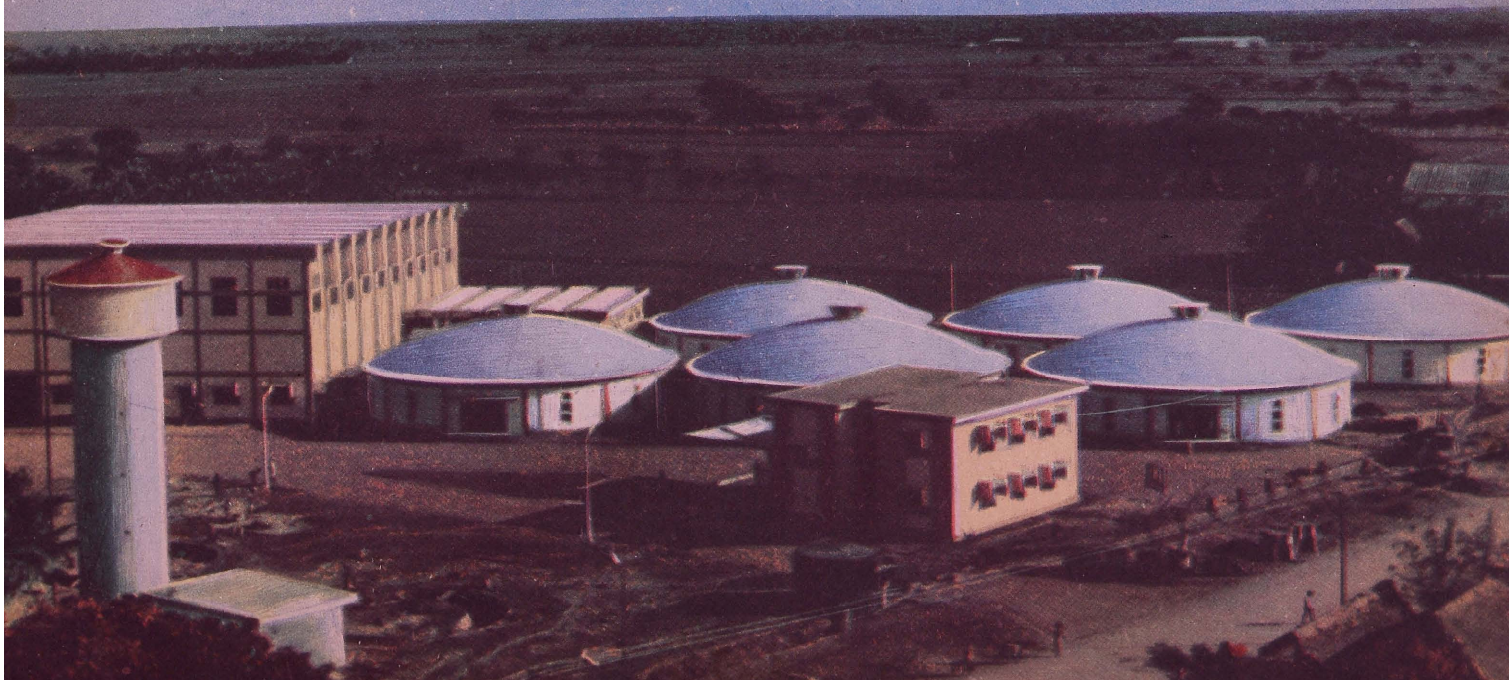
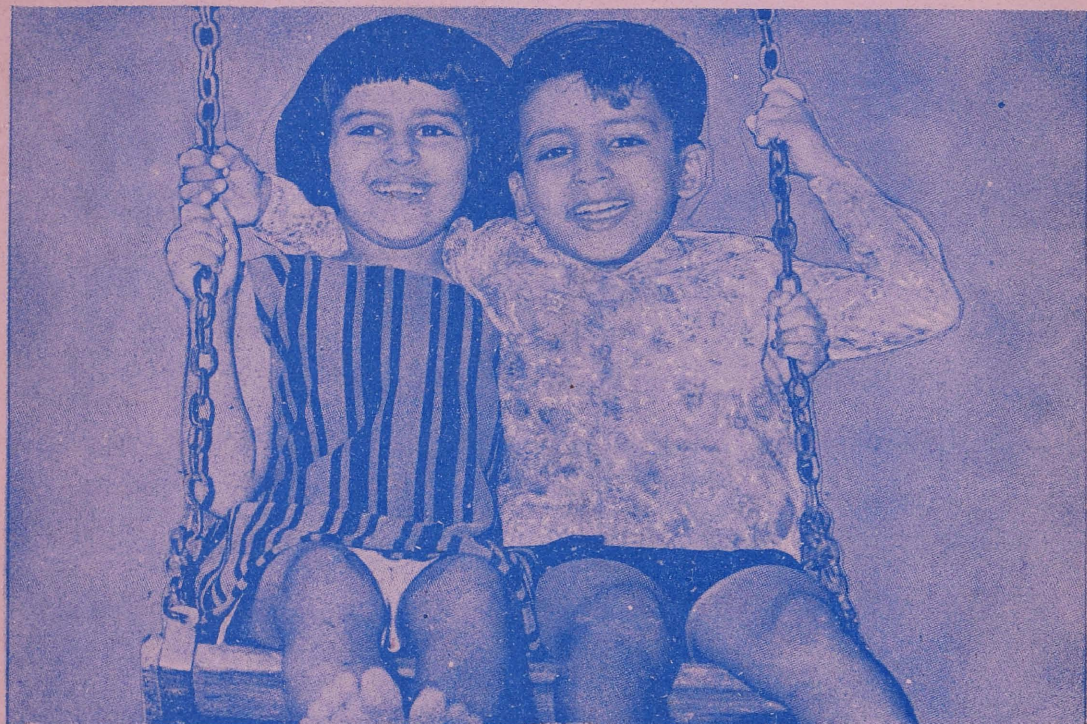


Tamil Arasu

FORTNIGHTLY, APR 20th 1971. 35 Ps.



Swinging their way to a happy future!



Selvan and Selvi are happy and contented. Their parents lavish them with all the comforts in life so that they can face the future with a smile.

Are they born lucky? No. Their parents were wise enough to know that with their limited means they could give them

maximum attention only if they didn't have more children.

Your happiness and the future hope for your children is in your own hands. Today you can have a child by choice, not by chance. That is when you desire one, and can give it the best attention.

Ask any of your friends who have benefitted by family planning. There are 10 lakhs of them in Tamil Nadu. Visit one of the family planning clinics. You'll get free advice, help and other aids from trained staff.



Plan your family-and live happily!

Issued by : Director of Information & Publicity,
Government of Tamil Nadu, Madras-9

Tamil Arasu

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CONTENTS

	Page
Those Twenty Days	4
10-Year Plan for Madras City	9
Coimbatore Sugar Cane Research Station	11
World's Largest Petro-Chemical Complex	13
Work of Water Supply Board.	15
Don't Be Afraid of diabetes	16
Pamani Fertiliser Factory	17
The Ennore Thermal Power Station	19
Excerpts from Governor's Address	27
Extension Work in an Educational Institution	30
The Service that Saves	31
Chemicalisation of Agriculture	35
Weedicide Trials	37
Irrigation Costs—Comparative Study	38
Vital Role of Forests	39
The Root of Our Problems	43
Poorna Swaraj Comes True in Tamil Nadu	46

Cover Page :

Pamani Fertiliser Factory General view.



THOSE TWENTY DAYS

M. KARUNANIDHI

LOUVRE, THE PALACE D' ARTS

On the morning of 8th July, we went to see the Versailles Palace. It is a veritable treasure-house of antiques to-day. Construction of this wonderful palace was commenced in the year 1661 by King Louis XIV and it functioned as the royal residence from 1783 onwards. Merely to go through the several chambers of the Palace would take a few hours and from this it could be inferred that a few days would be needed

if one were to seek to have a close look at the beauty of the mansion in its entirety. The grand victories which France garnered in the fields of battle and the deeds of derring-do performed by the valorous sons of the country are presented in dazzling portraits in one of the rooms. In what is said to be the Throne Room, I saw mirrors on all sides. A charming apartment is there which served as the bed-chamber of

King Louis XIV. The fascinating fountains outside that room are such as to titillate the palate of one's thoughts.

Well-known for his extravagance King Louis XIV had spent money like water in order to erect this magnificent Palace. From the dimensions of the terrace which is spread over 27 acres, we may get an idea of the expanse of the Palace and its grandeur. Alarmed that the people might be agitated if they were to come to know the total expenditure for the construction of the Palace it is said that the flamboyant monarch saw to it that the relevant accounts were duly consigned to the flames.

The Versailles Palace is replete with historical importance. It was here that King William of Prussia, who defeated France in the year 1871, declared himself Emperor of Germany. Again it was here that the Treaty of Versailles was signed by the political experts of the 27 countries that formed the Allied Powers in World War I to inflict a defeat on German domination, and the German officials. Also, when the American War of Independence ended in 1783, it was in the Versailles Palace that the Treaty was signed.

Louvre—A granary of *objects d' art*, unparalleled in the whole world, a perennial mine of art, a feast of art that sweetens the very region of thoughts and an anthology of exquisite charm and beauty that defies description in words.

An art-collection of such splendour as to make the heart yearn "O, won't we stay here till Eternity, until our feet hurt and until our eyes ache, and lap up in glee this nectar of sculpture, this ambrosia of painting !"

Yes, Louvre is the place where in the rooms—numbering over one hundred and fifty—of majestic buildings spread out and towering on an expanse of 49 acres ; in the Hall of Apollo which is among the most enchanting structures of the world ; and in the Grande Galerie, one may see wonderful sculptures born out of the chisels wielded by sculptors of renown that shall outlive time ; and lovely paintings that had taken shape from the brushes and palette of dedicated artists. Connoisseurs from all over the world come to Paris with the sole objective of viewing these life-like paintings and sculptures of a lofty standard.

When the French monarch Francis I was a prisoner-of-war in Italy, it so happened that his mind was set aflame with the ardour for art. The idea formed in his mind that he should raise such buildings in his motherland as would excel in sweep and beauty the structures he saw in Italy, and that art-objects could be collected and kept in those buildings. When he secured his freedom, he lost no time in seeking to get his desire fulfilled.

Thus it was that the Louvre Mansion took shape. The King beautified the Mansion by securing

the painting "Mona Lisa" by Leonardo da Vinci, that celebrated artist of the 16th century. It is said that all the later-day Italian painters strove in vain to

recapture in their own colours the cool grace gleaming in the eyes of Mona Lisa, the soft smile building on her lips and the life-beat throbbing in her hands.



After the arrival of Mona Lisa, the world's outstanding creations in the realm of art began making their way to Louvre. Henry, Louis XIV, Louis XV and others added to the worth and beauty of the mansion by procuring additional sculptures and paintings. As for Napoleon, he brought to Louvre all the art-treasures he could lay hands on in the countries of his conquest. Napoleon III who succeeded him raised Louvre to the status of an unparalleled treasure-house of art and it was he who threw open the place for public view.

The statue of Venus the goddess of beauty although it is in a mutilated condition, still blazons forth the glory of the art of sculpture.

The statue of Goddess of Victory signifying the Victory of Samothrace is also there. Endowed with wings, she stands on the shore with her attire fluttering in the sea-breeze. As we gaze at the statue, the impression grows on us that we too are on the seaside. Such is the throb of life apparent in that statue.

Another statue, this of a strapping youth. He is strong of limbs but alas, he is a slave. Michelangelo has raised this statue in a manner to display the determination of the youth to smash the shackles, the agony arising out of that thought and his yearning for aid from some omnipotent power to get rid of his bondage.

"Damsel seated in Lamplight" "Mother with two babes", Margherita in her prime"—thus in rows are displayed all the throbs of life in the form of rich colour-portraits. Louvre is the treasure-house of art that explains to us in chronological detail all the achievements in the field of art, stretching from times beyond the reach of history down to the present.

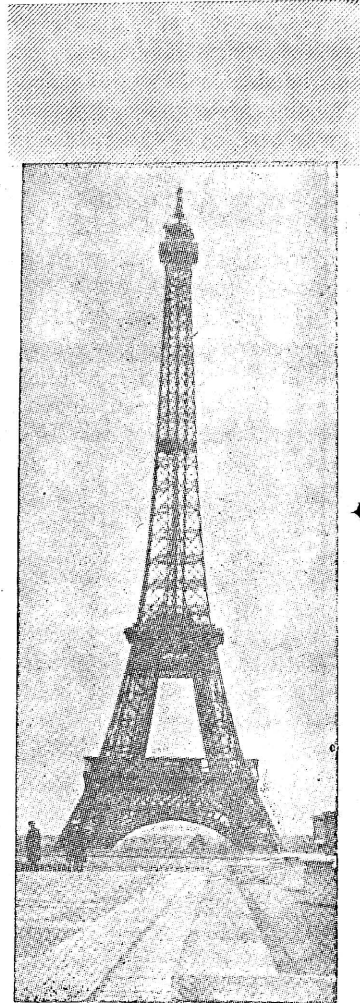
Louvre is the one place where one can see the several schools of sculpture and painting and also art pertaining to various countries—Egypt, Assyrian, Sumarian, Greece, Rome and France.

Louvre is indeed an arbour of art. The ripened fruits of sculpture hanging there in splendour are 3,000 in number. The blossoms of painting spreading their effulgence are 5,000 ; and the tender leaves that are the *objects d'art* exhibited all over the place are 2,00,000.

Containing the masterpieces of innumerable artists like Raphael, Leonardo da Vinci, Michelangelo, Rembrandt and Titian, Louvre broadcasts the eternal truth that even if Time changes, the renown of the artist remains intact.

Erect to a height of 1,902 feet, the majestic Eiffel Tower adds great charm to Paris. This steel tower on the bank of River Seine was constructed by Gustave Eiffel for the World Fair held in

Paris in the year 1889. Raised on an area of $2\frac{1}{2}$ acres, this tower has been equipped with giant lifts for transportation to the upper floors. From the topmost floor of this steel tower, one can get



a panoramic view of the city of Paris. Tourists from many a country come to Paris just to see the Eiffel Tower. There is not much of aesthetic charm in the tower but it is definitely a feat of engineering.

Two Engineering students—a youth and a girl—belonging to Sweden met and talked to me in the Eiffel Tower. They also got themselves photographed with me and left their address with me. The cost of the photograph was a mere 10 francs ; but priceless indeed are the affectionate hearts that stood with me in the picture-

Quite a few boats, charming as swans and carrying men and women and children suffused with happiness, were drifting about on the River Seine bathed in the Golden rays of the evening sun.

Climbing on top of Mt. Marta one is able to view the matchless beauty of Paris which is known as the 'City of Lights'. A pretty church has been located there. In former days, this place was a settlement of artists and poets ; and even now the fragrance of art lingers in the atmosphere. All around the church, several painters are hard at work. There are many in that place who are adepts in the marvellous art of cutting out figures on paper, then and there.

Indian menu is rare in the western countries. But in Paris

there is a restaurant named "Annapoorna". The proprietor of this restaurant which is being administered by French girls, had had occasion to taste the Indian type of food-preparations during a visit to our country and he was won over to the tastes of our cookery. The waitresses in that restaurant wear saris in the manner prevalent in Tamil Nadu. The diners however are in western dress. No doubt this is one type of integration between two different cultures.

The Industrialists in Paris invited me to the offices of their Chamber and they discussed with me the development of Indian industries. Their Chamber of Commerce accorded a reception. In his welcome-address, the President of the Chamber Mr. E. Mayolle stated that a French team would come to India in the near future in order to examine the feasibility of starting industries in our country. He also explained the continuous ties between the Indian sub-continent and France and he said that they in France were eager to start industries in collaboration with us, to make investments and to extend to us aid of technical know-how.

Thanking them, I pointed out how the glorious culture of France extended to India through the cities of Pondicherry and Karaikal is still being nurtured by us. Mentioning the share of France in the Cement Factory in Tamil Nadu, I sought their aid for the Salem Steel Plant. I detailed the opportunities existing in Tamil

Nadu for starting allied Steel Industries. Apart from that, excellent opportunities are available for foreign collaboration in a variety of other industries, such as petro-chemical industries and industries connected with salt. I asked the French industrialists to help us utilise fully our mineral wealth and through that to augment the resources of our country, to enable increase of avenues of employment, to eradicate poverty and thereby to give a boost to the friendly relations between France and India. The French team, during their visit to India, would have detailed discussions on the requirements of the industrial sector in Tamil Nadu and I assured all possible co-operation for them.

While in Paris, I met the French Minister for Culture and Fine Arts, Mr. Edmund Michelet at the Royal Palace. The meeting lasted 30 minutes. In a most heart-warming manner the Minister remarked that he was immensely pleased to receive such an outstanding writer, orator, poet and politician. He requested me to recommend to the Indian Government the drawing-up of an Agreement between France and India that would enable Indian Universities to recognise diplomas issued in France. I replied that I would extend all possible co-operation in the matter describing the cultural relations between the two great countries India and France, he desired that I should visit France once again for a longer stay, and participate in several engagements expressing

the beauty of the art of France. His words were throughout an index of his sincerity and affection. While thanking him, I mentioned how the cultural relations between India and France have been strengthened through the course of history and how we deem it a distinct privilege to protect and preserve those ties.

When I thought of all the affectionate people I had met and conversed with, from Rome to Paris, the words that kept ringing in my ears were those set out in ancient Tamil literature: "All the towns are ours indeed, and all the people our kith and kin." Is it not a fact that affection transcends race and language and relationship ?

As if to reinforce my line of thinking, a reception was arranged for me by Dr. Adiseshiah, Director-General of the UNESCO at the headquarters of the Organisation. The Indian Ambassador, the French Envoy to the UNESCO and representatives and officials of several other countries were present on the occasion. In that distinguished assembly what all Dr. Adiseshiah said in praise of me I accepted as applying not so much to me as an individual as to a Tamilian in general

and that was how I could steady the waves of shyness swaying in my heart.

On behalf of the UNESCO, nine projects are being implemented in Tamil Nadu. The publication of children's books by the Southern Languages Book Trust, donation of scientific equipment, aid for architectural research in the Guindy Engineering College and renovation of the temples at Kancheepuram, Thiruarangam and Rameswaram are notable among these. The efforts undertaken by the UNESCO in regard to these projects were explained by Dr. Adiseshiah. He also set out in detail how it was necessary to preserve the ancient temples of Tamil Nadu that were excellent examples of architecture and symbols of culture and how tourists could be attracted by these. Further, Dr. Adiseshiah gave details of the International Institute of Tamil Studies to be set up in Tamil Nadu.

While replying to his speech I expressed my desire that the UNESCO should come forward to preserve the temples of historic importance, at Thanjavur and Gangaikonda Cholapuram, as monuments of Tamil art.

Three very useful and fruitful hours were spent at the headquarters of the UNESCO which Organisation is engaged in the task of arranging cultural exchanges between the several countries so that the cultures of the countries of the world may be protected. A medallion of the UNESCO was presented to me by Dr. Adiseshiah. As I left the headquarters of the UNESCO I could not help reflecting: "O, what an elevation this world would achieve if only men were to shed communalism, racialism and imperialism, establish communion with one another through cultural contacts, stand shoulder to shoulder and strive thus in unity!"

In the chief cities of western countries as also of the developed countries in the east, there is one habit that is spreading fast. Expending a substantial portion of their earnings, people seek pleasure and engage themselves in entertainments. It has become a habit with them to keep awake till late in the night and spend the time in night clubs for this purpose. People of varied categories coming to Paris from the different corners of the globe imbibe the nectar of art by witnessing drama and dance at the internationally famous clubs.

[To be continued]

ORDERLY GROWTH OF MADRAS CITY

The Rs. 300-crore 10-year Metropolitan Project for Madras City drawn up at the instance of the State Government will ensure the orderly growth of the City in tune with its importance as the Premier City of the Southern Region.

Madras is not only the Capital of Tamil Nadu but also the Premier City in the entire southern region comprising four States of Andhra Pradesh, Kerala, Mysore and Tamil Nadu. The problems created by the rapid urbanisation have been steadily increasing in severity, in a metropolitan City like Madras. The task of providing necessary urban facilities and services has become particularly onerous in the wake of large scale migration of population. This besides causing severe congestion within the State has been instrumental in the proliferation and growth of slums. An idea of the magnitude of the problem facing us can be gained from the fact that the City population has swollen from the figure of 14 lakhs in the year 1951 to roughly 25 lakhs now; this is expected to double itself during the course of the next two decades. In order to

be prepared to face these problems following the urban population explosion and in order to bring orderliness to the future growth of Madras City, the State Government have taken steps to thoroughly examine all problems faced by the metropolitan area with a view to arriving at satisfactory solutions. The idea is not only to meet problems of an emergent nature but also to establish a sound long-term perspective plan to meet the growing needs of the metropolitan area. As a result, a metropolitan development project report has been prepared in which an integrated plan for the development of various facilities in the City has been drawn up.

The basic projection underlying the project report is the demographic one and the future population in the metropolitan area by 1991 is estimated to be 5.2 million of which about 4.8 million is estimated to be urban. The increases in urban population are proposed to be distributed in new urban nodes along the radial corridors emanating from the City apart from establishment of satellite towns along the same corridors to act as counter-magnets to potential migrants. Each

urban node is proposed to be designed as a self-contained community providing for balanced residential, industrial, commercial and other uses within it, to eliminate unnecessary movement between the urban nodes on one hand and the urban nodes and the City on the other. The project report has also assessed the long term needs of the metropolitan area as regards traffic and transportation requirements, housing including clearance of slums, water-supply and drainage needs, education, medical and recreational facilities for the entire metropolitan area.

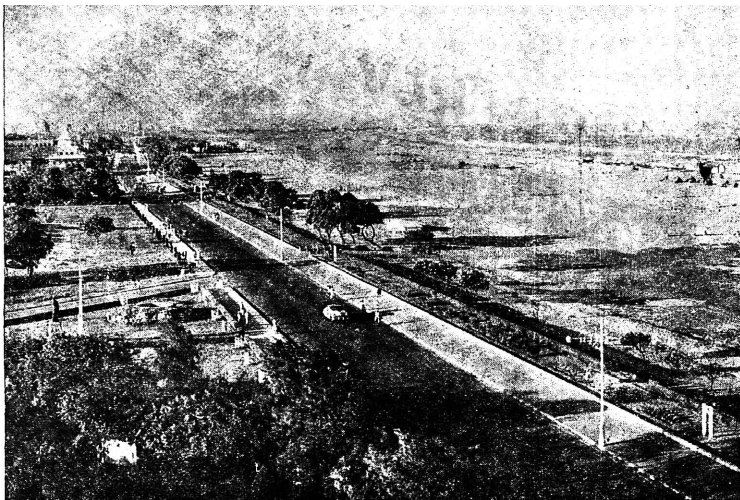
The financial resources of the City Corporation and the local authorities in the area have been examined and measures needed for raising further resources for the implementation of the developments contemplated have also been worked out. The table below summarises the finances required for the period 1971-1991.

The finances for these development programmes can be found by resorting to additional taxation or earmarking part or whole of existing State or Central taxation for this purpose, or by making the programmes self-supporting, or by a combination of both.

10-YEAR PLAN 0
RS 300 CRORES

The Plan has also drawn up an immediate action programme for implementation during 1971-1981 at a cost of Rs. 289.28 crores and another plan of action for the 20-year period up to 1991-the sectoral allocation being as under :

These sectoral outlays will ensure an orderly growth of Madras City into the capital of Tamil Nadu and will also be commensurate with the dignity due to the premier City of the South.



10-year Programme.

											Total outlay. (RUPEES IN CRORES.)
1. Land Development	...	...	...	...	...	...	...	...	...	...	15.00
2. Housing and Slum Clearance	...	...	...	...	...	...	...	...	...	...	94.00
3. Traffic and Transportation	...	...	...	...	...	...	...	...	...	...	84.92
4. Water-supply and Drainage	...	...	...	...	...	...	...	...	...	...	66.92
5. Education, Medical and Social and Recreational facilities	...	...	...	...	...	...	...	...	...	...	29.14
Total										...	289.28

20-year Sector of Development.

I. Land Development—

(1) Satellite Towns	...	...	...	...	...	...	...	...	...	...	33.75
(2) Land development in urban nodes	...	...	...	...	...	...	...	...	...	...	150.00

II. Traffic and Transportation—

(1) Roads	...	...	...	...	...	...	...	...	...	...	32.33
(2) Railway	...	...	...	...	...	...	...	...	...	...	30.80
(3) Others	...	...	...	...	...	...	...	...	...	...	60.05

III. Housing and Slum Clearance—

(1) (a) Slum Clearance	...	...	...	...	...	...	...	...	...	...	51.00
(b) Housing for lowest income group	...	...	...	...	...	...	...	...	...	...	45.90
(2) Housing for low and middle income groups	...	...	...	...	...	...	...	...	...	...	226.00

IV. Water-supply and Drainage—

(1) Water-supply	...	...	...	...	...	...	...	...	...	...	94.86
(2) Sewerage	...	...	...	...	...	...	...	...	...	...	19.68
(3) Drainage	...	...	...	...	...	...	...	...	...	...	20.00

V. Education, Medical, Social and Recreational facilities—

(1) Education	...	...	...	...	...	...	...	...	...	...	24.74
(2) Medical and Social facilities	...	...	...	...	...	...	...	...	...	...	25.17
(3) Recreation	...	...	...	...	...	...	...	...	...	...	10.00

Total ... 824.28



Cane growers all over the country have begun to think of Coimbatore when they think of sugarcane. Several new Coimbatore cane varieties have established themselves well in commercial cultivation during the last decade. All these varieties were evolved at the Sugarcane Research Institute, Coimbatore. The Coimbatore sugarcane research is directed towards increasing production not only per unit area but also per unit of time. Armed with a collection of sugarcane from all parts of the world, the Coimbatore Sugarcane Research Institute is poised to announce further break-through in sugar industry.

Research work on sugarcane started with the establishment of a Central Sugarcane Institute at Coimbatore in Tamil Nadu in 1912. This Institute was taken over by the Government of India in 1924, and it functioned as part of the Imperial Agricultural Research Institute, Pusa (now

Indian Agricultural Research Institute, New Delhi). This institute has done significant service for the breeding of new varieties of canes suited for both the tropical and sub-tropical regions. In April 1969, the control of the institute was taken over by the Indian Council of Agricultural Research.

With the setting up of the central station at Coimbatore, a break-through for higher yields was effected which laid the foundation of the present day sugar industry in the country. The yield level of cane has now registered an increase. The Coimbatore canes also travelled to many cane growing countries in the world where they have been either directly cultivated or used in their breeding programmes for better varieties.

Several new Coimbatore cane varieties have established themselves well in commercial cultivation during the last decade. 'Co.

740' gave a record yield of 346 tonnes of cane per hectare with 10 per cent recovery in Maharashtra. It is replacing 'Co. 419', 'Co 997' has spread into commercial cultivation in Andhra Pradesh. 'Co. 658' has proved good in Tamil Nadu. Under water logged and flooded conditions 'Co. 785' has done well in the States of Tamil Nadu and Kerala. 'Co. 975' and 'Co. 1007', tolerant to the red rot disease, have been adopted for commercial cultivation in Uttar Pradesh. 'Co. 1148' has proved a high yielding variety with remarkable tolerance to frost and is being grown in Punjab and Western Uttar Pradesh.

There are a number of new varieties which have done well and hold promise of being successful. They are 'Co. 1287', 'Co. 62174', 'Co. 62175', 'Co. 6602', a mutant of 'Co. 449' (obtained through gamma irradiation and resistant to red rot) and 'Co. 6604' (tolerant to water logging).

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to make a cup!***



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A NESTLÉ PRODUCT

The Southern Petrochemical Industries Corporation (SPIC) will establish its fertilizer plant for a naphtha-cum-salt based chemical complex in Tuticorin. It is a joint sector.

The fertilizer factory will be one of the largest in the world. It will be the mere hub of a giant Rs. 200—300 crore chemical complex. Most of the complex is now in the letter of intent stage and the next five years should see the completion of three or four of the units and the start of a few others.

Naphtha will be imported for the fertilizer factory immediately. Demand will necessitate another oil refinery at the head of the new Tuticorin harbour before the end of this decade to feed naphtha to the chemical complex and oils and distillates to the region.

The SPIC will start large scale production of fertilizers and ammonia that will help set up soda ash and ammonium chloride plants. Thanks to the big ammonia plant of the SPIC, a heavy water plant is to be set up in co-operation with the Atomic Energy Commission. Availability of ammonia at a reasonable cost will enable development of industries based on ammonia. The large urea capacity that SPIC is to build will help production of mela mine, a versatile plastic. Another versatile plastic, methyl methacrylate, can also be produced.

WORLD'S LARGEST CHEMICAL COMPLEX COMING UP AT TUTICORIN

The SPIC fertilizer complex, as sanctioned, includes a 1,100 mt/day single stream ammonia plant, 1,600 mt/day single stream urea plant, 600 mt/day DAP-NPK unit, together with 470 mt/day sulphuric acid plant and 165 mt/day phosphoric acid plant. SPIC is awaiting a letter of intent for a 5,000 mt/year mela mine unit.

The ammonia plant of SPIC will be the largest in the country and as big as the largest one in Europe now. Besides, the 1 100 mt/day ammonia, a 320 mt/day ammonia loop will supply reflux ammonia to the heavy water plant. The largest single stream ammonia plant now under construction in India is the 750 mt/day unit of the Madras Fertilizers. A 910 mt/day unit has been licensed for Kalol in Gujarat and the Fertilizer Corpo-

ration is envisaging a number of similar units.

Unlike in most plants in India today, SPIC's ammonia plant will embody the Total Energy Concept. This means the plant itself will produce enough energy to keep it running and will, thus, be independent of production problems caused by voltage fluctuations and power failure. Unlike other fertilizer plants, SPIC's will consume a considerably low amount of power—18 MW against 35 MW. On full production the plant will need 280,000 tons of naphtha and 140,000 tons of fuel oil per year.

SPIC has almost finalised all technical collaboration arrangements with leading international contracting and engineering companies and the work on the

project is expected to start immediately after the monsoon, about the middle of August, and to be completed by the end of 1973. The corporation is the product of collaboration between the Tamil Nadu Government and the industrialist group.

Investment in nitrogenous fertiliser industry in India has been ranging from Rs. 2,200 to Rs. 4,000 per ton of nutrient. Even though the Tuticorin factory is coming up late, the investment is not likely to be more than Rs. 1,900 per ton of nutrient, despite the rising cost of equipment. Thus cost of production is bound to be relatively lower than most other projects in India.

Inclusive of the heavy water plant, the giant project is now expected to cost Rs. 85 crores.

The SPIC is already planning the melamine plant, while plans for methyl methacrylate unit have yet to be finalised. The State Industrial Development Corporation has already a letter of intent for the production of soda ash and ammonia chloride and these will be dependent on the ammonia from SPIC. Projects are also under consideration for further development of the salt industry near Tuticorin. SPIC will draw its power from the State grid station at Kayathar, about 30 miles away. A 20 million gallon day water pipeline is being laid by the Government to supply water to the industrial complex from the Tamaraparani river, about 20 miles away.

FERTILIZER USE GOES UP IN TAMIL NADU

The consumption of fertilisers in the state has been stepped up from 0.85 lakh tonnes of nitrogen in 1966-67 to 2 lakh tonnes estimated in 1970-71. Similarly, the availability of short-term credit has been increased from Rs. 31.41 crores to Rs. 55.00 crores, that of long-term credit from Rs. 3 crores in 1966-67 to Rs. 19 crores in 1970-71. The establishment of lift irrigation societies and the opening of 117 new primary land development banks are further evidence of the State's determi-

nation to extend adequate credit to the farmers.

It is our estimate that production of foodgrains will reach at a target of 67 lakh tonnes representing an increase of 7 per cent over the last year's level of 6.26 lakh tonnes. This compares well with the level of 54.58 lakh tonnes in 1966-67. Increase of production of foodgrains has been primarily the result of continued and concerted attention given to the provision of fertilisers, pesticides, better variety of seeds, credit and better water management.

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Sarath

The execution of Water-supply and Drainage Schemes, particularly in urban areas with high density population, has always been recognised to be an important aspect of the public health programme. So far as Tamil Nadu is concerned, the need for providing protected drinking water and adequate drainage facilities, in the minimum possible time, to urban and rural areas alike has been engaging the attention of Government for quite some time now. During 1969-70 the L.I.C. of India was approached for the first time for loan assistance for water-supply and drainage schemes of local bodies. The L.I.C. came forward with loan assistance in a big way. A loan of Rs. 192.33 lakhs was obtained from the L.I.C. for the year 1969-70 covering 22 water-supply and four drainage schemes. For the year 1970-71 the L.I.C. of India was approached for a loan assistance of Rs. 296.29 lakhs for 52 new water supply and drainage schemes as well as 22 spill-over schemes.

The L.I.C. of India have sanctioned loans for Rs. 270.78 lakhs for 50 water-supply and drainage schemes for 1970-71. In addition to L.I.C.—assisted schemes, several other water-supply and drainage schemes are also under execution, without institutional financial aid. The outlay on water-supply and drainage schemes during 1970-71 was about Rs. 6 crores.

There are 94 municipalities in this State. Schemes are in operation in 72 municipalities. In 12 municipalities water-supply

schemes are under execution. For three municipalities, investigations have already been taken up. Water-supply schemes are to be taken up for the remaining seven municipalities including three municipalities which were constituted, as such, very recently.

In September 1969, in pursuance of Government's decision to have a sole and single agency for the implementation of water-supply and drainage schemes for local bodies in Tamil Nadu, the Tamil Nadu Water-supply and Drainage Board was constituted. Government were of the view that if the Tamil Nadu Water-Supply and Drainage Board could be set up as an autonomous body on a

Act has come into force, and the Board is now placed on a statutory footing. It can accept loans, grants, subventions, donations and gifts from the Central or State Government or a local authority or any individual or body or organisation whether incorporated or not for all or any of the purposes of the purposed-enactment. For raising resources for executing Water-Supply and Drainage Schemes, the Board will raise loans from the L.I.C. or Banks or other financing institutions or raise loans from the public by issue of bonds or debentures or stocks or otherwise.

One of the major schemes to be executed by the Tamil Nadu

THE WORK OF THE WATER SUPPLY BOARD IN TAMIL NADU

statutory footing, it would conduce to speedier planning, investigation and execution of schemes and also enable it to raise substantial resources from financing institutions and in the open market, with a view to providing drinking water and drainage facilities to urban and rural areas in the State within the shortest possible time. Accordingly, a Bill, namely, the Tamil Nadu Water-supply and Drainage Board Bill was introduced in the Tamil Nadu Legislative Assembly on 2nd December 1970 and the Bill has been passed by both Houses of the Legislature. Th

Water-Supply and Drainage Board relates to augmentation of water supply for Madras City. Another major project proposed to be taken up is the Comprehensive Water-supply Scheme for Coimbatore Municipality, Singanallur Municipality and wayside Panchayats, with the Bhavani river.

The project which is estimated to cost about Rs. 14 crores, contemplates drawal of about 48 mgd. (90 cusecs) of water from the river Bhavani to meet the ultimate requirements of Coimbatore and Singanallur Municipalities and 11 wayside Panchayats.

DON'T BE AFRAID OF DIABETES

A full life despite diabetes being the theme of this year's World Health Day, a few hints to diabetes patients are given in this article.

There is no cure for diabetes, but undetected and uncontrolled diabetes can cripple a person. But a majority of complications arising from diabetes can be prevented.

The longer the disease remains untreated, the more frequent are serious complications—hardening of arteries, gangrene (death of body tissue), cataract of eye, etc.—likely to develop. By early, efficient treatment, the accumulation of sugar in the blood—which is the primary cause of complications are avoided. Unfortunately in India nine out of ten cases of diabetes go undetected.

How to Detect Diabetes ?

For early detection of diabetes the least one can do is to test urine two to three hours after a heavy meal and not the morning urine-sample. But the best test for detection is blood examination done after a heavy meal of over 100 gms. carbohydrate value. Negative test for sugar in urine does not preclude diabetes. But blood sugar over 130.0 mg. per cent two hours after a heavy meal suggests diabetes and in such a case a glucose tolerance

test is advisable to come to a definite diagnosis of diabetes.

Treatment of Diabetes.

Once the disease is detected it must be controlled intelligently, vigorously and continuously. The treatment of diabetes rests on four legs, just like the four legs of a chair or a table. If one leg is removed one cannot sit on a chair in a secure way, so drugs or diet alone do not solve the problem. It is diet—drug—exercise and education that forms the basis of the treatment of diabetes.

Aim of Treatment.

The main aim of treatment of diabetes is to increase longevity and prevent complications both acute and chronic and make the individual an asset to the family and a useful member of the society, and here a team work of the physician, dietician, social worker, nurse, laboratory technician and last but not the least, the patient himself is essential.

A diabetic must know the importance of all the essential nutrients to be included in proper proportions in his diet and the total amount of calories required by him.

Diet.—A diabetic patient has the same nutritional needs as any one else, except that he is unable to use sugar. It follows

therefore, that his diet should have less of sugar producing foods such as cereals, bread, rice, potatoes, sweets, etc. He can have more of fruit, vegetables, milk butter, cheese, curds, meat, eggs, etc. He should eat at regular hours—three or four times a day. His food should be tasteful and satisfying both in quality and quantity.

Insulin.—Since insulin in sufficient quantity is not produced in the body of a diabetic patient, the doctor treats the disease by giving the patient insulin injections or oral drugs. Insulin should be taken regularly as advised by the doctor.

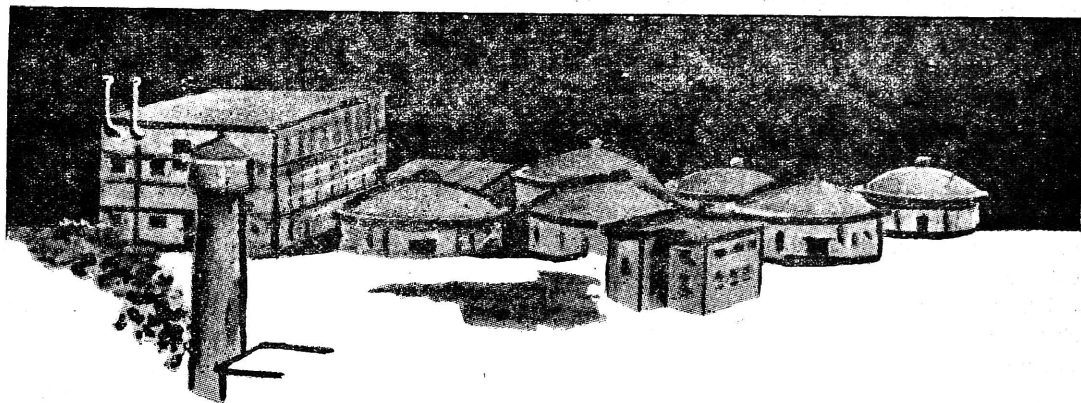
Insulin may sometimes cause reaction such as sweating, nervousness, shivering, a sick-feeling, nausea, drowsiness, hunger, headache. To counteract the reaction the patient should quickly swallow a lump or two of sugar which he should carry handy with him.

Lack of insulin in the body may sometimes cause a patient to pass in a state of unconsciousness, called diabetic-coma. His "body may dry up", breathing may become difficult and the breath may smell of acetone.

Exercise.—Exercise helps to burn sugar in the body and improves blood circulation and general condition of the patient. However the amount and kind of exercise should be decided in consultation with the doctor depending on the nature of work the patient is performing.

A diabetic patient should :

Take regular treatment and exercise and observe dietary control.



The Fertiliser Granulation Unit at Pamani, Mannargudi is the first project of its kind in Tamil Nadu and it is one of the 14 granulation units in India that are under various stages of implementation under the scheme sponsored by the N.C.D.C.

This Rs. 27 lakh project was declared open on 11th April 1971 by Chief Minister Thiru M. Karunanidhi.

The plant and machinery have been designed by Messrs. Fertiliser Engineering Company, Bombay in collaboration with the T.V.A. firm of U.S.A. This is a horizontal type of plant unlike the plants set up earlier in Maharashtra and other States. It is designed to produce granulated compound N.P.K. Fertilisers of suitable grades out of Nitrogenous phosphatic and potassic fertilisers available in the country.

The different stages of processing now consist of (1) Crushing raw materials, (2) Mixing of raw materials in desired volumetric proportions, (3) Wetting of mixed

THE PAMANI FERTILISER GRANULA- TION PLANT

WILL
MEAN
CHEAPER
FERTILISER
MIXTURES
TO
THE
FARMER

materials with water, (4) Formation of granules in wet condition, (5) Drying and cooling of granules (6) Screening of uniform sized granules, (7) Curing of the finished products and packing and stitching in polythene lined bags.

The plant is located at Pamani village at a distance of one mile from Mannargudi. It is set up on a site measuring about five acres on the main highways from Mannargudi to Pamani Centraj Warehouse, and nearer to Food Corporation of India Modern Rice Mill. There is a plan to acquire 3 to 4 acres of cultivable land adjacent to the plant for the purpose of putting up demonstration plots and a soil testing laboratory.

The installed capacity of the plant is 7.5 tonnes per hour or 150 tonnes per day. The plant can achieve a total annual production of 45,000 tonnes. Urea, Ammonium Sulphate, Single Super Phosphate, Triple super Phosphate, Di-Ammonium Phosphate, Rock Phosphate,

Muriate of Potash and Dolomite will be used. Granulated compound fertilisers of 3 mm. to 6 mm. size containing the major plant nutrients, Nitrogen, Phosphate and Potash in balanced proportions. Finished products will be in 50 kg. packing in most attractive polished and coloured Hessian gunny bags with polythene liners inside bag closers will be used for machine stitching.

Grades of Granulated Fertilisers.

The plant is capable of producing all the 13 standard grades approved by the Government of Tamil Nadu and also special grades to suit the exact requirements of High Yielding varieties of crops. To start with the plant will produce the following grades.

(1) 12 : 6 : 6, (2) 15 : 5 : 5, (3) 6 : 12 : 6, (4) 4 : 8 : 12, (5) 14 : 7 : 0, (6) 15 : 12 : 5 : 12.5, (7) 14 : 21 : 14, (8) 9 : 9 : 9, (9) 6 : 6 : 12.

Sales Plan.

Having regard to the large offtake of mixed fertilisers to the tune of 3 lakh tonnes in Tamil Nadu and also increasing consumption of complex fertilisers, a careful assessment of the needs in different areas has been made and steps are being taken to market this new product to cover the main crops like paddy, sugarcane, groundnut, etc. It is estimated that at least 50 per cent of the production could be earmarked for the I.A.D.P. district of Thanjavur and the rest could be marketed in the remaining districts.

The working capital for the production will be Rs. 1 crore and the annual turnover will be Rs. 3.5 crores. The financial arrangements are being made with State Co-operative Bank with the aid of margin money provided by the N.C.D.C.

Technical Personnel.

A graduate Mechanical Engineer with practical experience in a fertiliser factory has been appointed to be in charge of production and management of the plant. He is assisted by skilled personnel like Foremen and Operators along with semi-skilled and unskilled labour.

Distribution Machinery.

The finished product will be distributed through the network of 130 marketing societies and 3,000 village retail societies within the fold of T.N.C.M.F. which is promoting the sale of all varieties of fertilisers of over one lakh tonnes per annum through the same channels of distribution. Sales promotion of granulated fertilisers through them will be intensified by the Regional Sales Officers of T.N.C.M.F. in all the districts.

Sales Promotion Efforts.

The T.N.C.M.F. will popularise the products through publicity media, like Cinema Slides, Crop brochures, Posters, Sign Boards, Advertisements in dailies etc., besides extension methods like Field Demonstrations, Farmers Festivals, Training of Sales personnel and also sales incentive

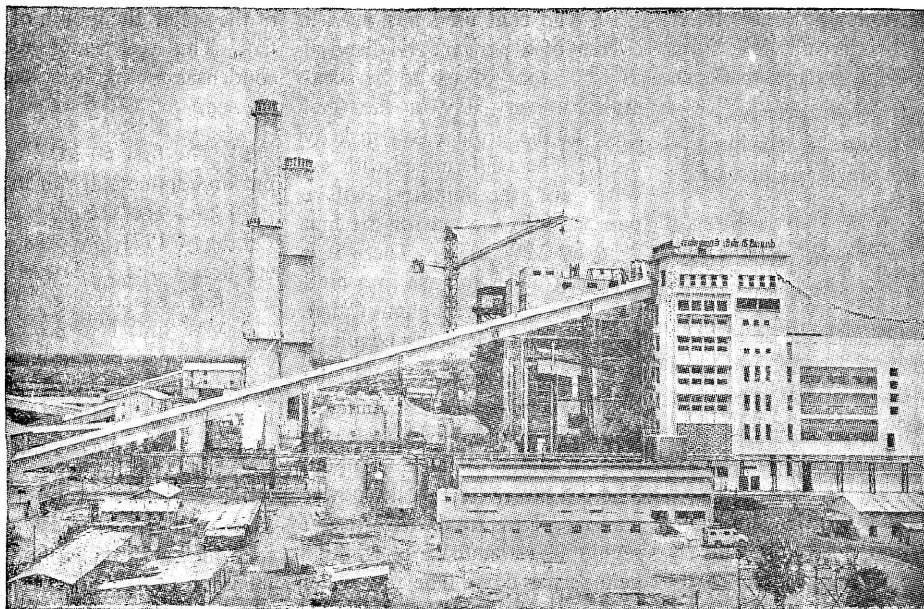
schemes. In due course soil testing service will be undertaken.

Price Structure.

The Federation will bring home to the farmers the advantages of using granulated fertilisers as against conventional powder mixtures or straight fertilisers, etc. The high analysis fertilisers will be introduced gradually to ensure reduction in cost of cultivation per acre. In any case the price of granulated fertilisers may not exceed Re. 1 per bag over the cost of Standard mixtures.

The complete plant and equipment for the Pamani Factory was manufactured and erected by Fertiplant Engineering Company, Private Ltd., Bombay. The plant was commissioned within 10 months, under the supervision of Mr. A. T. Doshi, Administrative Director, Mr. A. A. Tamhane, Chief Engineer, and Mr. S. Y. Pradhan, Works Manager, Fertiplant has a technical know-how collaboration arrangement with the Fertiliser Engineering and Equipment, Company, Inc., Green Bay, Wisconsin, U.S.A.

Fertiplant is headed by Dr. Ramesh Tribhuvandas Doshi who had earlier held several executive positions in various agro-based industries. Out of the 19 granulation fertiliser plants in India 16 are in the co-operative sector and Mr. Doshi is entrusted with the task of manufacturing and erecting the plant equipment in the co-operative sector. Eight have already been commissioned and more are on way.



The Ennore Thermal Power Station is to be declared open on 27-4-1971 by Chief Minister Thiru M. Karunanithi.

At the end of Third Five-Year Plan though the installed capacity in the Tamil Nadu Power Grid was 1070 MW yet about 90 per cent of it was hydel, most of which are linked with irrigation. Delayed monsoon and inadequate rains have led to power cuts.

It is therefore found necessary to go in for Thermal power, in spite of higher cost of generation.

Ennore Thermal Scheme was evolved under these circumstances and the Government of India was approached in November 1963. The Planning Commission approved the scheme in September 1964. The work was taken up for execution in the year 1966.

ENNORE

THERMAL POWER STATION

The Ennore Thermal Power House located in a 1,000 acre plot is situated 13 KM. North of Madras City and is close to the sea-shore. The salient features are enumerated below :—

1. This is the biggest Thermal Station in Tamil Nadu Electricity Board with an installed capacity of 340 MW. in the first stage and 450 MW. in the ultimate stage. It is estimated to cost Rs. 58 crores for the first stage and 16 crores for the second stage.

2. The boiler and turboset of the first 2×60 MW sets which are to be commissioned now are indigenously manufactured at High Pressure Boiler Plant, Trichy and Heavy Power Equipment Plant Hyderabad of Bharat Heavy Electricals Limited.

3. The 110 MW units under erection are the biggest single

generating unit in South India and are being supplied from Czechoslovakia under the Czech credit.

4. The hydraulic sluicing of ash into the sea is the first of its kind in India.

5. Close to sea-shore, soil mainly sandy 18,000 Nos. piles had to be driven for foundation works. This was an uphill task.

6. Each of 60 MW units will be fed by boiler of 260 tonnes per hour capacity while the 110 MW units will be fed each by 370 tonnes/hour boilers.

7. The superheated steam temperature and pressure will be 545°C and 96 atmosphere respectively for the boilers of 60 MW units and 570°C and 130 atmosphere for the boilers of 110 MW sets.

8. The power generated from 60 MW units is stepped upto 110 KV and is fed into the grid through the Ennore Sub-station while power from the 110 MW units will be stepped upto 230 KV direct and will be fed into the grid at Korattur Sub-station. There is a proposal to have an auto transformer station at the power house itself to interconnect the 110 and 230 KV systems to have more flexibility.

9. The fuel for the boilers will be low grade slack coal from Singareni Collieries situated 600 KM away from Ennore. 5,000 tonnes of coal per day would be required to meet full generation and special arrangements have been made with the railways for the transport of this huge volume coal in special box wagons.

10. The coal used has an ash content of 40 per cent and disposal of 1,500 tons of ash to be accumulated every day at the final stage of the project is a task by itself. The ash is mixed with sea water and the mixture will be pumped into the sea for the first 2×60 MW units. There is a proposal to let the ash in a land adjoining the Buckingham Canal, for which land is being acquired.

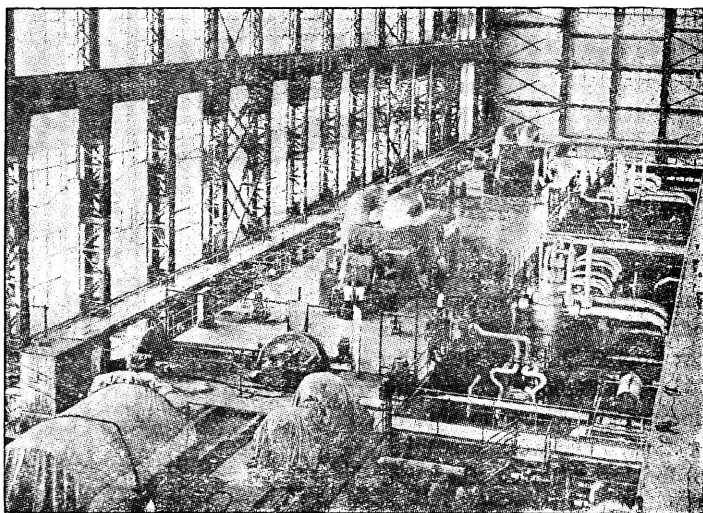
11. Raw water required for the boiler makeup and cooling of bearings is obtained from the wells in Minjur area located about 3 miles away from the power station. The total raw water required is estimated as one million gallons per day. The raw water is chemically treated before it is used in the boiler and for the cooling of bearings.

12. The used steam is condensed and is reused once again for steam generation. The water-required for cooling of the condensers is taken from back waters

of the sea at the mouth of Courtliar. The sea water used for condenser cooling is let back into the sea.

13. The first 60 MW unit was put on commercial run in March 1970 and the second unit on February 1971. Works on the erection of the 2×110 MW units are fast progressing. The first 110 MW unit is expected to be commissioned by the end of this year while the second 110 MW unit will be commissioned six months thereafter, by mid 1972.

14. There is a proposal to add a fifth unit of 110 MW capacity for which clearance from Government of India has already been obtained. This 110 MW unit (i.e., the fifth unit) will be supplied by BHEL/New Delhi and negotiation is going on regarding the supply of these units. This scheme of installation of the fifth unit has been included in the Fourth Five-year Plan.



15. The completion and commissioning of the 2×60 MW units are due to the joint endeavour of the Engineers of the Board, Engineers and Specialists from Czechoslovakia and Engineers and Specialists belonging to BHEL/NEW DELHI. The Skodaexport, Praha Czechoslovakia had supplied the project report of scheme and provided the Technical services against an erection supervision contract under the Second Economic Agreement. They had also supplied the 2×110 MW units and the completing equipments for the 2×60 MW units from Czechoslovakia under the Czech credit. The project is thus an example of International Co-operation of two friendly countries.

The present installed capacity of the grid is 1,365 MW which comprise of 1,114 MW from 15 Hydro stations and 251 MW from three Thermal Power Stations. Besides, the Neyveli Thermal Power Station has an installed capacity of 600 MW. The works on the Kodayar P.H. 2 under Kodayar H.E. Scheme and Sholayar P.H.I. under Parambikulam-Aliyar Hydro-Electric Scheme have almost been completed and these power stations are expected to be commissioned during the second quarter of this year these power houses would enhance the installed capacity by another 110 MW. With the completion of the Ennore Thermal Station (I stage) the total installed capacity of the grid will be 1,695 MW excluding

the 600 MW capacity available at Neyveli.—

During the Fourth Plan period, the following schemes are contemplated:—

1. Pandiyar (Moyar) Hydro-Electric Scheme in Nilgiris—100 MW.
2. Kundah IV Stage in Nilgiris—110 M.W.
3. Naduvattam Diversion Scheme to supplement power generation at Pykara and Moyar—69 MU.
4. Installation of Fifth Unit at Ennore—110 M.W.

the living past

The imprint of Time left on impressive buildings like the Taj Mahal is more easily discerned in written records. In place of mute memorials, eloquent books speak to one and all. The past is preserved in documents and books for posterity to show how and where history is imperishable. The same can be a guide to the future also.

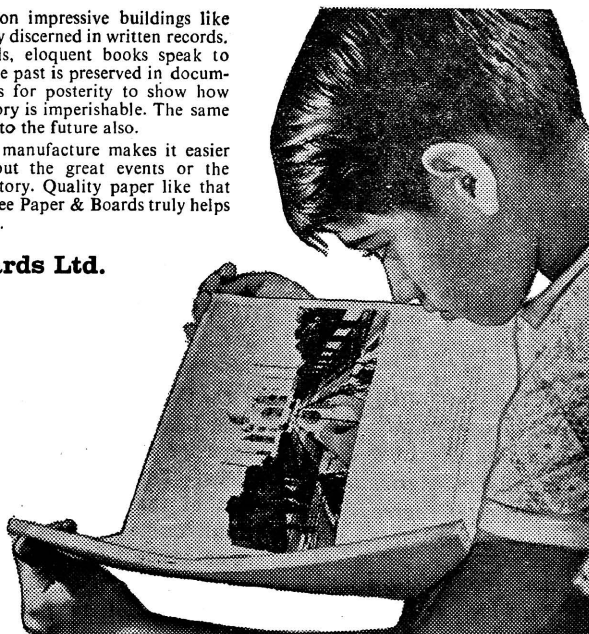
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Churned fertiliser gives better yield

[The cover page of this issue gives an aerial view of Pamanai Fertiliser Factory which turns out granulated fertilisers, which will be cheaper than Standard mixtures. But the news items below indicate that churned fertiliser can be cheaper still.]

A casual idea that occurred to a Government employee has resulted in the possibility of increasing the strength of fertilisers many times.

Shri Y. Ramachandran, of All India Radio observed that the principle of increasing potency in homoeopathic medicines by churning them at high speeds could be profitably used in increasing the strength of ordinary chemical fertilisers.

For about a year, he and some of his friends used churned fertiliser for growing common vegetables in the kitchen garden.

They found that a smaller quantity of churned fertiliser gave better yields.

He requested many organisations like the Indian Council of Agricultural Research to try the technique scientifically.

Initial reaction of scientists was that the idea was unworkable. But Mr. Ramchandran persisted and at last the Indian Agricultural Research Institute agreed to conduct an experiment.

He has now received a letter from the Institute saying that "the result seems to be quite encouraging".

Page : 23

Above : The joint Session of the Tamil Nadu Legislature addressed by the Governor Sardar Ujjal Singh on 24th March 1971.

Below : The Chief Minister Thiru M. Karunanidhi, presenting the Interim Budget at the Tamil Nadu Legislature Assembly on 25th March 1971.

Page : 24

(1) The Tamil Nadu Industries Minister Thiru S. Madhavan inaugurated the Hire Purchase Assistance Scheme of the Tamil Nadu Industrial Development Corporation Limited, on 29th March 1971 at Hotel Ashoka, Madras.

(2) Polish Trade Representative met the Minister for Agriculture Thiru Anbil Dharmalingam at the Secretariat on 3rd April 1971 and discussed with him the various points relating to the setting up of Agricultural and other allied factories in Tamil Nadu in collaboration with Poland.

(3) Reception was accorded to the Minister for Backward Classes Thiru K. Rajaram by the Valluvar Kalai Manram, Madras Branch, on 2nd April 1971 at Lady Wellington College, Madras. Thiru N. D. Sundaravadivelu, Vice-Chancellor of Madras University, addressing on the occasion.

(4) The Collector of Madras Thiru Oza, I.A.S., presented Rs. 3,000 from the Chief Minister's State Relief Fund to the daughters of the late Thiru D. L. Cleur, Traffic Inspector who died in an accident near Madurantakam while on duty. The picture shows one of the daughters receiving the amount from the Collector on 26th March 1971.

Page : 25

(1) Thiru Shanmugam, M.L.A. of Villupuram was sworn-in as Speaker Pro-Tem on 16th March 1971 at Raj Bhavan, Guindy. The Governor administered the oath.

(2) In order to implement the Scheme of making Tamil the Official Languages, the Government awarded prizes of Rs. 500 each to Government servants who drafted best administrative notes in Tamil. The Education Minister Thiru Nedunchezhiyan presented the prize and certificate to Thiru N. Ramalingam of Agricultural Department on 25th March 1971.

(3) Family Planning Fortnight was celebrated at Vellore. The Minister for Public Health Thiru K. Anbazhagan is seen going round the Exhibition.

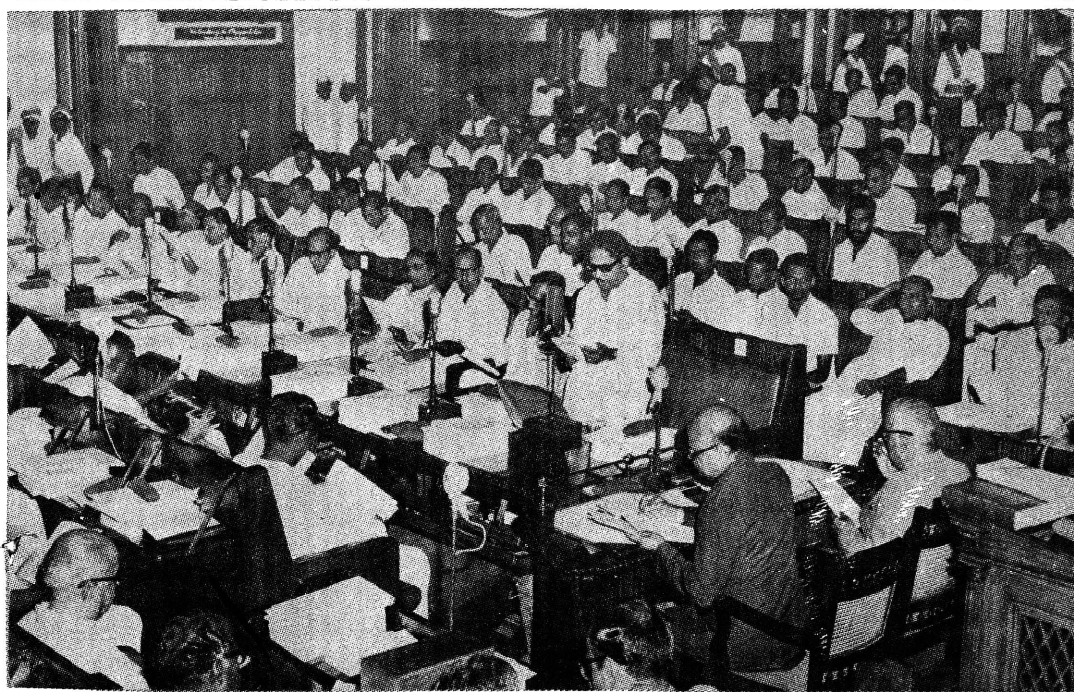
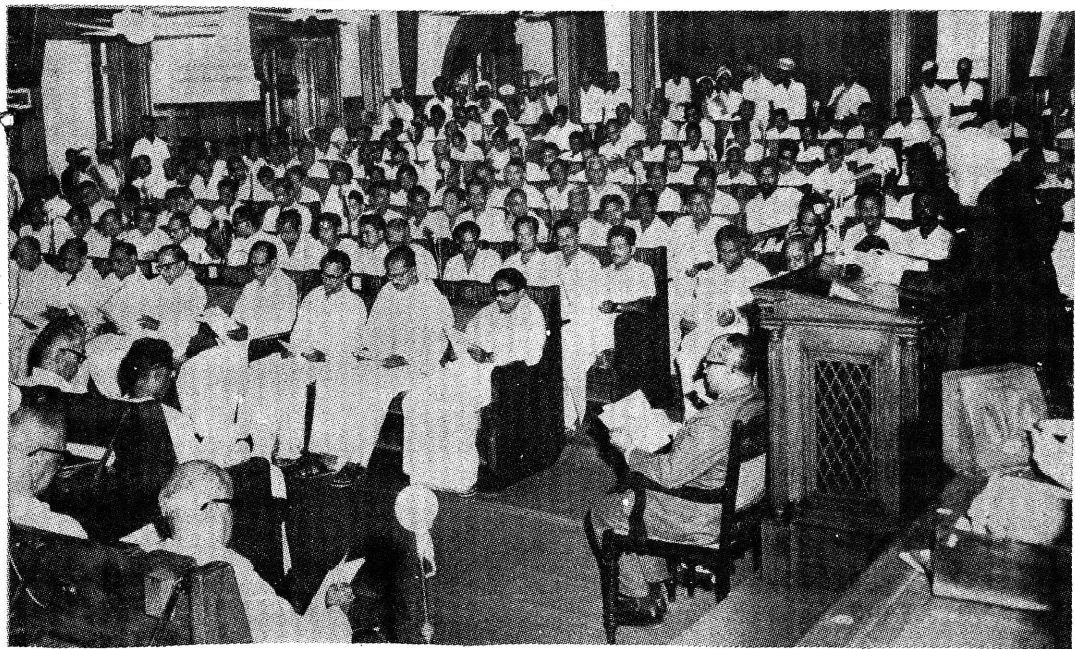
(4) Reception was given by the State Transport Department to the Minister for Works and the Minister for Transport at Hotel Ashoka on 23rd March 1971. Picture shows Thiru S. Ramachandran, Minister for Transport presenting a Model Bus to Thiru S. J. Sadiq Pasha, the out-going Minister.

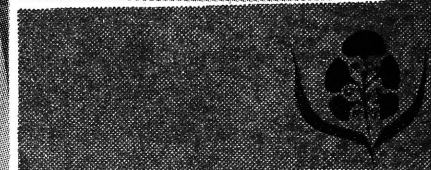
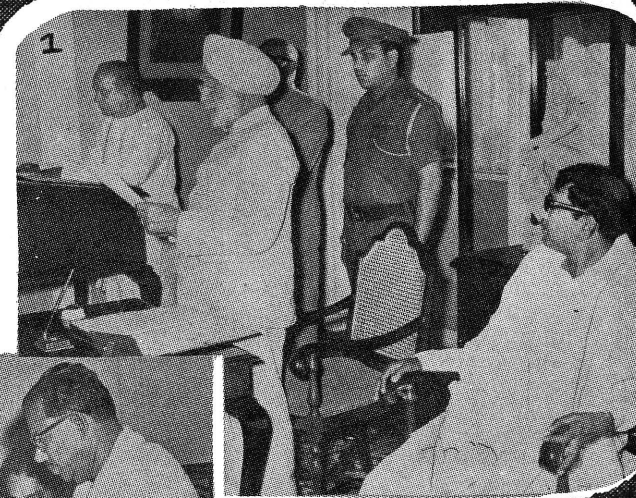
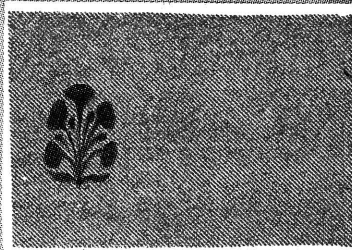
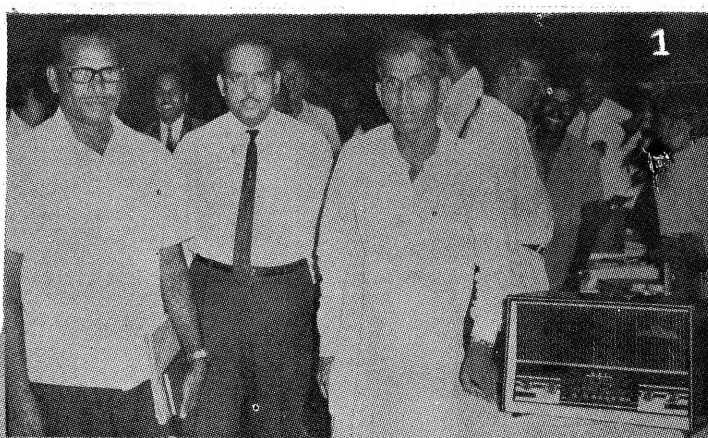
Page : 26.

(1) & (2) The Collectors' Conference was held on 7th April 1971 at 'ANNA KALAI ARANGAM', in the Secretariat.

(3) Thiru K. A. Mathiazhagan was unanimously elected the Speaker of the Legislative Assembly on 24th March 1971. The Speaker is seen with Thiru V. R. Nedunchezhiyan, Minister for Education and Thiru Ponnappa Nadar, Leader of the Opposition.

(4) The Chief Minister at Press Conference in the Secretariat on 16th March 1971.







The State continues to lay emphasis on extension services. The intensive agricultural areas programme was extended to Tiruchirappalli and the extension services in the State generally strengthened. The decision to set up an agricultural university at Coimbatore is yet another evidence of the State's determination to bring the fruits of modern science to the farmers.

Government had also prepared a comprehensive project report costing Rs. 72 crores for credit to farmers for digging wells, installing tube-wells and mechanising cultivation.

Side by side with this goes the intensive programme of rural electrification by the State Electricity Board. In spite of problems arising from limitations of financial resources and of raw materials, the total number of villages and hamlets electrified has gone up from 25,000 by the end of 1966-67 to 40,560 by the end of December 1970. The present tempo of rural electrification will continue. The number of pumpsets electrified in the State will also go up from 2.57 lakhs in 1966-67 to 5.09 lakhs by the end of 1970 which will be about 33 per cent of the pumpsets energised in the whole country.

Government are aware that so long as the bulk of the population continues to depend on agriculture and that too of the

The Tempo of Industrial and Agricultural Progress

traditional kind, levels of living cannot improve. The long-term prospects of the countryside depend on increasing industrialisation and modernisation of agriculture which are inter-dependent.

The inauguration by the Prime Minister of the work on a long cherished dream of Tamil Nadu—the Salem Steel Plant—has been one of the most important events of 1970. I am happy to note that Government of India have recently nominated the consultants to update the detailed project report of the plant. I hope that in keeping with the new image of a purposeful and a decisive Government at New Delhi, decisions on further phases of the construction of the project will also be taken with expedition.

This Government's pragmatic policies in the field of industry have been commended widely in the entrepreneurial community, both here and abroad. While Government's policy is that of securing the commanding heights of industry for the public sector,

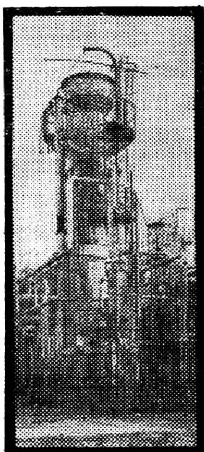
we continue to lay emphasis on the blending of private initiative and social control through establishment of industries in the joint sector. Government of India have issued a letter of intent for a sixty-crore fertiliser project in the joint sector to be set up at Tuticorin. The preliminaries of site selection and evaluation of processes and tenders have been completed and once the decision of Government of India on feedstock for the plant is communicated, the project will be well on its way. The Tamil Nadu Industrial Development Corporation has also secured letters of intent for a Rs. 1.5 crore plant to produce sodium hydrosulphite, a Rs. 5.5 crore plant to produce tyres, and Rs. 6 crores plant for manufacture of soda ash. These projects will be set up in the joint sector. I take this opportunity to extend a hearty invitation to all entrepreneurs in the State and in the country to avail themselves of this proffered hand of co-operation by the Tamil Nadu Industrial Development Corporation to set up units in the joint sector. ☺

The Spring.

**Nature's New Year
Bouquet to you.**

**Springing new hopes...
fragrant, colourful,
rejuvenating.**

**Can fulfilment be
far behind?**



**Reminds you of
Madras Refinery.
Which sprang up
with new promises.
Promises
that have been
fulfilled constantly:**



NEW MOBILITY FOR TRANSPORT:
*With Gasolene, Kerosene, Diesel,
Turbine & Jet Fuels,
Lube Base Stocks. And Asphalt for roads.*



NEW FERTILITY IN AGRICULTURE:
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AND NEW FILLIP FOR ECONOMY:
*Because MRL is the Nucleus of a developing
Rs. 500-crore industrial belt!*

*Wishing you a
Happier New Year—*



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RURAL UNEMPLOYMENT

We have been concerned with the increasing unemployment in the State. It must be recognised that unemployment is a national problem and can be solved only by co-operative efforts of the Centre and the State and the State by itself cannot be expected to solve the problem. However, within the available resources of the State, Government have undertaken a few measures. The frustration that results from unemployment of skilled and trained personnel is particularly explosive. Recognising this, Government implemented a number of schemes to absorb educated unemployed, the chief among these being an apprentice-teacher programme to give jobs to 6,500 teachers and an apprentice-engineer programme for 2,400 engineers. These are already being implemented at an annual cost of Rs. 1.38 crores.

The problem of rural unemployment is more difficult to tackle. It is seasonal in nature in many parts of the State. In some areas due to continued drought, there is perennial unemployment. The Government have initiated two special projects at a cost of Rs. 2 crores each, to provide in work chronically drought affected areas of Ramanaithapuram and Dharmapuri districts. It is Government's belief that a much more intensive

works programme is necessary, both to create an agricultural infrastructure and to produce employment in various parts of the State. Proposals for these are under consideration and will be included in the revised budget.

CITY SLUM PROBLEM

The lack of employment opportunities in the villages has been creating problem in the towns and cities of the State.

The problem of slums is a human one. Government have recognised that the squalor and filth of the slums are by themselves a concrete condemnation of the social power structure. Government have set up a Slum Clearance Board to approach this problem in a rational and scientific manner. Government have also set apart sufficient funds, Rs. 1.5 crores in 1970-71 and Rs. 3 crores in 1971-72 for slum clearance. The Board to create new and better housing for the slum dwellers. One of the main causes of slums is the failure of employers in industry to provide for accommodation for their employees. Government also feel that industrial units should set up colonies for accommodating as large a proportion of the labour employed by them as possible. Government recognise that it is not sufficient to merely emphasise the creation

of new housing accommodation ; it is also necessary to prevent the growth of fresh slums by creating employment opportunities in and around the village in the State. Growth-centres should be developed in the State outside the urban areas, so that the rush of the people to the cities can be stemmed. Government propose to devote special attention to this problem.

BACKWARD CLASSES IMPROVEMENT

As Honourable Members are aware, Government constituted a Backward Classes Commission in November 1969 to review the measures so far undertaken for the welfare of the backward classes and to assess the effectiveness of these measures in improving their condition, particularly in matters relating to education and representation in public services. The Commission was also requested to make recommendations as to the further steps to be taken to improve the lot of the backward classes in the fields of education, public services, trade, commerce and industry, Rural credit, marketing and co-operation, housing, etc. The Commission has presented its report to Government on 2nd January 1971. The report is under active consideration of the Government and we hope to take early decisions on the report.

and more economical way of combating the problem. The chemical weed control has been hit upon as the right answer.

An example of extension work by an educational institution is the Sri Ramakrishna Mission Vidyalaya at Coimbatore. It is a large educational complex consisting of a pre-basic school, a higher elementary school, two secondary schools, an arts and science college, a teachers' training school, a post-graduate teacher training college, a college of physical education, a rural institute. The Vidyalaya is also doing various types of extension and service activities, like (1) night schools in the villages around for adults and for poor non-school going children, (2) construction of additional school buildings and school kitchen rooms in villages with people's participation. The vidyalaya gives a cash donation of Rs. 1,000 per building. Students and teachers camp in the village and offer their labour, and the local people make their contribution in labour, cash and kind. The extension department of the Rural Institute takes care of the organisational and extension aspects of the whole programme, (3) Development of kitchen gardens in schools, (4) Distribution of teaching aids, charts and science kits to schools, mostly prepared by the Vidyalaya student themselves, (5) Agricultural development work including, analysis of soil and water samples compost pits, tree planting, demonstration of improved practices, supply of seeds and fruit plants, vaccination of cattle,

etc. Engineering work covering construction of model low cost houses, preparation of water supply schemes, schemes for minor irrigation projects, surveys for village housing, sanitation, road levelling, and preparation of housing materials like windows, doors, etc., (7) Social education work including school enrolment drive, cultural programmes, film-shows celebration of national festivals, savings campaign, family planning campaign, health campaign and formation of youth clubs, (8) Medical service to

FROM PRE-BASIC TO POST-GRADUATE STUDIES

the local people, (9) Service in festivals and other services like flood relief work, cyclone relief work, relief work in period of epidemics, (10) Spiritual services through spiritual discourses, etc.

ALL IN ONE CAMPUS AND EXTENSION WORK TOO

Extension in their dictionary is not mere working for the people. Rather their role is to motivated the people, guide them and help them to help themselves. The task of extension is to help people gain a clear idea of what can and should be done, and then to assist them in finding ways and means of achieving the goal. Extension should carry the knowledge gained through learning and research to the people, help people learn to put that knowledge into practice in ways which result in improvement in their living conditions.

One could ask whether it would be possible for all educational institutions to carry on all these activities. It is true that all educational institutions do not have all the facilities and advantages which Sri Ramakrishna Mission Vidyalaya enjoys. All depends on the interest and initiative of the teachers and the encouragement and support provided by the management of the institution.

The Tamil Nadu Fire Service Department observed the Fire Services Day in Madras City and in mufassal towns to-day. The Fire Services Day is observed to make the people conscious of the necessity of taking adequate precautions against fires, losses on account of which run into crores of rupees. This day is also observed as a day of remembrance of the gallant fire-fighters who lost their lives in the performance of their duty. The theme of the Fire Services Day this year is **Prevention of**

Home Fires. Posters and Pamphlets depicting 'Fire prevention in Homes' were exhibited and cinema slides on the same theme were also shown in cinema houses. Hand-bills on how to prevent home fires were distributed among the public. As part of the programme of observance of the day, the Officers and men of the City Fire Service held a large-scale demonstration in fire-fighting and rescue work at the Rajaratnam Stadium at Egmore under the Presidentship of Thiru H. K. Ghazi, I.A.S., Secretary to

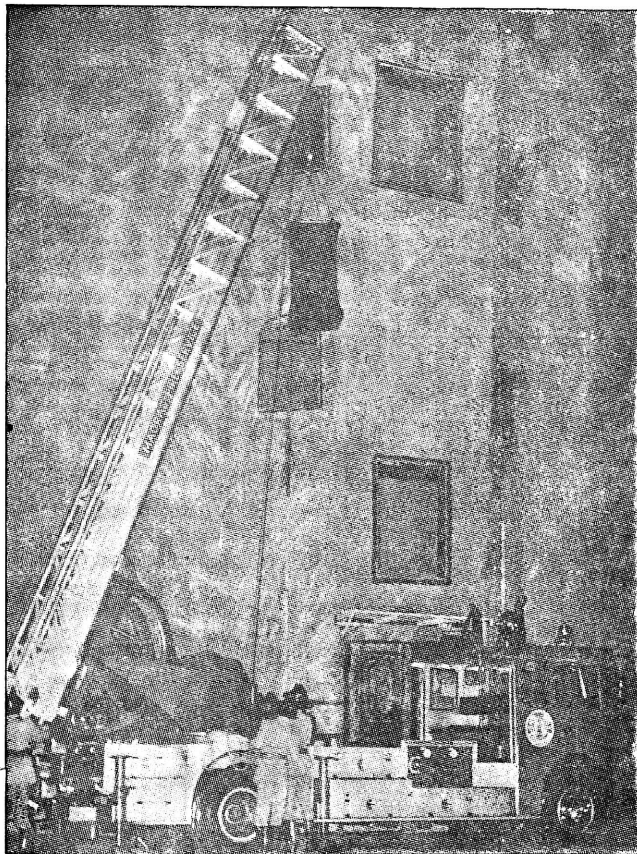
A SERVICE THAT SAVES

Government, Home Department, Tamil Nadu. Thiru M. A. S. Mohajir, Director of Fire Service, welcomed the President and the invitees. The President, Thiru H. K. Ghazi, in his speech emphasized the need for fire prevention and dwelt on the part played by the Fire Service in this regard. After a vote of thanks by Thiru R. Nityanandam, Deputy Director of Fire Service, a large-scale demonstration in fire-fighting and rescue was conducted under the command and guidance of Thiru S. Amirthalingam, Divisional Fire Officer, Madras. Thiru P. N. Mehrotrar Deputy Fire Advisor, Government of India, who attended the function on special invitation was kind enough to give a running commentary in English for each and every item of demonstration while Thiru R. Nityanandam, Deputy Director of Fire Service gave the commentary in Tamil. The function was largely attended by the public.

The Fire Service Day is observed throughout the country on the 14th April. In his speech on the occasion, the Director of Fire Services said ;

Home is a priceless possession to every one of us. Even a pavement dweller has a particular attachment to the corner of the

The men and machines of a Fire Station are so trained and tuned to respond to calls in 15 seconds.



pavement which he uses as his own even temporarily. In our country several thousands of homes are destroyed by fire every year. It is, therefore, our duty, nay our responsibility, to do our best to save our homes from destruction by fire.

Last year, out of a total of 3,918 fires, which occurred in several parts of the State, 1,946 or more than 50 per cent were house-hold fires and they accounted for loss of property amounting to Rs. 39.3 lakhs, which worked out to more than 60 per cent of the total fire loss in the State. 24 persons lost their lives and 76 were injured in these fires. The distress caused to the thousands of people who lost their homes with whatever they held near and dear can better be imagined than described. A look at the sorrowful face of the victim of a fire accident will better [portray [the

deep distress that has befallen him than any statistics of fires such as those mentioned by me just now. House-hold fires, apart from causing loss of life and property to the individuals concerned tell upon the economy of the country in general and of the State in particular.

What then is to be done to reduce, if not altogether eliminate the staggering losses from fires and the attendant misery they leave in their trail.

From a careful study of the causes of fire accidents in house-holds which have occurred in the past, a large majority of house-hold fires can be traced to the carelessness on the part of some member of the house or a neighbour. It, therefore, follows that if every one is made aware of the common causes of fires in homes and the steps to be

taken to remove these causes a great many fire accidents at homes could be prevented and thereby losses through fire accidents minimised.

Most of our people live in thatched houses. Even in built-up urban areas thatched constructions are put up on top-storeys of buildings and summer pandals are not uncommon. Though our State can take pride in the fact that almost all parts of the State, even the remotest village, are provided with electricity, the use of naked lamps in houses is quite common. Careless use of these naked lamps account for a large number of fires. Such lamps must be kept out of the reach of children and quite away from hanging curtains or other combustible materials in the house. A little extra care taken in this regard and using covered lamps like Hurricane Lamps will go a long way to remove fire accidents caused through naked lamps.

Thiru H. K. Ghazi, Secretary, Home Department, addressing on Fire Services Day. Thiru M. A. S. Mohajir, Director of Fire Services also is seen.



Electricity is much more safer in home than the naked lamp. But electricity is also responsible for very many fire accidents due to faulty wiring, defective connections and careless handling of electrical appliances. One should not tamper with electrical installations. If a fault is detected in an electrical installation in the house, it is the licensed electrician who should be called in to set right the defect and not the house-holder making his own attempt to test his knowledge of electricity. Faulty switches, blown up fuses, etc., should be

got replaced promptly with the help of a licensed electrician. Indiscriminate use of flexible wires, over-loading a single plug point for using various appliances such as Electric Irons, Heater, Radio, etc., should be strictly avoided.

The carelessness of the housewife herself is yet another cause of fire accidents. Reports of deaths of women due to loose ends of their sarees catching fire while cooking are almost a daily feature in the news-papers. A little care on the part of the housewife while attending to her duties in the kitchen will definitely prevent the occurrence of fire accidents. The use of pressure stoves and ordinary kerosene stoves for cooking purposes is a very common sight in our house-holds. These appliances should be handled with care. Pouring kerosene into oil tanks of stoves while burning, should

never be attempted. Quite often hot ashes are carelessly removed from the oven and thrown in the dust bins. The small sparks hidden inside are sometimes carried by a strong wind to nearby thatched houses, if any, and cause havoc in the locality. The ashes should therefore be dampened with water to see that no hidden spark lies in them before they are disposed of.

Children should never be allowed to meddle with match boxes, as the careless throwing of a lighted match coming into contact with combustible material in the house may cause a serious accident.

Festive occasions are of course joyous occasions. But, they should never be allowed to end in misery by permitting children to use fire crackers indiscriminately. There have been scores of fire accidents in house-holds during Deepavali due to indiscriminate firing of crackers and other dangerous types of fire works. Better, if they are avoided altogether. But, it is difficult to deprive the children of their pleasure in enjoying this dangerous sport. It would therefore be advisable to see that the adults are present when the children play with fire works so as not to allow them to be reckless in the handling of dangerous crackers and fire works.

Accumulation of waste in the house-hold is one more common cause of fires. Unwanted and useless combustible materials should never be stored in large quantities. They may cause fires resulting in irreparable loss



to the house and irretrievable loss to the house owner. Such waste materials should therefore be disposed of regularly when Municipal or Panchayat dust cart comes in for collection.

These are only a few of the common causes of fires in homes that can very well be prevented by exercising a little care and taking preventive measures that cost almost nothing.

There are special fire hazards mainly present in industries. To every employee the industry in which he serves represents his means of livelihood. The employer, whether an individual, group of industrialists or the State itself, is equally interested in preserving, conserving and expanding the industry. No company or industry can regard itself as immune from the threat of a serious fire. Enormous quantities of raw materials used

Slippery water for fire-fighting

A technique to make water more slippery to increase the volume that can be passed through a pipe has been developed by Dr. Edward Blum of the New York City-Rand Institute. It is being made use of by New York city firemen as an aid for fighting fires.

The technique depends on polyethylene oxide, a polymer of very high molecular weight. Also referred to as friction-reducing additive, the chemical when added to water being pumped decreases the turbulence and friction, thereby greatly increasing the volume of water through pipes. As little as 30-50 parts per million of the polymer is sufficient to achieve this result.

15 SECONDS TO RESPOND AND 15 SECONDS TO ATTACK FIRE.

in the process of the industry, vast array of costly and intricate equipment and machinery are involved in many industries. Huge godowns for stacking raw materials and storing finished goods before they are sent out to the market are put up near industrial premises. Most of the industries use several combustible or inflammable materials such as coal, wood, cotton, rubber, alcohol, turpentine, plastics, etc., to name a few. Explosives like sodium nitrate, potassium chlorate, nitro-cellulose, lacquer, varnishes, etc., are also used. All these present a potential source of danger and constitute serious fire hazards.

The entrepreneurs should plan now if they have not already done, if they are to be reasonably certain that their firms or industry are not going to be among those that would suffer a serious fire. To the consequential direct loss of a fire, one has to add indirect ones such as loss of markets, customers and above all man-hours. Taking adequate preventive measures against fires in industries will not be expensive in the long run though the initial cost may appear high. Money spent on fire prevention and fire protection is money invested. A good lay out of machinery and working yards and storage of goods and materials in an orderly manner will reduce the risk of fire to a great extent. Every factory, mill or industry, large or small,

should have a well-trained team of fire-fighters, well-versed on preventing fires.

We have in this State 58 Fire Stations in all, established in various parts, 12 of which are in Madras City and the remaining 46 in the mofussil towns. The Government have sanctioned the opening of four additional Fire Stations in different parts of Madras City and six new Fire Stations in the mofussil. We are taking vigorous steps to establish these Fire Stations as quickly as possible. The Government have also approved a priority list of 44 other towns in the State for establishing Fire Stations in them on a phased programme. According to the recommendation of the Standing Fire Advisory Committee to the Government of India, fire units should be so located that the running distance to the farthest place should not be more than 15 kms. In view of the heavy cost involved in the establishment of a Fire Station, it will take a number of years to achieve this standard.

Each Fire Station is normally provided with two fire-fighting vehicles and one ambulance. The 58 Fire Stations among themselves attended during the last year 3,918 fire accidents involving loss to property worth Rs. 69.56 lakhs, and saved property worth Rs. 902 lakhs. They also attended to 474 rescue calls, rescuing alive 134 persons and 124 heads of cattle.

The ambulance service is intended to convey casualties in fire accidents and it is also available to the public for transporting the sick from home to hospital and *vice versa* on payment of a small fee. Fire Service ambulances are also made available for transporting to hospitals indigent patients free of charges. No fee is levied for transporting to hospitals persons injured in road accidents and in accidents in public or private premises. The total number of ambulance calls attended by the Fire Service during the last year was 14,217 of which 13,531 were paid-calls and 686 were free calls.

Ours is a humanitarian service which puts its duty to the public above all else. We are always with the public when life and property are in danger. "We serve to save" is our motto. As far as efficiency is concerned, I must state that in this country we are second to none. Belonging to an emergency service, we always deem it our first duty to respond to calls and turn out promptly without any avoidable delay. Surely you can't expect us to be at a given spot even before the fire starts, but we have done and continue to do our best in cutting off those vital seconds between the alarm, arrival and attack. In this connection I would like to inform you that our men and machines turn out of their stations within 15 seconds of a call and after reaching the spot within travelling time, we are able to attack any fire within 12 to 15 seconds of our arrival at the spot. ●

Chemistry, the science of substances and their transformations, plays a vital role in modernized farming. This article deals only with the major contributions of Chemistry in agriculture.

If crops can talk they will cry "Feed us to Feed you". In the new strategy of exploitive agriculture balanced and adequate nutrition of crops through judicious application of fertilizers is a must. Among the factors contributing to higher agricultural production fertilizer use is the most important one. It has been estimated that about 50 per cent of the increase in agricultural production is due to this input alone.

It has been established that in countries like India, Ceylon, East-Pakistan and Burma, rice-crop responds to fertilizer application (N-P-K application).

There are two major conditions affecting fertilizer use, namely agronomic and economic. They include factors like yield response from fertilizer, cost per unit of fertilizer and value of additional crop produced. Fertilizer recommendations should not be static. They have to be geared to the existing agronomic and economic situation through continuous research. Such "realistic" recommendations should reach the farmers through an efficient extension education agency. The fertility status of soil varies from farm to farm and at times between fields of one and the same farm. It is impossible to

lay out experiments in all the farms or fields. Therefore, researchers cannot help giving somewhat 'generalized' recommendations. Farmers can modify such recommendations to

The price of fertilizer is also an important factor affecting fertilizer use. Fertilizer subsidy programmes in Japan and U.S.A. have returned large economic dividends. Even if such schemes cannot be implemented adequately and timely, fertilizer credit at least should be made available to farmers.

Since farming is also a business researchers should apply the principle of diminishing economic returns before making fertilizer recommendations. The 'added' return should be more than the added cost in the case of fertilizers application.

Chemistry and crop protection.

We have to protect our crops from insects, rodents, fungi, bacteria, virus and weeds. As contributions of Chemistry we have insecticides, rodenticides, fungicides, antibiotics, weedicides, etc. It is estimated that about 10 per cent of our agricultural production is annually lost due to insect and disease attack. Since the discovery of DDT a number of chlorinated hydrocarbon insecticides have been developed. The development of Organo Phosphorus insecticides (Parathion, Malathion, etc.) has extended the range of pests which can now be controlled both effectively and economically. Of late many agricultural antibiotics have been discovered to alleviate human suffering (starvation) by controlling plant diseases, eg. antibiotics to control rice blast.

suit the needs of their farm soils with the help of Soil Testing Laboratories, and follow what are called "specific" recommendations or specific fertilizer schedules.

CHEMICALISATION OF AGRICULTURE

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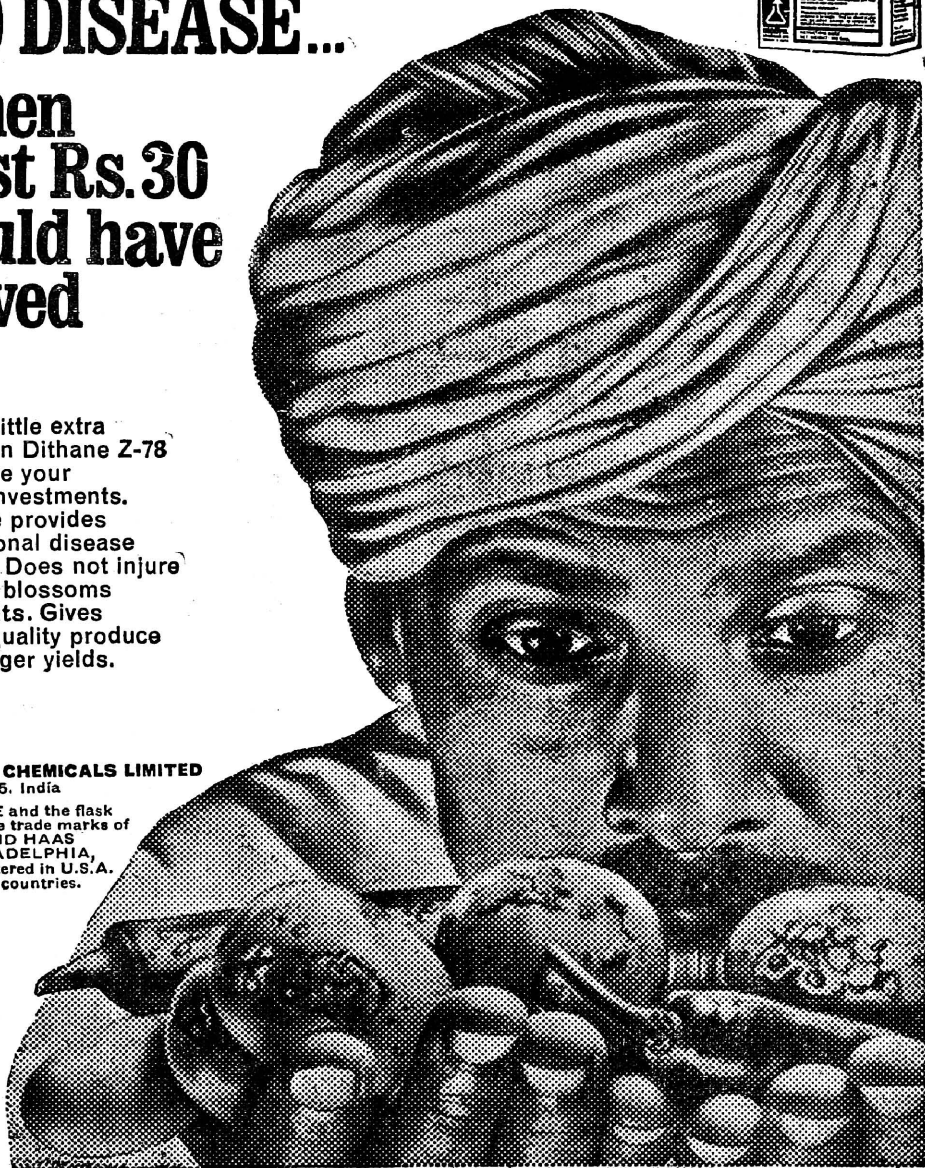
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WEEDICIDE TRIALS IN AGRICULTURE DEPT.

The Department of Agriculture is conducting a large number of field trials as well as chemical tests at the Agricultural College and Research Institute with various Herbicides sent by the manufacturers. So far, the Department has approved two chemicals namely "Rogue" of Messrs. Monsanto and "Stam-F. 34" of Messrs. Indefil Chemicals.

The trial report in paddy field reveals that the hand weeded plot recorded the minimum weed weight and superior to all other treatments. "The Stam-F. 34" at 6 litres per acre stands superior to other treatments on control. "Rogue" at 3.5 and 4.5 litres per acre were on a par and found to be efficacious. Similarly the Chemical "Lasso" tried against weeds in groundnut crop has controlled the majority of weeds satisfactorily.

The trials conducted at Palur Agricultural Research Station with T. M. V. 7 groundnut reveal that "Ram Road. 65" at 10.4 kgs. per hectare is found to have the best controlling effect on weeds, and also increase the yields.

The trials conducted at sugarcane Research Station, Cuddalore with weedicides have revealed that "Diuron" at the rate of 1.6 kgs. per acre as pre-emergence spray on third day and "Symazine"

at the same rate pre and post emergence spray on trial and 20th day of growth were found to be effective in controlling the weeds to an extent of 70 per cent. The combined effect of trash mulch plus 4×4 "2-4-D". or "Bladex C." as pre and post emergence spray were found to be good in controlling the weeds over 75 per cent besides improving the tiller production, cane yield, etc. It is observed that "Ansar 629" at 8 litres per acre has given promising results.

With a view to control the weed "Marshelia" at State Seed Farm, Mettur, Herbicidal treatments were adopted in small plots. It was noticed that there MCPA plus Rogue was sprayed, the treatment was effective in arresting the growth of the weeds up to 40 per cent.

Cost of Chemical Weeding.

Roughly a sum of Rs. 40 is required for weeding by engaging about 20 women labourers on an average for paddy crop. If we adopt the chemical method of weed control with chemicals like Rogue or Stam-F-34 at 4 to 5 litres per acre we will have to spend a sum of Rs. 90 towards cost of chemicals and a sum of Rs. 3 towards operational charges. From the above figures it could be seen that an additional sum of Rs. 53 may be required in

resorting to chemical method of weed control over the conventional method of weed control. Similarly for Millet, Groundnut and Sugarcane and additional sum of Rs. 33, Rs. 53 and Rs. 20 may be required respectively. However considering the efficacy of the chemicals, labour saving during peak season, the additional production, etc., the Farmers can take up the chemical method in a large measure without minding the extra cost involved over manual weeding.

Why chemical weed killing ?

When the weeds in a maize field were analysed, it was revealed that the weeds have twice as much nitrogen, 1.6 times as much phosphorus, 3.5 times as much pottassium, 7.6 times as much calcium and 3.3 times as much magnesium as the maize for which all the above soil nutrients were applied by the farmer. The Plant food inputs, which are costly get taken up mostly by the weeds hus starving the Crop for which the plant foods are primarily meant.

The common methods of weed control are mechanical, cultural and biological. These are the conventional methods. Their utility is tested and proven. But they have their own limitations. The quick re-emergence of weeds, the high cost of weeding, the scarcity of labour and the inherent inefficiency of these methods have induced agricultural scientists to look for a better, more complete and more economical way of combating the problem. The chemical weed control has been hit upon as the right answer. ☉

Irrigation is one of the important factors of intensive cultivation. Irrigation may be by natural flow or by lifting water by some device from its natural level whether surface or under ground. An extent of about six lakh acres is being irrigated by wells in Tamil Nadu. Water lifting appliances are being worked by human labour, animal labour and mechanical power.

Water lifts worked by human labour are in vogue for small areas such as vegetable gardens, betelvine gardens, etc. Water lifts worked by animal labour and mechanical power are suitable for medium and large scale farms. In this study, an attempt has been made to work out the economics of lift irrigation by country mhone, oil engine and an electric motor. Recently a case study was conducted in the village, North Elandaikulam of Tirunelveli district.

The results of the study are discussed below. The efficiency has been measured by the area irrigated by different appliances in a day of 8 hours, and comparing the cost of irrigation per acre.

I. COUNTRY MHOTE

Approximate cost of mhone equipment Rs. 250.

	RS.	P.
1. Cost of maintenance of a pair of bullocks	5	00
2. Labour charges for guiding water (a woman or a boy)	1	50
3. Interest, repairs and depreciation of mhone equipment	0	60
Total ...	7	10

COMPARATIVE STUDY OF LIFT IRRIGATION COSTS

Area covered in a day of 8 hours ranges from 30 to 35 cents. So cost of irrigating one acre ranges from Rs. 20-30 to 23-70.

II. OIL ENGINE (5 H.P.)—

The approximate cost of one 5 H. P. Oil Engine is about Rs. 3,500 (including all expenses upto erection). Oil Engine requires more of repairs and renewals than an electric motor. The extent of irrigation will vary according to the water level in the well.

	RS.	P.
1. Consumption of diesel oil one litre/hour, eight litres for eight hours at Rs. 0-90/ litre ...	7	20
2 Cost of lubricating oil	0	50
3 Cotton waste, grease	0	50
4 Depreciation at 10 per cent for Rs.3,500 (200 days of working per year-straight line method) ...	1	75
5 Interest at 6 per cent.	1	05
6 Repairs, renewals, Drivers wages (Farmer himself or the man guiding water will attend to the engine). ...	0	60
7 Guiding water ...	2	50
Total ...	14	10

Area covered in a day ranges from 1-25 to 1-50 acres. Therefore Cost for irrigating one acre ranges from Rs. 9-40 to 11-28.

III. Electric Motor—5 H.P.—

The approximate cost of one 5 H.P. electric motor will be about Rs. 2,000 (including all the expenses upto erection).

1 Electric energy consumption 4 units/hour or 32 units/8 hours. Cost of electric power at Re. 0-11/ unit....	3	52
2 Depreciation at 10 per cent (assumed that the motor will work for about 200 days/year).	1	00
3 Cost of grease, cotton waste, oil rope, etc.	0	10
4 Wages for Driver (Normally attended by farmer himself).	0	10
5 Interest 6 per cent ...	0	60
6 Guiding water one man ...	2	50
Total ...	7	82

Area that can be covered in a day of 8 hours varies from 1-25 to 1-50 acres. So cost of irrigation varies from Rs. 5-21 to 6-25. So it could be seen from the study that lift irrigation by an electric motor is cheaper (Rs. 5-00 to 6-50 per acre) than an oil engine (Rs. 9-00 to 11-50 per acre). So the extension of electric energy to the farm for running the various machineries especially for lifting water will increase the agricultural production at a lesser cost.

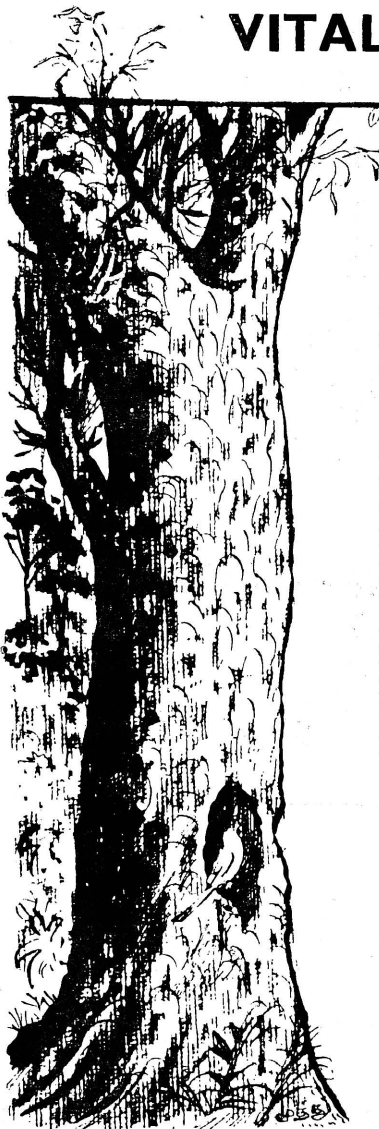


VITAL ROLE OF FORESTS

Forests play a vital role in the economic development of the country by their three-fold functions, viz., protective, productive and bio-aesthetic.

The protective functions of the forests in the water sheds form the basis for the entire economic uplift generated by the numerous hydro electric and irrigation projects. In addition ground water resources are also dependent to a great extent for recharging on the existence of permanent vegetation in the form of forests. Moderation of climate is an important and vital function of well distributed forests.

A function more readily appreciated is the productive utility of the forests. Forests yield a variety of products which are essential for human welfare. Timber, fuelwood, bamboos, grass, tanning materials, medicinal plants, essential oils are some of the main items derived from forests.



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Forests lend beauty to landscape and provide numerous recreation facilities. The rich and varied fauna of our jungles attract tourists in thousands from all over India and abroad. Management of forest resources has a considerable employment potential, particularly for rural population and tribal people. A variety of forest products in semi-processed or processed forms are also commodities of international trade. With a planned development it is possible to create a favourable balance in the international trade in the forest produce, and also to augment the long-term requirements of the State in regard to timber, fuel and industrial raw materials, and to ensure more economic and efficient utilisation of the forest products.

With the above objects in view, the Forest Department is implementing various development schemes. First Five-Year Plan upto the end of the Third Five-Year Plan, Rs. 549.84 lakhs had been spent for various developmental operation. High lighting features of the Third Five-Year Plan were the extension of planting operations in the areas outside the Reserved Forests under the Scheme of Farm Forestry Village Forests and raising rubber plantations in Kanyakumari district. The achievements under each scheme during the period from 1967-68 to 1970 are narrated below :

The object of the scheme raise forest plantations in all

available and suitable village poramboke lands and tank beds over an area of 16,000 hectares during the Fourth Five-Year Plan period at a cost of Rs. 40 lakhs.

Under the Scheme of Farm-Forestry—Extension Forestry, a Central Nursery was formed in Salem during 1967-68 to supply seeds and seedlings to the public.

The object of the scheme is to raise fuelwood plantations in the forest-areas adjoining the densely populated towns and villages to meet the fuelwood requirements of the urban population. The Fourth Plan target is to raise 6,000 hectares at a cost of Rs. 30 lakhs.

Economic Plantations

(i) *Teak*.—The object of the scheme is to raise teak and other hardwood species in suitable localities in the districts of Kanyakumari, Tirunelveli, Madurai, Coimbatore, Chingleput and the Nilgiris. During the Fourth Five-Year Plan it is proposed to raise 3,000 hectare at a cost of Rs. 15 lakhs.

(ii) *Softwood*.—The object of the scheme is to raise softwood plantations in suitable localities in order to augment the supply of raw materials required for match and plywood industries. During the Fourth Five-Year Plan it is proposed to raise 15,000 hectares at a cost of Rs. 5 lakhs.

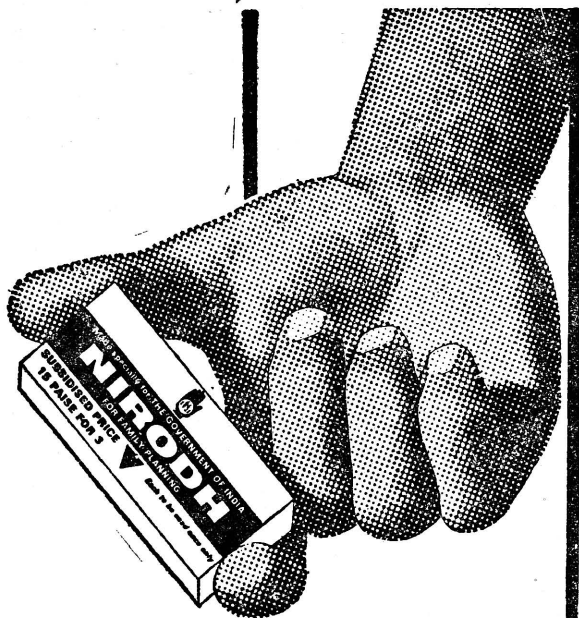
(iii) *Casuarina*.—The object of the scheme is to raise Casuarina Plantations over Padigai lands and along the seashore with a view to meet the demand for firewood in the State. During the Fourth Five-Year Plan an area of 2,000 hectares will be raised at a cost of Rs. 10 lakhs.

(v) *Sandal*.—Sandalwood earns a sizeable revenue for the State. With a view to improve the sandal wealth in the State artificial regeneration of sandal is undertaken under the Scheme. During the Fourth Five-Year Plan it is proposed to raise sandal plantations over 1,000 hectares at a cost of Rs. 10 lakhs.

(viii) *Rubber*.—The object of the Scheme is to raise rubber trees in Kanyakumari district as rubber is a strategic material. The target for the Fourth Five-Year Plan is to raise rubber plantations over 800 hectares at a cost of Rs. 100 lakhs.

Rehabilitation of degraded forests.

The object of the scheme is to raise a green mantle over the low hill portions of the ex-panchayats, ex-zamin and reserved forests to prevent soil wash and incidentally supplement the fuel supplies. During 1967-68 an area of 248 hectares was planted at a cost of Rs. 0.62 lakhs. During 1968-69 older plantations were maintained at a cost of Rs. 0.17 lakhs.



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WHY A STATE PLANNING COMMISSION

“As a Government we are committed to improving the levels of living of our people. We believe that the economy should be modernised and a new socialist society built up. A plan of development, which should be drawn up on the basis of assuring full employment, improving skills, marshalling the idle manpower resources and exploiting the natural wealth of the country, cannot be built up on the basis of a narrow accounting approach. Government have decided to draw up a ten year-perspective plan with a view to combating the problems of unemployment and poverty in the State.”—Chief Minister, Thiru M. Karunanidhi announced in the Tamil Nadu Legislative Assembly.

Following this announcement, the Government of Tamil Nadu have set up a State Planning Commission.

This Commission would consist of Administrators, Economists and Technologists, who will identify industrial and agricultural opportunities for formulating a perspective plan as the basis for Five-Year Plans.

“The legitimate case of Tamil Nadu for increased transfer of resources from Government of India has been ignored too long. I would like to State a few pertinent facts in this connection. The structure of our federal fiscal system is such that most of the taxes, which respond to the growth of a modern economy, like customs, income taxes, corporation tax and excises are in the Central list. The only tax which is relatively income-elastic in the State list is the sales tax. While the power to tax is thus over-weighted in favour of the Centre, the responsibility to spend and meet the welfare goals of the people is all vested in the States. This dichotomy between powers to raise resources and responsibility to spend is at the root of all our problems. It is this Government's view that a radical change in the pattern of revenue sharing should be brought about by amendment of the Constitution, if necessary.

The following is the guide-line indicated by the Chief Minister not only to the State Planning Commission, but also to the entire administration.

“Our emphasis is on finding the financial resources for a plan of development rather than constructing the plan through an accounting concept of available resources. Our approach to the budget is to view it as an instrument for accelerated development.”

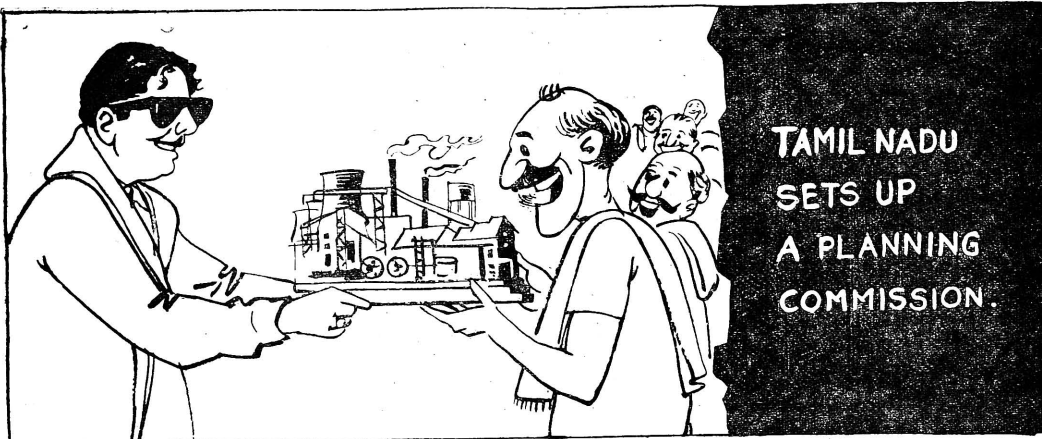


AT THE ROOT OF OUR PROBLEMS

I am hoping that when the Rajamannar Committee presents its report, our Government will be in a position to formulate definite views regarding this change.

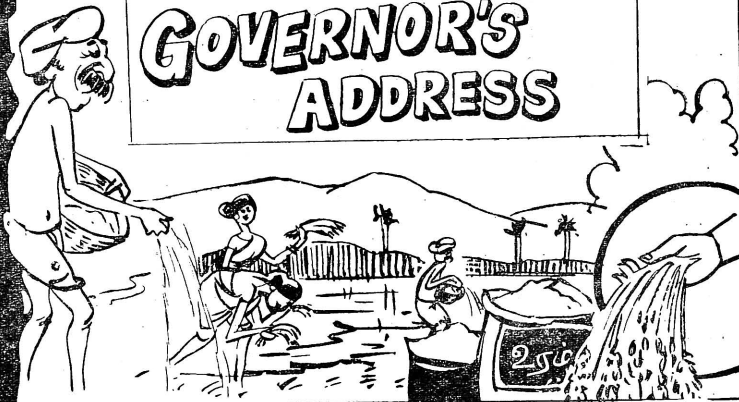
The Fifth Finance Commission presented a report extremely unfair to Tamil Nadu, which allocated according to figures published in the report itself a per capita transfer of taxes and grants of only Rs. 87.5 over the five years 1969-1974 as against Rs. 98.5 for the country as a whole. The difference of Rs. 11 per capita would mean a net reduction of Rs. 44 crores in the resources given to the State. This injustice shown to us by the Finance Commission is sought to be justified on the ground that it is a statutory body and that its findings are mandatory.

Our grievance is that while Government of India have remedied similar injustices in the case of a few other States through the device of special accommodation and central assistance from the Planning Commission, so far, Government of India have not acceded to our request.”



**TAMIL NADU
SETS UP
A PLANNING
COMMISSION.**

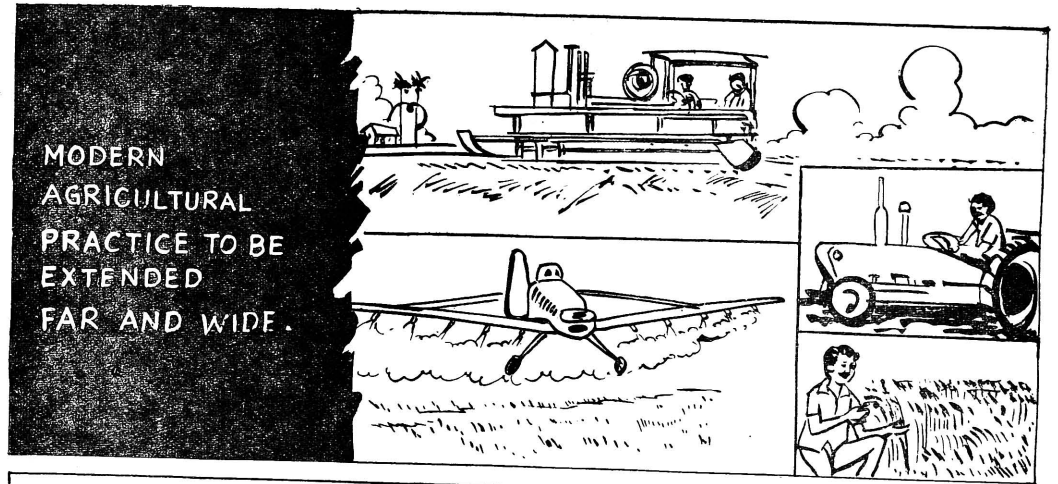
**FERTILISER
CONSUMPTION
WILL GO UP
FROM 85,000 TONS
IN '66-'67 TO
2 LAKHS TONS
IN '70-'71.**



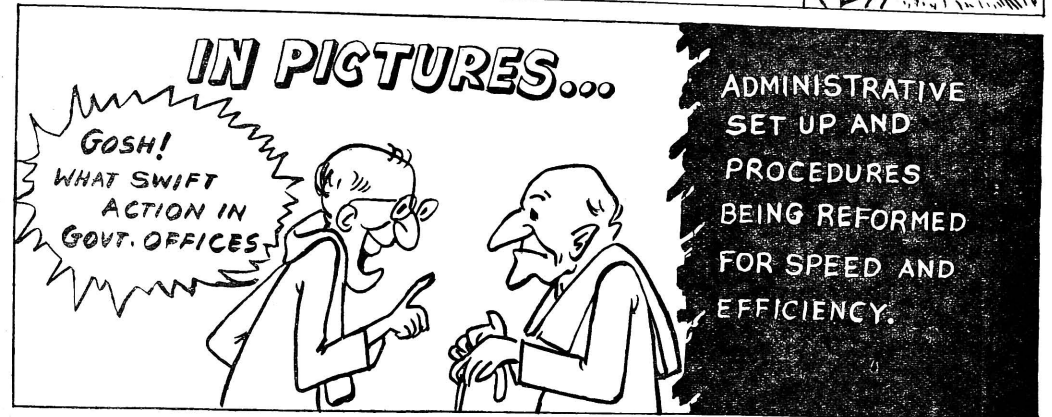
**GOVERNOR'S
ADDRESS**



**PROVISION FOR
SHORT-TERM
AGRICULTURAL
LOANS INCREASED
FROM Rs 31.41 CRORES
TO Rs 55 CRORES.**



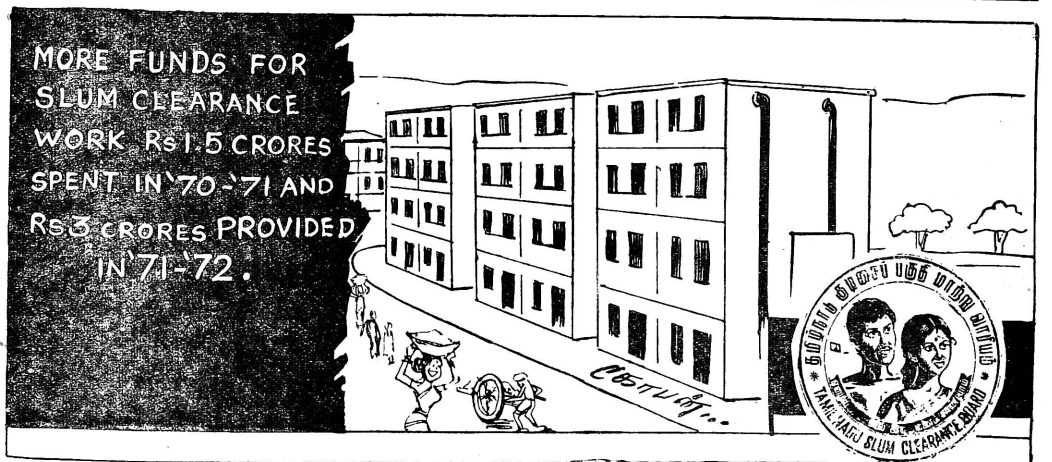
**MODERN
AGRICULTURAL
PRACTICE TO BE
EXTENDED
FAR AND WIDE.**



IN PICTURES...

**GOSH!
WHAT SWIFT
ACTION IN
GOVT. OFFICES**

**ADMINISTRATIVE
SET UP AND
PROCEDURES
BEING REFORMED
FOR SPEED AND
EFFICIENCY.**



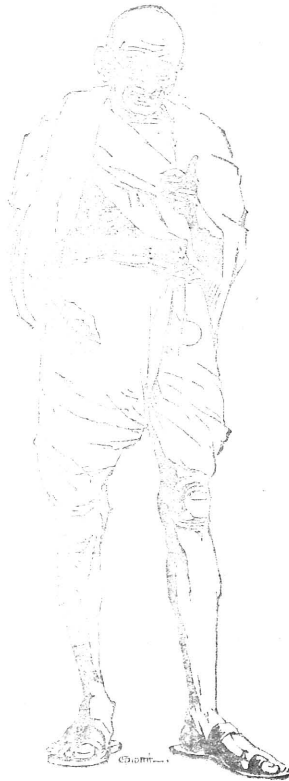
**MORE FUNDS FOR
SLUM CLEARANCE
WORK Rs 1.5 CRORES
SPENT IN '70-'71 AND
Rs 3 CRORES PROVIDED
IN '71-'72.**

THE POOR MAN'S SWARAJ IS COMING TRUE IN TAMIL NADU

HERE IS HOW GANDHIJI DESCRIBED

“ The Swaraj of my dreams is the ‘poor man’s Swaraj’. The necessities of life should be enjoyed by you in common with those enjoyed by the princes and the moneyed men. But that does not mean that you should have palaces like theirs. They are not necessary for happiness. You or I would be lost in them. But you ought to get all the ordinary amenities of life that a rich man enjoys. I have not the slightest doubt that Swaraj is not Poorna Swaraj until these amenities are guaranteed to you under it.”

—MAHATMA GANDHI.



HERE ARE OUR ATTEMPTS

The Government of Tamil Nadu is marching towards the Poor Man's Swaraj—How ? By providing these amenities to the Poor Man !

1. Lands distributed to the landless poor man for cultivation.
2. House-sites allotted free of cost to the poor man.
3. No new taxes for the poor man !
4. Existing tax on dry lands totally abolished.
5. Existing tax on wet land abolished upto five acres holding.
6. Electricity extended to villages—Especially to Harijan Colonies.
7. Free Education upto P.U.C. for poor man's children.
8. Free supply of bread (three slices every day) to poor man's child from the age of six months to three years !
9. Free supply of mid-day meals in schools.
10. Slum dwellers are provided with multi-storeyed buildings through Slum Clearance Board.
11. Loan facilities at the door of the poor man's hut !
12. Officials call on the poor man under 'Manuneechi Thittam' (Mass Contact Programme).

WELCOME TO THE LAND OF GLORIOUS CULTURE



Come to the land of the Tamils where ancient culture and civilization have been preserved in myriad forms... Bharata Natyam...rich Karnatic music...great literary classics...imposing temples...sculptural and iconographical masterpieces...And Nature's charms of tropical vegetation and lush rivers are as hospitable as the people.

For an unforgettable holiday come to the south.

Places of interest:

Madras - Mahabalipuram - Kanchipuram - Chidambaram
Tanjore - Srirangam - Madurai - Courtallam - Kanyakumari
Rameshwaram - Ooty - Kodaikanal - Yercaud.

Contact:

The Director of Information, Publicity & Tourism,
Government of Tamil Nadu, Madras-9.

YET ANOTHER TRIUMPH!

**Tamil New Year's
Raffle Bumper Offer.**
Total Prizes: Rs. 45 Lakhs
Special Prizes: Rs. 10 Lakhs
Ist Prize: Rs. 5 Lakhs
IIInd Prize: Rs. 3 Lakhs
IIIrd Prize: Rs. 2 Lakhs
(Common to all Series)
Usual Prizes: Rs. 35 Lakhs

Cost per Ticket Re. 1/- only.

**Date of Draw:
6-5-1971**

*So far Tamil Nadu Raffle has
created 232 Lakhiers!*

The Tamil Nadu Raffle collection is socially
motivated and ensures more education,
medical and housing facilities.

Benefit from the exceedingly generous prizes of the
Tamil New Year's Bumper Raffle Offer.

10% Bonus to Agents on special prizes.

SALES ARE NOW ON! RUSH.

BUY TAMIL NADU RAFFLE TICKETS

Issued by: Director of Information & Publicity,
Government of Tamil Nadu, Madras-9.

ALL CORRESPONDENCE SHOULD BE
ADDRESSED ONLY TO THE DIRECTOR OF
RAFFLE, TAMIL NADU, MADRAS-2.

Subject to issue of 10 series.



WIN RS.FIVE LAKHS

