be placed on the quantities allowed to be offered. By 1950 the great increase in the quantity of tea sold in Calcutta – partly as a result of increased consumption in India – made it physically impossible to avoid regulation as a normal practice. A sales and regulations sub-committee, consisting of representatives of producers, buyers, and brokers was formed with instructions to average the size of weekly auctions as far as possible and so ensure orderly marketing. It is universally recognized that the sub-committee has done its work well and that there has never been any question of limiting supplies to force up prices.

The third and most important change was the growth in the size of the Calcutta auctions. In the early years the Calcutta market was of little importance. Prices there were in reality determined by those prevailing in the London auctions and the quantities sold were small. Even as late as the end of the nineteenth century only 49,000,000 lb of tea were sold in Calcutta. Two thirds of that quantity were sent to London, mainly for re-auction there. The great bulk of North Indian tea was still sent on consignment to the London auctions.

The pattern began to change before the end of the First World War and in the next two or three decades the change was stimulated partly by the growth of Indian ownership of tea estates and partly by the compulsion on out-markets – i.e. countries other than Britain – to buy their teas direct from the producing countries during the Second World War. Another factor was the rapid growth of Indian consumption. After the war, the long delay on the part of the Ministry of Food in allowing the resumption of the London auctions strengthened the desire of the Government of India, already engendered by economic nationalism, to boost the Calcutta auctions. In 1953, out of total exports of over 500,000,000 lb, approximately half were sold in auction in India. In 1954 the Government of India appointed the Tea Auctions Enquiry Committee to consider how the quantity so sold could be increased. This subject has been studied in an earlier chapter and we merely note here that the committee recommended that from 1956–7 only twenty-five per cent of the total crop should be allowed to be consigned to the London auctions and that the ultimate aim should be the reduction of this figure to twenty per cent.

Government then passed orders limiting the quantity which could be consigned to the London auctions from North India to 140,000,000 lb. No limit was imposed in the case of South India.

No legal restriction was placed on private or forward sales, but the industry was informed that if in any year such sales greatly exceeded 40,000,000 lb, the consignment quota would be reduced. A few years later when India's serious foreign exchange position made export earnings of paramount importance, the industry was given to understand that for all practical purposes the ceiling was removed – a decision which, in the opinion of many tea men, underlines the unwisdom of the original restriction.

The fourth development is the emergence of Indian tea-broking firms in Calcutta. Three such firms were originally established soon after India became independent, but one has discontinued business. Sudhir Chatterjee and Tea Brokers (Private) are still going strong.

* In modern times the entry into the field of many small buyers has given rise to one difficulty. It is said that some of them have less interest in buying substantial quantities of tea than in acquiring free samples.

The Calcutta Tea Traders Association nevertheless, has not altered its rules so as to discourage this attitude.

Although the business of the producers and brokers could not exist without the buyers, the most important buyers are representatives of the big London tea distributors and a separate account of them is perhaps not necessary in this section. It may perhaps be mentioned that Lipton established a business in Calcutta in 1890, and that Brooke Bonds followed suit in 1902. They continue the dual function of distribution in India and export to their own principals in London, together with export on a smaller scale to Australia and elsewhere.

In 1947 auctions were established at Cochin to meet the needs of South India. When Cochin became an adequate modern port it was an obvious centre for the sale of South India tea. As auction procedures there followed the Calcutta pattern they need not be described here.

PAKISTAN AUCTIONS

In Pakistan during the last decade of our period producers have had little freedom in these matters. The demand for tea in Pakistan has risen so rapidly that there is little margin for export and the Government of Pakistan, torn between the desire to satisfy the public and the need to earn foreign exchange, has at times prohibited export and at other times made it obligatory. The artificiality of the auctions results from these varying policies together with the imposition of an unrealistic form of price control in 1959 and 1960, has already been discussed in an earlier chapter* and we need not dwell on it here.

PRIVATE AND FORWARD SALES

This chapter has dealt in some detail with auctions, but mention has been made of the fact that some teas from India are sold by private or forward contract. The latter procedure, which is speculative in the sense that it involves the sale of particular grades before they are produced, has in the last few decades been frowned upon by the Indian Tea Association, since it was considered to reduce competition at the auctions. As we have seen in an earlier chapter, in 1924 the London and Calcutta Associations recommended that members should not make forward sales and nearly all members accepted this recommendation. The policy was reversed a few years later for lack of unanimity, but in the main the embargo continued until the Second World War. In 1952 the reimposition of the ban was recommended, but in 1953 it was allowed to drop.

* Chapter 19.

Section 11

THE SECOND WORLD WAR

CHAPTER FORTY-FOUR

PLANTERS TO THE RESCUE

For the first two and a half years of the Second World War planters in India suffered from a severe sense of frustration. Over one-third of their number had joined the defence forces, and those left behind had to cope with the vital task of keeping Britain supplied with tea under increasingly difficult conditions. Their heaviest responsibility was for the feeding of their labour forces at a time when imports of rice from Burma had practically ceased and when military needs in other parts of India made railway waggons in a terminal province hard to get. The maintenance of Britain's tea supply was in itself an important though undramatic contribution to the war effort, but it did not satisfy men who were increasingly conscious of the hardships and dangers which their brothers and friends and in some cases their wives and children, were facing at home. They felt almost ashamed of their own safety.

PROJECTS

With the entry of Japan into the war and the tragedy of Pearl Harbour, this situation changed almost overnight. Assam soon became a great base for four major war-time operations – the reception of refugees from Burma; the re-equipment and rehabilitation of an army which had fought a gallant rearguard action from Rangoon to Kohima; the mounting of an offensive in Burma; and the organization of a massive aerial lift which would enable the Americans to fly supplies, over the 'hump' in the North-east to Chiang Kai-Shek's capital, Chungking.

Few provinces could have been more unprepared than Assam for operations of this kind. For generations the British in India had taken it for granted that danger would come only from the North-west, and North-east India had practically no military bases or installations round which expansion could take place. Moreover it was obvious that the Army would need massive support from the civil authorities, and yet the Assam Administration, after two generations of relative freedom

from stress and strain, was less highly geared than that of other provinces, and would have been quite unable to provide all the help that would be required.

Fortunately there was in Assam the powerful organization of the Indian Tea Association and it was to that body that the military authorities turned for help early in 1942. Help was required in two separate ways. Labour forces had to be recruited and organized for the construction of roads, camps, and aerodromes on a vast scale, and at the same time thousands of helpless and in many cases demoralized refugees had to be shepherded to safety and given a chance to recuperate.

We shall deal first with the part played by the tea industry in what came to be known by the unromantic name of projects – i.e. construction works – and here we shall draw partly on Indian Tea Association reports, but largely on the graphic description of some of these projects written by Lieutenant-Colonel A.H.Pilcher, CIE, MC, who became chief tea labour liaison officer of the Manipur Road project. It is difficult to understand why his fascinating little book *Navvies of the Fourteenth Army* has not become a best-seller.

It should be explained that the work of the Indian Tea Association was concerned primarily with two distinct sets of projects – the Manipur Road, and the construction of aerodromes in various parts of Assam. At one time it looked as though work on the Ledo Road would be of equal importance, but things did not develop in this way and the main work of the Indian Tea Association on that road was concerned with the evacuation of refugees. From the beginning of 1942 agency houses had given some assistance in the form of labour, materials, and lorries for the construction of certain aerodromes in Assam and defence works in the Chittagong area, but the first request to the Indian Tea Association for help on a considerable scale came on 24 February 1942. The Association at once agreed to do whatever was required and armed with that authority, the chairman, the late James Jones* and E.J.Nicholls† attended a conference with the military authorities in Delhi on 1 March. They were asked to supply a labour force of twenty-five thousand at Manipur Road in Assam and another force of seventy-five thousand at Ledo in the extreme east of Assam when the Manipur requirements had been fulfilled. Jones and Nicholls at once undertook to provide these forces. The QMG naturally took it for granted that as a business body the Association would require an agency fee and was perhaps astonished to learn that the services of the Indian Tea Association would be given gratuitously as part of the war effort.

What the Indian Tea Association had agreed to do was in the words of its report for 1942:

* Later Sir James Jones, CIE.
† Later CBE.

To furnish the largest possible number of tea garden labourers who would volunteer for work on these roads; to supply European personnel to supervise them and Indian clerical staff to keep the necessary records; to transport the labourers to the sites of the projects; to maintain them there with adequate food and clothing; to provide all necessary medical attention for the labourers and staff; to recruit additional labourers through the Tea Districts Labour Association; and to administer the funds to be placed at the Association's disposal by Government for the financing of these enterprises.

A project sub-committee of the Indian Tea Association was at once set up in Calcutta, with individual members in charge respectively of European personnel and labour, stores and supplies, medical organization, finance, and recruitment of labour. Each member was given full authority in his department, 'without the necessity of referring to the Committee except on important matters of general principle'.

From this stage onwards things moved with astonishing rapidity. On 4 March, only three days after the Delhi conference an advance party of one planter and one hundred carefully chosen labourers from his own estate, together with their own rations and medical set-up, had arrived at Manipur Road Station, some ninety miles from the estate – in spite of the fact that it was the time of the *Fagua* festival, which Pilcher tells us is to the tea-garden labourer rather like a Robbie Burns night continued for four or five days. The advance party's job was to prepare reception camps, which consisted simply of bivouacs made from jungle leaves and branches. The Indian Tea Association appointed Pilcher as chief tea liaison officer and sent up several planters, one to take charge of each bivouac camp. Pilcher writes amusingly of the headquarters Indian Tea Association labour camp.

> They set themselves up as 'Headquarters Indian Tea Association Labour' in the last remaining vacant *dak* bungalow room. This did service as bedroom for three and office, the latter consisting of one communal table at which there was always one occupant and a queue of two. The moment the occupant left the table for a second the next man took possession and with a breast stroke motion cleared all pending letters to either side and started off on his own lot. All three had obviously been strong swimmers in their younger days.

Planters with labour from their own gardens now began to arrive rapidly and it must be emphasized that every man was a volunteer. The Indian Tea Association's original commitment had been simply to work at the Dimapur base – i.e. in and around Manipur Road Station, but by the time that labour had begun to arrive an altogether new request was made. The Indian Tea Association representatives were summoned to a conference with Major-General E. Wood, the Administrator-General, Eastern Frontier Communications, in Dimapur on 7 March. Pilcher describes the conference as follows:

The General's conference was confined to the Sub-Area Commander, Colonel Gilpin, a Political Officer, the Indian Tea Association Representatives, and the General's Staff Officer. It was opened by the General explaining that the news from Burma was most grave. Rangoon had fallen two days ago, followed by the loss of the Armoured Brigade. As if this were not enough, local labour employed on making the road from Pallel to Tamu, after contact with demoralized refugees and an outbreak of cholera in their camps, had all absconded and work was virtually at a standstill. He went on to explain that the Pallel–Tamu road had originally been designed for an offensive purpose, but in view of the grave news from Burma it might be called upon to play a different and even more important role, but to be of any use for this, the road must be put through not later than 7 May – in just under two months from that day.

In reply to the General's query for suggestions, Colonel Gilpin said the Indian Tea Association was the only hope they had, and the latter then agreed to put their labour into the Lokchao valley, 24 miles over the hills from Pallel and accepted the urgent request to move the first 1,000 up to Pallel, 161 miles away, at 7 a.m. on the 10th, i.e. in under 12 hours' time. The Conference then broke up.

A brief explanation of the geographical situation is necessary here Tamu in Burma is over two hundred miles to the south of Dimapur, and the military authorities had hoped to launch an offensive against the Japanese through Tamu. From Dimapur there was a road of sorts – more properly to be called a track in many places – through Kohima and Imphal to Pallel, one hundred miles from Dimapur. The Army had begun to employ local labour on the construction of a road from Pallel to Tamu, but hard conditions of living together with an outbreak of cholera had disheartened the labour and the process was soon completed by contact with demoralized refugees from Burma. Most of the labour absconded and work was at a standstill. It was at this point that the Indian Tea Association were asked to take up work beyond Pallel.

To understand the magnitude of this task the character of the road from Dimapur to Pallel must be borne in mind. In the best part of the road it was only twelve feet wide and if two vehicles had to pass it was necessary for one to get half off the road. The next stretch was described by Pilcher as a fisherman's paradise and a motorist's nightmare'. The road was merely 'a ledge cut out of the almost perpendicular cliff', with a sheer drop of two hundred feet below it to a narrow gorge. Of a stretch further on we are told that it is just a rock ledge with a precipice on the left and massive cliff on the right. In many sections the road was tortuous in the extreme with very steep gradients and this was the road up which large armies of labourers had to be taken before they could start work beyond Pallel. It speaks volumes for the efficiency of the Indian Tea Association's organization and the spirit of labour that the

first drafts were in Pallel by 12 March, five days after the suggestion had first been made.

The Imphal and Forward Areas Group of the Indian Tea Association thus came into existence, but was apparently known to planters by the less high-sounding name of 'Rogers Rangers'. Up to this stage organization at Dimapur had been *ad hoc*, but in view of the size of the proposed employment of a labour force of twenty-eight thousand scattered over two hundred miles of mountain, it was now put on a more systematic basis, with departments roughly corresponding to those of the projects sub-committee in Calcutta. The normal routine was that planters and labour drafts were allowed one day to settle in after arrival at Dimapur and were then at once sent to work on projects. A rough-and-ready mess was established in the jungle near the *dak* bungalow, of which Pilcher writes thus:

> A combined mess was accordingly started in the jungle just east of the dak bungalow, and consisted in the initial stages of a tarpaulin stretched over two old card tables, a solitary tin bath with hessian cloth modestly draped round it but nothing except the stars above, and a series of wigwams under the trees made of tarpaulin sheets supported mainly on optimism. It was essentially a mobile mess and necessarily so as the Railway Company of the RE's were now being very busy, and it was no uncommon thing to go to sleep in virgin forest and wake up at dawn in the lee of a goods train.

It must be emphasized at this stage that though the work of the Indian Tea Association Forward Group was magnificent, it could not have been done without the less dramatic but highly efficient work carried out in Calcutta and Dibrugarh. The problems of supply and transport were immense, but these were all solved. Lorries were collected on a large scale from tea estates and it is a remarkable thing in view of the character of the road, that within three months they transported twenty-nine thousand labourers to Dimapur or beyond and brought back twenty thousand refugees, with only one fatal casualty. Water supply in the forward areas presented a grave problem, but the Medical Officers of the industry combined with Tocklai scientists to run a water sterilization unit 'by the system of electrolysis, the necessary equipment consisting of a six-volt battery, some pumps and piping, and two silver coins as anodes'. Rice had to be brought in a distance of one hundred miles and properly stored; money was drawn for payment of labour and other needs from a distant Treasury; and canteens were set up for the supply of the needs of Europeans. In peace-time the establishment of such an organization would have taken months, but in this emergency it was done, with remarkably few hitches, in a few weeks.

The hardest part of the task nevertheless still lay ahead. Lockchao, where operations on the road to Tamu were to begin was only twenty-four miles from Pallel, but the track rose four thousand feet in ten miles

and then fell five thousand feet in fifteen miles and every requirement of life had to be carried by porters (Manipuris, Assam Rifle guards, and convicts from the Imphal jail – with some assistance from ponies and bullocks from the Assam Rifles, and mules). Even water for the journey had to be carried and for this another SOS was sent to Assam asking for all available empty bottles. Before long there was a continuous line of labour camps from Pallel to Lockchao. Bulldozers were used over some stretches but a considerable part of the road to Tamu was cut by hand.

Before the end of April it was clear that it would not be possible to release garden labour at the end of the six weeks period for which they had originally engaged. A small proportion of labourers were given leave to visit their gardens and reassure their relatives, and almost the entire force volunteered to stay on for three months.

Thanks to the remarkable co-operation of the Army and the Indian Tea Association and the complete confidence of tea garden labour in the planters, the miracle demanded by General Wood was accomplished. The road to Tamu was finished on 5 May and in view of the rapid Japanese advance, labour was, on military orders, withdrawn from Tamu and moved to Kanglatombi eighteen miles north of Imphal, where the Indian Tea Association were asked to build a reception camp for the retreating army from Burma. Unhappily the first Japanese raid on Imphal took place at this time, and there were sixteen casualties amongst Indian Tea Association labour. The raid was not a heavy one, but the morale of the local civil population was completely destroyed. Public services ceased to function, law and order broke down and looting and arson were widespread. To its everlasting credit, tea-garden labour alone stood firm and the reception camp at Kanglatombi was completed. The Indian Tea Association had completed its first task and labour returned to the gardens to recuperate.

After a short breathing-space the Indian Tea Association were asked to supply a maintenance force of from fifteen thousand to twenty thousand men on the road from Numaligarh to Mao (twenty miles south of Imphal, on the Pallel road). The monsoon was about to break and it was essential to provide better living conditions for planters and labour than those they had endured on the Pallel–Tamu road. Shelters of bamboos and tarpaulin, with raised floors, were therefore constructed and the maintenance force took up its position in June. An emergency now arose on the Manipur Road south of Kohima. After torrential rain a whole spur of a hillside began to move down into a valley a thousand feet below and for a time the only line of communication to the 4th Corps was cut. The Indian Tea Association were asked on 7 July to provide a labour force of one thousand to deal with this situation and on 10 July the labour moved into position. Local Nagas were also employed and the Indian Tea Association collaborated with

the Public Works Department with such determination that the road was opened again on 12 July. Here we must quote from *Navvies of the Fourteenth Army*:

The hillside however was still moving and any road across it usually subsided at the rate of about three feet an hour, which meant a maximum of about two hours during which light conveys could be rushed across; after this the road completely broke up and disappeared into the valley below. From 12 July therefore a daily new road had to be built across the swamp; work was done by gangs starting at dawn, the first mission was to rescue the corduroy planks from the remains of the previous day's road down in the valley, after which a track was hacked out above road level to allow for subsidence during work. This was then stabilised with road metal, and finally the corduroy planks laid, by which time it was usually about 6 p.m. Waiting convoys were then rushed over until the road was no longer safe, after which work was shut down for the night.

After this procedure had gone on for three weeks the hillside seemed to settle down and it began to be possible to build a more permanent road. The Manipur Road now began to suffer the disastrous effect of the monsoon in its lower stretches and in the notorious gorge, slips had to be cleared daily – and this had to be done by hand since the bulldozers had become useless after their work on the Tamu Road. These obstacles were all overcome and a few months later the Indian Tea Association began the work of doubling the road from Dimapur to Imphal.

The task was facilitated by the fact that the Chief Engineer, Brigadier L. D. Grand, was now able to make an estimate of his labour requirements for the winter of 1942–3. This made possible the shadow force labour scheme under which every tea estate in North-east India undertook to supply one labourer for every ten acres of tea, and was authorized to recruit a corresponding number of labourers for the estate, at Government expense. The North-east Indian tea industry as a whole guaranteed to provide a force of fifty thousand for projects organized in Assam. In fact it maintained a project force of between seventy-five thousand and ninety thousand for work on roads, quarries, airfields and military installations and only recruited twenty-five thousand labourers at the cost of Government.

It is perhaps not necessary to pursue this story in detail. The doubling of the Dimapur–Imphal road was finished by January 1943, staging camps for the Chindits were built from Dimapur to Kohima, and a number of subsidiary roads were constructed. A new project on a road from Imphal to Tiddim in the Chin hills was abandoned when a Japanese thrust made it untenable. Thereafter events moved quickly. In March 1944 a rapid advance of the Japanese to the west necessitated the withdrawal of all labour beyond Kohima. A week or so later Kohima was isolated and Japanese columns began moving down the valley on each

side of the Kohima–Dimapur road. Fortunately, the Dimapur airfield – the construction of which by the Indian Tea Association had only been started in October 1943 – was now ready, and to quote Pilcher again: 'It was a wonderful sight to see the DC3s and Commando planes coming in thick and fast the next one touching down before its predecessor had completed its landing run and transport all ready and waiting to whisk the disembarking troops up the line.' The relief of Kohima on 20 April 1944, the reopening of the road to Imphal at the end of June, and the dramatic way in which the tide of battle turned against the Japanese are not relevant to our purpose. When the road was reopened it was found that little damage had been done to it but that the Japanese had done no maintenance work and it was in a bad condition. Thirty thousand Indian Tea Association labourers, working under planters who had now become experienced road engineers, soon put it into a condition fit for the march of the liberating armies.

It seems right to end the story of the Manipur Road project in the words of Pilcher:

> This is the story of the Manipur Road ITA Project. It was only one of the many Projects run in Assam and North East Bengal by the Indian Tea Association and each played their part in the final defeat of the Jap.
>
> Manipur Road was started as the building of a Base in 1942 from which to attack and defeat the Jap. As the situation in 1942 deteriorated, it was switched to becoming the escape route of our beaten forces, rather in the same fashion as Dunkirk. It then reverted to its previous role, but when all were waiting for attack, it suddenly became attacked itself in no uncertain fashion, and it seemed a toss up whether the big Dimapur Base with its masses of material would fall to the Jap.
>
> But finally, after two and a half years of changing fortunes, it played to the full the part for which it had been intended originally, and was the springboard for the big attack on Burma.

The convention followed in this book forbids the allotment of praise to individuals still connected with the tea industry. Pilcher unfortunately is dead, and we can therefore express the opinion that he, perhaps more than any other civilian, by his courage and organizing ability made it possible for the British, Indian, and American forces to advance into Burma and defeat the Japanese.

REFUGEES FROM BURMA

While the construction of roads and aerodromes satisfied the desire of the planter to participate in the war effort, the organization of assistance to refugees from Burma was his natural response to the miseries of thousands of men, women and children in distress. The part played by the Indian Tea Association in that work has been graphically described by Geoffrey Tyson in *Forgotten Frontier* and in the following pages we shall draw heavily on his account.

The partial evacuation of Rangoon in February 1942 was perhaps the first sign that the Allies were unlikely to be able to halt the Japanese advance and it came as a profound shock to the people of Burma. For most of them, as for the people of any invaded country, there was nothing to do but to stay where they were and hope for the best, but there were sections of the population for whom escape still seemed possible. Those who remember the haste with which British people left the continent of Europe just before both the First and Second World Wars, will not be surprised that the main thought in the minds of Indians resident in Burma was to get back home. Not only were they foreigners, but they were conscious of not being popular in Burma. Many of them, therefore, left Rangoon by sea for India while there was time, and when that route became impossible others trekked along the coast to Cox's Bazaar or Chittagong in India. When the Japanese grip on the area round Rangoon tightened, a mass exodus of Burmese and Indians to the North began. The Burmese may have hoped to remain in comparative safety in Upper Burma, while many of the Indians intended to make their way home. The refugees congregated mainly in and around Mandalay, Bhamo, Kalewa, and Myitkyina and from the last named town a considerable number were transported to India in Douglas aircraft.

The bombing of Myitkina and its evacuation by the British on 7 May put an end to this rescue operation, but still further strengthened the desire to reach the comparative safety of India. The only remaining ways of escape involved hazardous journeys on foot over the formidable mountains which separate India from Burma. Roads in any proper sense of the word were non-existent and the bridle-paths normally used by the few primitive inhabitants of these desolate areas were a nightmare to the disorganized and demoralized refugees who struggled wearily up the sides of mountains rising in some places to twelve thousand feet, only to descend into malaria-infested valleys, before making yet another laborious ascent. Except for a handful of officials and professional travellers or explorers, few people knew anything about this remote region and what was entailed in attempting to cross them. They were, moreover, completely unprepared. As Tyson tells us:

> Many of the refugees who reached Upper Burma were really only prepared to be flown out of the country. Before reaching a place like Myitkyina, from where they had expected evacuation by air, they had already discarded most of their useful clothing, retaining their most expensive kit on their backs and such things as papers, jewelry and money which could be conveniently taken by plane. By the time they found that evacuation by air was impossible there was nothing in the shape of blankers, boots or other necessary articles to be bought in the bazaars of Upper Burma, and they started to foot it to India in the expensive, but not necessarily utilitarian, clothing they had chosen for the promised air trip.

Three main routes were used, the most important being that through Tamu in Burma down to Dimapur, so that on this route the tasks of building the new road and caring for refugees would have to go on side by side. A second route, to which refugees were directed, to relieve pressure on the Tamu–Dimapur road, took them through Bishenpur to Silchar in the Surma Valley, while the most dreadful of all routes was that through the horrors of the Hukawng Valley. We shall deal first with that through Tamu.

On 25 February the Army authorities warned the Government of Assam that large numbers of Indian refugees were moving towards the frontier of Assam. It was obvious from the few accounts received that they would be in bad condition and that many of them would be quite unable to make the journey to Dimapur without well-organized help. It was equally obvious that such help would have to be on a considerable scale and that the Government of Assam would be quite incapable of coping with it. That Government asked A.E.Whittaker, CIE,* the chief representative of the Indian Tea Association in Assam, if volunteers could be found to organize relief, and almost at once the political agent in Manipur wired asking for a dozen officers to construct and control refugee camps. The industry reacted without hesitation and within four days twelve planters and one planter's wife, together with stores, some transport and equipment arrived in Dimapur, where they were soon joined by a fine medical unit provided by the Assam Oil Company. They were given no directive – and they needed none, for obviously what they had to do was to establish relief camps as close to the Burma frontier as possible. Transport was a major headache since the needs of the Army, and the requirements of the planters constructing the new road were bound to conflict. Somehow or other the Indian Tea Association made lorries available and in an incredibly short time a camp was established at Korengei, some miles from Dimapur, for the reception of refugees and their despatch down the Assam Valley. By 5 or 6 March the Camp Commandant had moved out to the proposed camp site. In the words of Geoffrey Tyson, the duties of the Commandant were:

> To organise as best he could the Porter Corps which was being mobilised to carry the luggage of refugees; to pay these porters and to keep them on the job; to see that reserves of rations for refugees were built up, and were fairly distributed each day; to see that the camps were cleared every twenty-four hours and to carry out as many sanitary precautions as were possible in exceedingly primitive conditions. General instructions of this kind were all that were possible in the circumstances, or that were asked for by the men themselves. If the camps were not built, the planters would help in constructing them; if they were not large enough, they would extend them; if they were built they would run them.

* Later CSI.

It should be explained that for obvious reasons of logistics, refugees from Tamu were sent by two separate routes and camps were required in each route. By the end of March ten camps had been established. The largest of them, at Dimapur, was under the charge of one of the heroic figures of the operation – Alexander Beattie, a planter from Woka tea estate, who died later in the year from typhoid fever contracted in the service of the refugees. Beattie's determination and devotion have been so well described in *Forgotten Frontier* that extensive quotation is justified:

Foodstuffs in Dimapur were scarce and prices, already high, were rising. The school compound offered no shelter for human beings, as all the school rooms were used to keep the foodstuffs dry. It was necessary to build camps to accommodate large numbers, and to prepare for the day when the inflow would exceed the capacity of the night trains to take the refugees away. The refugees in March were still for the most part able-bodied and comparatively well to do, having started from Burma in sufficient time to have made long stretches of the journey northwards to Tamu by train, or boat or lorry. The news of the fighting was not encouraging, and the more ominous silence of the Government of Burma about the numbers moving made it certain that Dimapur would soon have to deal with the weak and the ailing, the poor and the weary. For Beattie these were problems which called forth all the qualities of this practical-minded Scot. He produced two fellow planters, brought in his own garden lorry and his own contingent of seventy garden labourers with their own tools. He took similar services from a neighbouring garden, and imported both Hindu and Mohammedan cooks. Then he secured rice supplies from a rice mill forty miles away and bought up a large supply of *dhal*, an article which was rapidly becoming scarce. Likewise he arranged a supply of vegetables and eggs from his own garden and those of his neighbours, and had a supply of milk brought in by special messenger for refugee children. Finally, he brought in four 400-gallon water tanks and in twelve days sank two successful tube wells. In a place where the only representative of the Public Works Department, who could be spared from road works, was a timid overseer, constantly down with malaria, it was useless to rely on any official agency for either building work or the materials to build. Beattie and his colleagues imported their own thatch and bamboos, and with their own labour set to work. In two weeks the compound was transformed. A road was cut to enable lorries to run in with their loads, whereas previously refugees had been decanted on to the main road, where they had crowded the approaches to the station in their eagerness to see a train that would take them to their destinations. In between camps, transport was the great problem. In the camps themselves, sanitation was problem number one. Dimapur was no exception to the others where, throughout the whole period of this mass migration, camp commandants were continually struggling against the refugees' complete disregard of the people following close behind. Vigorous precautions had to be taken to prevent the Dimapur camp precincts from becoming open sewers. Bamboo mats, frequently renewed, made a flooring. In other lines, bamboo platforms were built for sleeping accommodation. A hospital, open

at the sides (the night temperature was never below 70° F) was built; doctors' dispensaries and isolation wards, kitchens and offices were made ready. Everything was of a temporary nature, because everyone knew that the refugees could not cross the hills in the monsoon, which was due to break in the hills at the end of May and in the plains early in June. The achievement lay in making shelters in a place where there had been none; in producing materials from a tract denuded to meet Army requirements; in bringing labour into a military area where activity was such as to deter the local populace; and above all, in bringing into this inhospitable region the cheerful spirit of a man whose quiet efficiency was unimpaired by the inertia of governments and the waywardness of the military controls. But of comfort there was none.

Beattie was fortunate, too, in having the help of a number of planters' wives. It is unfortunate that the convention followed in this book prevents mention of their names, but they are well known in the tea world and will be honoured for their devotion as long as that generation of planters survives. The lady who led them turned the practical mind of a woman to the tasks of building cooking stoves, obtaining utensils, and organizing supplies of fresh vegetables from districts.

We have described the Dimapur camp in some detail, but the other camps were of the same pattern on a smaller scale, each with its own Beattie. In April help from the Ram Krishna Mission, three members of which were working in co-operation with the planters, was of great value, but at the same time the numbers of refugees were increasing and they were in worse physical and mental condition than those who came before them. Many of them, riddled with disease, had forced themselves to endure almost inconceivable hardships until they reached the safety of the camps, but their will had then given out and they had collapsed. The Tea Labour Hospital at Dimapur performed wonders, but it was essential to send all refugees on as soon as possible and in dealing with utterly exhausted men, women, and children the planters' kindness often had to give place to sternness and insistence that the poor miserable creatures should pull themselves together. A few thousand refugees could be cared for lower down in the Assam Valley or in Calcutta, but in Korengei or Dimapur they would merely make it impossible to succour the thousands who followed them.

At this stage a heart-rending problem faced the planters in charge. The Tamu–Dimapur camps could not cope with all who came from Burma. Fortunately, an alternative route was available. Amidst the general spinelessness of the Government of Assam, a few individual officials stood out for foresight and energy. Amongst them was the political officer of Manipur who as far ahead as February had foreseen the magnitude of the refugee problem and had realized that the Dimapur route would be inadequate to cope with all that was required. At his request

the Surma Valley Branch of the Indian Tea Association, backed from Calcutta, had established camps on the road from Bishenpur to Cachar, and had created ample reserves of food at each camp. 'By 19 April,' says Tyson, 'there had been laid down at each camp 2,000 maunds (seventy tons) of foodstuffs comprising rice, *dhal*, salt, *masala* and tea, arranged in quality and quantity which was never reached in any of the camps on the Tamu–Imphal–Dimapur route.' This route was opened on 28 April, and when the Dimapur route was impossibly congested, a system of selection was introduced. Refugees who were reasonably physically fit on medical inspection at Thobal, between Pallel and Imphal, were taken by lorry to Bishenpur from which place they had an eighty-mile march to Cachar. It must have been incredibly hard to decide who should go by this route, but the camps on the way to Cachar were magnificently run, and the diversion justified itself abundantly by results.

The problems of the Dimapur route were aggravated when the bombing of Imphal on 16 May led to an unauthorized exodus of refugees from the Korengei camp to Dimapur. At the same time the subordinate staff in the public services fled down the road and the Commandant at Dimapur faced a situation which, in theory, should have been impossible. With the aid of the Tea Labour Hospital and the conservancy staff, he coped with it – and here it is right to pay tribute to the great medical work done by Colonel Taylor, IMS, who had been sent by the Assam Government to control the serious threat of cholera and other epidemics.

By this time, however, the advance of the Japanese made the continued use of the Tamu route impracticable and in any case it was doubtful if the mountains could be crossed in the monsoon. Major-General Wood reached the decision in the middle of May that the forward camps must be abandoned. The stream of refugees did not, however, dry up as had been expected. Many desperate parties tried the route from Homelin sixty miles north of Tamu and between 27 May and 17 June, Tyson tells us, thirty thousand refugees passed through Dimapur. Congress medical volunteers arrived at this stage and did valuable work, somewhat late in the day, but by the middle of June, the movement had practically ceased and the camps at Dimapur and Bishenpur soon closed down. It is reckoned that 150,000 refugees had passed through Dimapur and thirty-seven thousand through Bishenpur.

The only remaining escape route was further north through the dreaded Hukawng Valley over the Pangsau Pass and down the road to Ledo. It was soon learned that refugees, mainly from the frontier village of Shibiwyang, were in fact struggling along that route under the most appalling conditions, and on 12 May Major-General Wood asked the Indian Tea Association to take on the task of organizing help. Once again the aim was to establish temporary camps as far forward as

possible. The most difficult part of the route lay east of the Pangsau Pass and advance parties each consisting of two ITA liaison officers, one sub-assistant surgeon, one dresser, twelve menials, and fifty Abor porters were at once sent to sixteen sites between the base at Lekhapani and the most forward post contemplated, at Taikham Zup.

In early May the state of the mule track along which the refugees would pass to Pangsau was thus described by a reconnaissance officer, from whose diary Tyson quotes:

> These last two days have given us a real idea of the conditions under which evacuees are travelling from Burma over these hills; stiff marches in rain over muddy parts, hundreds of leeches, evacuees arriving tired and then having to build shelters for the night, sleeping in wet blankets if they can sleep when there are so many sandflies and other insects that bite, trying to light a fire and cook a breakfast in the rain . . . it seems highly improbable that many will get through unless this rain ceases.

Conditions in Shinbiwyang, where it is estimated that forty-five thousand refugees from Upper Burma – Indians, Burmese, and Chinese – had collected, were almost indescribable. For food supplies they depended almost entirely on the limited quantity that the RAF could drop and a young political officer named North, together with a few armed police, struggled magnificently with the problem of distributing the small rations available, maintaining law and order, and waging a constant fight against disease. At one time, says Tyson, the death rate had risen to fifty a day and North was having great difficulty in burying the corpses, while the Chinese, armed but hungry, were disposed to demand more than their fair share of the very limited quantities of food available. The desire to escape from this hell led thousands to brave the dangers of the Hukawng Valley.

By this time the monsoon had broken and it is difficult to imagine the difficulties under which the Indian Tea Association parties worked. The sickness rate among the porters was high, many of the refugees were in very bad physical condition and 'there was rain always rain and mud and soaking jungle. Many a relatively fit man had to be rescued from the mud in which he might find himself imprisoned waist high.'

Between the refugees at Shinbiwyang and safety there were rivers which were often in high spate for several days on end, and desperate men had either to be persuaded to wait, or helped to cross. The RAF now began to drop supplies at the camps east of the Pangsau Pass in spite of the unfavourable monsoon weather conditions, but there were days when this was impossible and the Indian Tea Association liaison officers had to maintain stern discipline to prevent the available food from being seized by the strongest.

Porterage of supplies was a constant problem and was only solved by

the creation of a special force consisting partly of Abors and partly of volunteers from garden labour. Besides coping with all these problems, liaison officers had to put up with considerable physical hardship – mosquitoes, *dim-dam* flies, lack of fresh food, almost perpetually damp clothes, and work almost without rest, took their toll. Some went sick, and many who were sick carried on, driven by the knowledge of the almost indescribable hardships suffered by the refugees on their long march. This was indeed the grimmest of all the routes and perhaps the worst cause of both misery and danger was mud so deep that strong men sank in it up to their thighs, while those debilitated by fatigue and shortage of food fell in it, and lay there to die. Those who were fortunate enough to reach the Indian Tea Association camp were in many cases at the point of mental and physical collapse. The Indian Tea Association parties then had three main tasks. They had to build up the strength of those who were just weak – and starving men must not be overfed; to deal with disease; and then to drive onward to the next downward camp those who were too apathetic to want to move. Here tribute must be paid to the work of the tea-garden doctors. Tyson tells us:

> On the Shinbiwyang–Ledo road itself, in addition to the Principal Medical Officer of the Indian Tea Association, there were five fully qualified European doctors, and one Indian doctor, distributed between Lekhapani and Tagung Hka at intervals of approximately fifteen miles. In every camp, at intervals of roughly seven miles, there was a small camp hospital, staffed with one assistant medical officer, one compounder, and one anti-malarial *babu*, with whatever might be necessary in the way of dressers and menial staff. As a rule evacuees were given a medical inspection on the Burma side of each camp, so as to locate infection before it had an opportunity to be carried into the main camps. Serious cases of illness or exhaustion were treated in camp hospitals, and cases unable to walk were handed over to stretcher parties. Between camps, temporary sheds and benches were erected on the road side, and minor complaints were dealt with there. In the forward camps thousands of evacuees were inoculated against cholera, and the consequence was that the ravages of this disease never seriously appeared. Every one suffered from a form of colitis which, unless checked, quickly turned to dysentery. By July malaria was on the increase, and at this period the Indian medical staff were grossly overworked. Government were asked to supply thirty assistant medical officers and thirty compounders to meet the emergency, but the net effective response was one assistant medical officer.

Thanks to this work and to the close collaboration between planters and doctors, the death rate in these camps was low. The great majority of those who reached the first Indian Tea Association camp were passed on safely from camp to camp, until they reached Tipong, where they were taken by lorries to the base at Lekhapani or to Margherita, where their tribulations were at an end.

A fourth route used by a relatively small group of refugees, lay over the Chaukan Pass and across the dreaded Dapha River. The story of the rescue work on this route has been graphically described by G. W. Tyson in *Forgotten Frontier* and since it did not fall within the main operation of the Indian Tea Association we need not recount it here. It need only be recorded that the survivors owed their lives to the unsurpassed gallantry and determination of a well-known Tea man, Gyles Mackrell, DFC, GM.

We have selected in this chapter the two most dramatic aspects of the part played by planters and tea-garden labour in the war effort, but innumerable less spectacular though equally important tasks, such as the construction of the aerodromes from which the American and British air forces were to operate, were carried out by the industry. The Government of Assam played little part in these operations, though a few of its officers did magnificent work. The credit for what was done rests with the Indian Tea Association and branches for first-class organization; with the planters for courage, determination, and the capacity to create confidence in the labour forces; with thousands of tea-garden labourers who were deterred neither by hardship nor by danger. Last but not least immense credit must go to the many tea-garden doctors, European and Indian, whose courage and devotion saved thousands of lives and brought relief from suffering to even greater numbers.

EPILOGUE

EPILOGUE

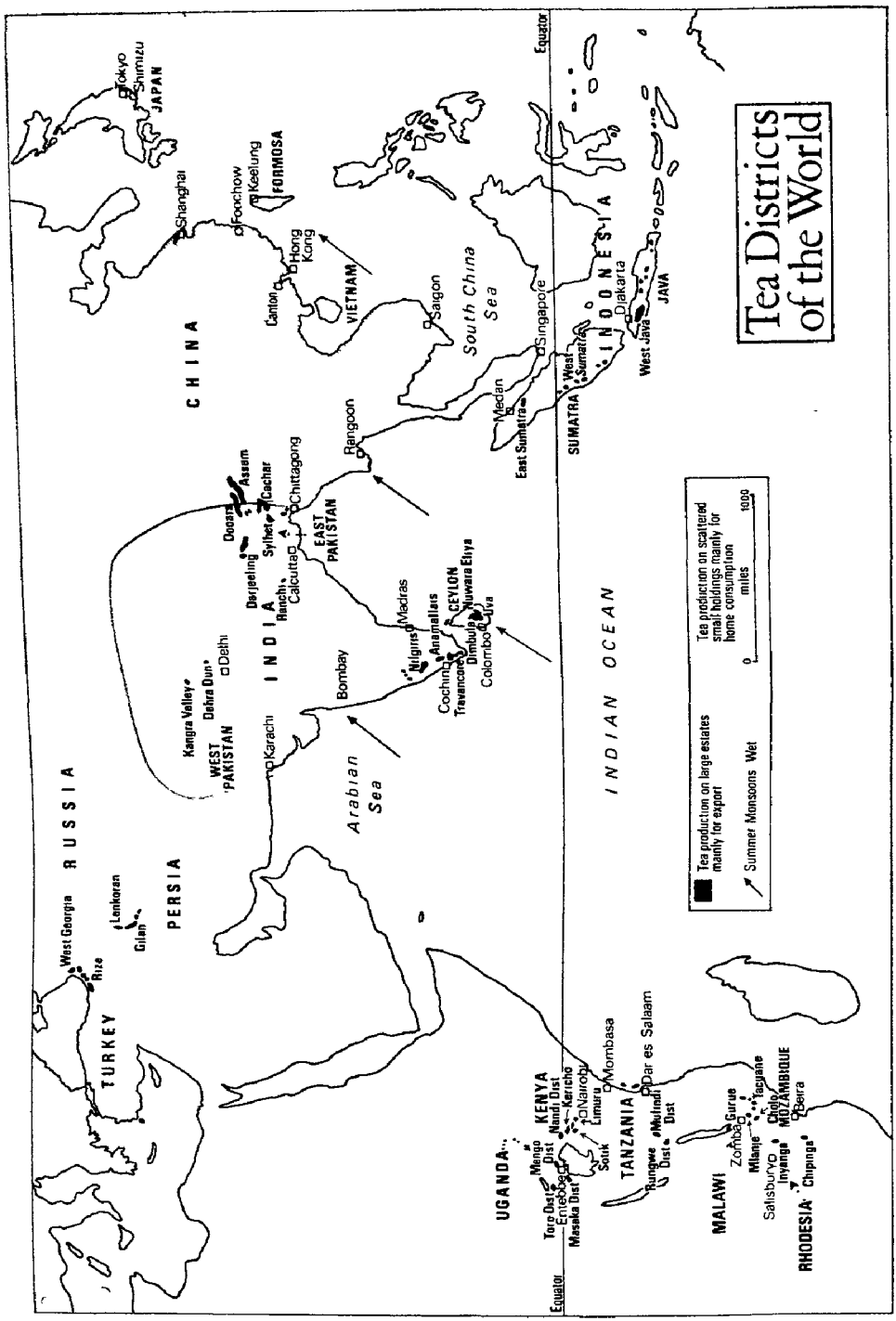
It can now be seen that the history of the Indian tea industry falls into several clearly marked phases. First came the pioneers whose vision of the future inspired them to tackle the dense and deadly forests of Assam or South India. In the next phase, men of inventive genius – Davidson, Jackson, and a host of others – brought machinery into the service of tea and laid the foundations on which all subsequent development has been based. In the next generation the typical planter thought in terms of greater yields and adequate labour forces which he learned to treat with firmness but with a humanity which inspired trust and even affection. In the fourth phase the industry applied itself to scientific research with such success that it established perhaps the finest research station of its kind in Asia, and in due course developed new methods of agriculture and manufacture.

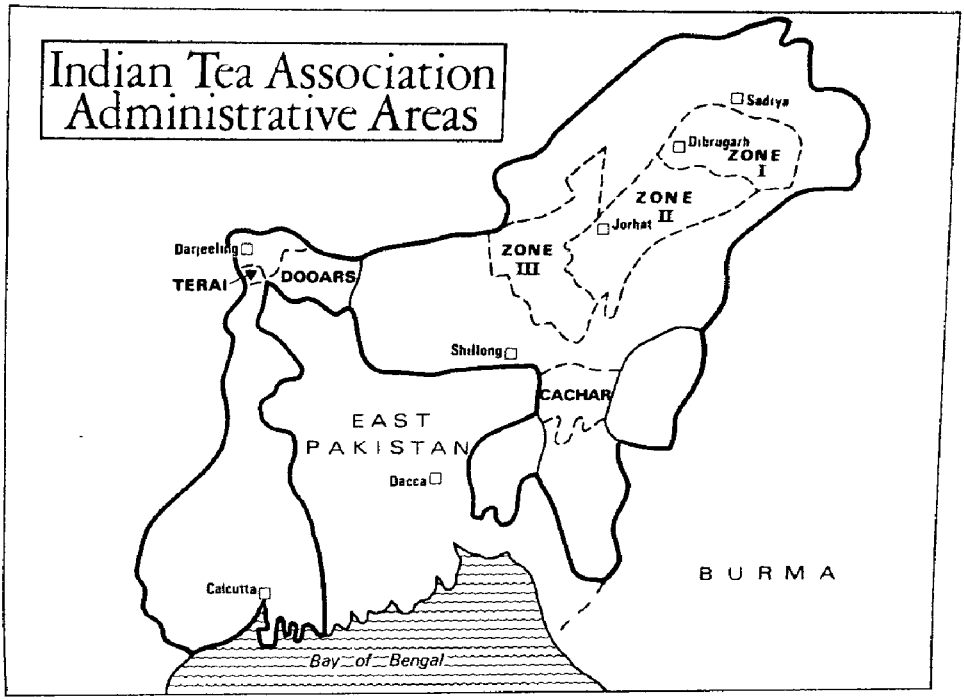
The Second World War offered the industry its greatest challenge and we have seen with what efficiency and devotion that challenge was met. Finally, after Independence planters adapted themselves to changed conditions with remarkable success. They learned to work within the framework of governmental controls; they mastered the art of negotiation with trade unions; and they conquered the sense of frustration arising from continuing shortages of the essentials of production. Perhaps more important still, British planters acquired Indian colleagues and liked them immensely.

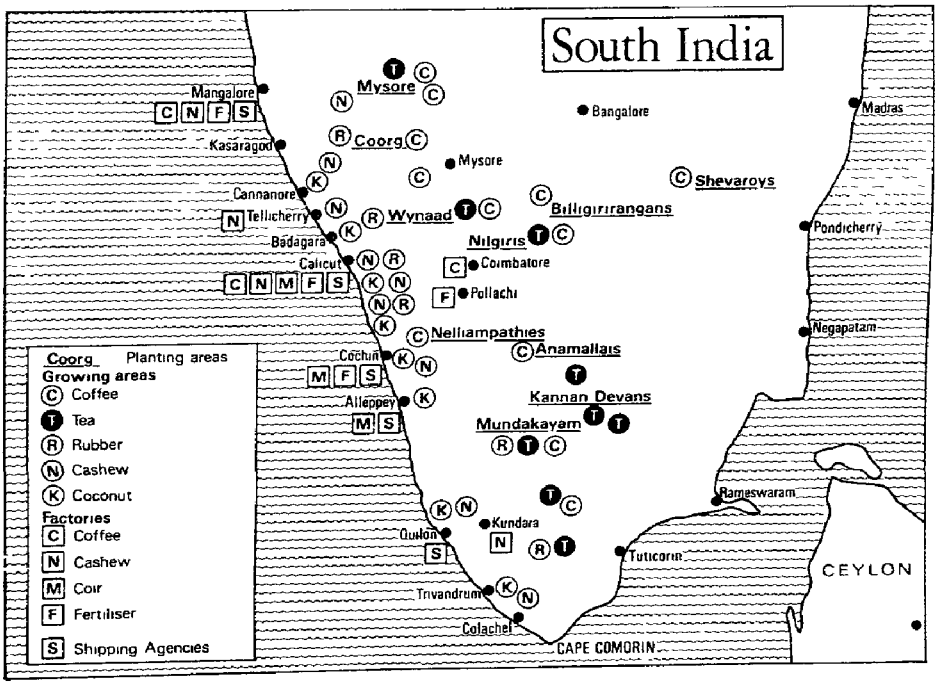
The industry can indeed claim to have been flexible in its approach to new problems and progressive in its outlook. Thanks to these qualities it is today the largest private employer of labour in India and is the second most important earner of foreign exchange for India.

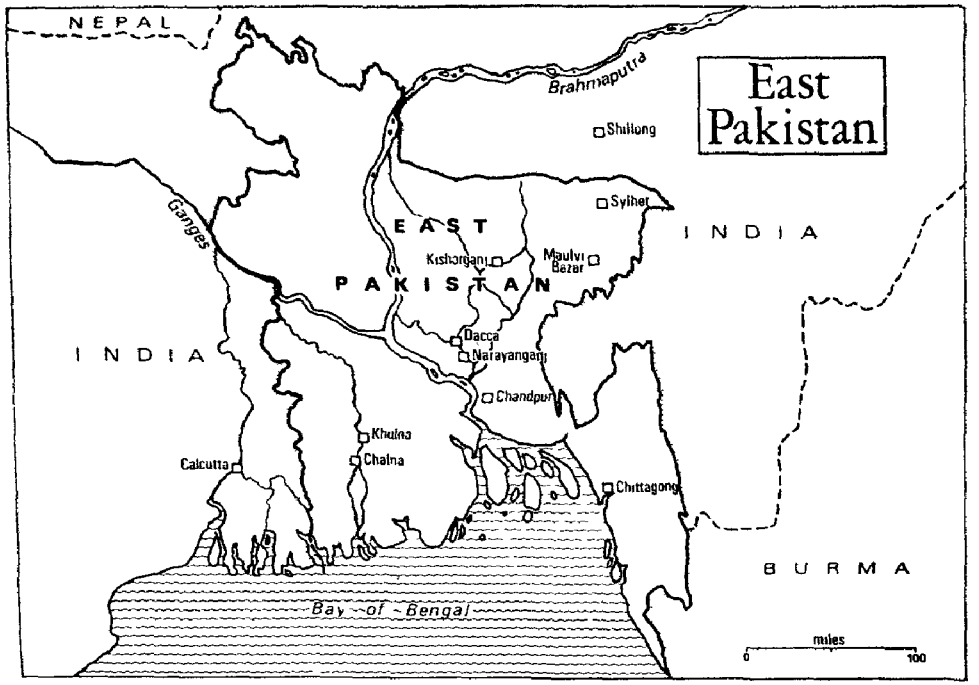
The writer came into the tea world from outside and is conscious of the privilege of having been associated with it for a quarter of a century.

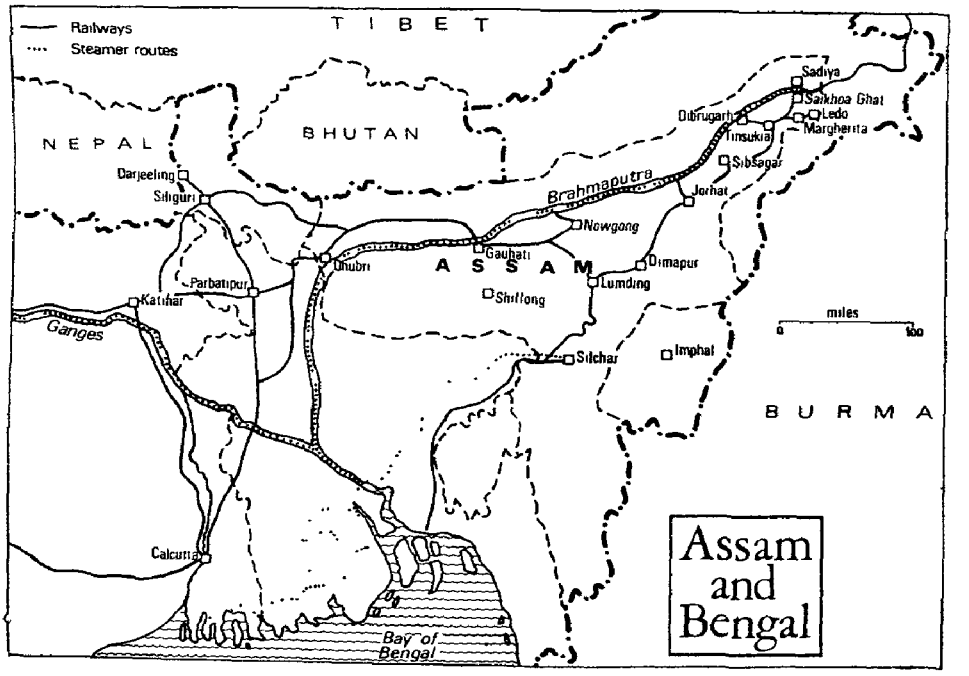
MAPS


Tea Districts of the World
Tea production on large estates mainly for export
Tea production on scattered small holdings mainly for home consumption
Summer Monsoons Wet
0
1000 miles
RUSSIA
CHINA
PERSIA
TURKEY
INDIA
PAKISTAN
CEYLON
INDONESIA
SUMATRA
JAVA
JAPAN
FORMOSA
VIETNAM
UGANDA
KENYA
TANZANIA
MALAWI
RHODESIA
MOZAMBIQUE
Arabian Sea
South China Sea
INDIAN OCEAN
Equator
Tokyo
Shimizu
Shanghai
Foochow
Keelung
Hong Kong
Canton
Saigon
Singapore
Rangoon
Chittagong
Calcutta
Darjeeling
Assam
Cachar
Sylhet
Dooars
Ranchi
Delhi
Dehra Dun
Kangra Valley
Karachi
Bombay
Madras
Nilgiris
Anaimallais
Cochin
Travancore
Dimbula
Nuwara Eliya
Colombo
Uva
Medan
East Sumatra
West Sumatra
Djakarta
West Java
Lankoran
Gilan
West Georgia
Rize
Mango Dist
Toro Dist
Entebbe
Masaka Dist
Kericho
Nandi Dist
Nairobi
Sotik
Limuru
Mombasa
Dar es Salaam
Rungwe
Mufindi Dist
Dist
Zomba
Gurue
Milanje
Tayuane
Salisburyo
Inyanga
Chipinga
Chiolo
Beira


Indian Tea Association
Administrative Areas
Sadiya
Dibrugarh
ZONE I
ZONE II
Jorhat
ZONE III
Darjeeling
TERAI
DOOARS
Shillong
CACHAR
EAST
PAKISTAN
Dacca
BURMA
Calcutta
Bay of Bengal


South India
Mangalore
Kasaragod
Cannanore
Tellicherry
Badagara
Calicut
Cochin
Alleppey
Quilon
Trivandrum
Colachel
CAPE COMORIN
Mysore
Coorg
Wynaad
Nilgiris
Nelliampathies
Kannan Devans
Mundakayam
Kundara
Bangalore
Coimbatore
Pollachi
Anamallais
Shevaroys
Billigirirangans
Madras
Pondicherry
Negapatam
Rameswaram
Tuticorin
CEYLON
Coorg Planting areas
Growing areas
Coffee
Tea
Rubber
Cashew
Coconut
Factories
Coffee
Cashew
Coir
Fertiliser
Shipping Agencies


NEPAL
Brahmaputra
East Pakistan
Shillong
Sylhet
INDIA
Ganges
EAST
PAKISTAN
Kishorganj
Maulvi Bazar
Dacca
Narayanganj
Chandpur
INDIA
Khulna
Calcutta
Chalna
Chittagong
BURMA
Bay of Bengal
miles
0
100


Railways
Steamer routes
TIBET
BHUTAN
NEPAL
Darjeeling
Siliguri
Parbatipur
Katihar
Ganges
Calcutta
Bay of Bengal
Brahmaputra
Jorhat
Nowgong
Gauhati
Dhubri
ASSAM
Shillong
Dimapur
Lumding
Silchar
Imphal
Sadiya
Saikhoa Ghat
Ledo
Margherita
Dibrugarh
Tinsukia
Sibsagar
miles
0
100
BURMA
Assam and Bengal

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BIBLIOGRAPHY

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