AN EMPLOYMENT-ORIENTED SURVEY FOR DHARMAPURI

PROGRAMME FOR EDUCATION, HEALTH & FAMILY PLANNING, TRANSPORT AND EMPLOYMENT

THE INDIAN INSTITUTE OF PUBLIC OPINION, NEW DELHI

CONTENTS

CHAPTER I

EDUCATIONAL PROGRAMME AND EMPLOYMENT

1.1 The present educational system in Dharmapuri district has been the result of a system of linear expansion of schools and enrolments at the primary, middle, and high school levels without any corresponding expanded provision for training in the skills relevant for the kinds of occupations available in the district or outside for the growing numbers of school-leavers and dropouts. On the statistical evidence available as on 1.8.1971, about 82 per cent of the children in the age-group qualifying for primary school have been enrolled which, however, is below the average for the State as a whole of about 95 per cent. This is mainly due to the low proportion (only 65 per cent) of enrolment of girls. In the next above group at the middle-school level, the enrolment is much lower, 27 per cent as compared with the State average of 55.6 per cent; the proportions are much lower than those of the State in the cases of both boys and girls. In the high schools the enrolment is not more than 14 per cent of the children of the corresponding age-groups as compared with 36 per cent for the State as a whole. Even so, unemployment among out-of-school rural youth has been increasing in recent years.

TABLE I

Percentage of Enrolment in Dharmapuri at Different School Levels 1971-72

Level and Age-Group	Total Number of Children			Schools	
	Boys	Girls	Total	Nature	Number
Primary School : Age 5–9 years (14 5% of the population)	122,344	120,933	243,277	Lower Elementary Junior Basic Total	1427 1 1428
Middle School : Age 10–12 years (7% of the population)	59,063	58,381	117,444	Hr Elementary Sr Basic Total	191 8 199
High School : Age 13–16 years (6.5% of the population)	59,828	49,227	109,055	Boys & Mixed Girls only Total	94 7 101
Total :	241,235	228,541	469,776		1728

	Enrolment in Schools			Percentage of Enrolment		
	Boys	Girls	Total	Boys	Girls	Total
Primary School : Age 5–9 years (14.5% of the population)	119,876	78,853	198,729	98.0	65 2	81.7
Middle School . Age 10–12 years (7% of the population)	22,143	9,653	31,796	37.5	16 5	27.1
High School : Age 13–16 years (6 5% of the population)	11,057	3,770	14,827	18 5	7.7	13.6
Total	153,076	92,276	245 352	63 5	40 0	52.2

1.2 There is a conspicuous lack of any other form of occupational or vocational education except for the following institutions :

TABLE II

	Number	Enrolment 1970–71 (Nos.)	No. of Teachers
Industrial Training Institute, Hosur	1	146	24
Agricultural Training Institute, Papparapatty	1	20	NA
Teachers' Training Colleges	3	426	25
Arts Colleges	2	1,247	57
Adult Education Centres	4	135	4

1.3 These data clearly indicate the nature of the tasks ahead. At the primary level, all children of the primary school-going age should be put into a school, which means an expansion from 82 to 100 per cent, within the next five years. There will be a growing number of such children; by 1976, their numbers will go up to 280,690 (boys : 141,160, girls : 139,530). The present school-pupil ratio at the primary level works out to 1:139 and the average teacher-pupil ratio to 1:32. Any improvement in these ratios, particularly the latter, will not be easy since it will depend on the construction of new school buildings or availability of teachers most of whom will have to be trained on a scale much larger than the existing training facilities available within the district. Special intensive but shorter-term training schemes will have to be launched. It should not be difficult to attract large numbers of matriculates and high-school dropouts who are now flocking to the Employment Exchange to register themselves for jobs. The panchayat unions or village panchayats will have to take prompt measures to put up the new buildings, sheds or expansions to existing school premises in rural schools where the problem of accommodation will be more acute than in the towns.

1.4 The numbers of children in the age-groups at the three school levels in 1976 and 1981 and the probable percentages of enrolment of boys and girls at these levels are indicated in the next table. These targets deviate slightly from those set for the State as a whole by the Task Force on Education for Tamil Nadu at the middle-school and high-school levels because of the existing low levels of enrolment over which the improvements have to be effected. For example, it is unlikely that rural youth in a backward district like Dharmapuri can be expected to complete the high school stage by the age of 14 as assumed by the Task Force. While there can be no question about raising enrolment at the primary stage to 100 per cent of all children in the appropriate age-group by 1976, it is very unrealistic in the conditions likely to prevail in Dharmapuri in the next ten years to seek to raise middle school enrolment to 100 per cent by 1980-81 or to 75 per cent at the high school level (as proposed for the whole State by the Task Force). In both cases, therefore, somewhat lower targets have been assumed in this survey. The additional cost of equipment and buildings and the teacher-pupil ratio are based on the Task Force's estimates. Taking the teaching and non-teaching staff ratio as 2.5:1, additional requirements of supervisory, inspection, clerical and menial personnel have been estimated to the nearest round figure.

TABLE III

Targets of Enrolment and Staff and Estimated Costs : 1976 and 1981

Level		Boys (Nos)	Girls (Nos.)	Total (Nos.)	*No. of Teachers Required	No of Non-Teachers Required	@Cost of)Addi-tional) School Buildings (Rs. in lakhs)	Cost of Equip-ment (Rs. in lakhs)
Primary School								
Proposed enrolment	1971 (82%) (100%)	119,876	78,853	198,729	4,702	—	NA	NA
	1976	141 160	139.530	280,690	7,587	3,037	+136.00	13 0
—do—	1981	161,030	159,170	320,200	8,654	3,460	+ 64.0	7.0
Middle School								
Proposed enrolment	1971 (27%)	22,143	9,673	31,796	936	—	—	—
	1976 (50%)	40,650	27,100	67,750	2,053	820	+ 60.0	14.0
	1981 (60%)	57,960	42,520	100,480	3,043	1,220	+ 54 0	13.0
High School								
Proposed enrolment	1971 (14%)	11,057	3.770	14,827	1,624	—	—	—
	1976 (30%)	22 020	15,730	37,750	1,180	470	46.0	26.0
	1981 (40%)	32,300	25,120	57,420	1,795	720	40.0	22.0
Total :	1971 (52%)	153,076	92,276	245,352	7,262	2,008	NA	NA
Total :	1976	203,830	182,360	386 190	10,820	4,327	242.0	53.0
Total :	1981	251,290	226,810	478,100	13,494	5,400	158.0	42.0

Teacher-Student Ratio : *Primary—1 : 37
Middle—1 : 33
High —1 : 32

Teacher-Non-teacher ratio : 2.5 : 1.

	@Cost for 1000 Students' Building	Equipment
	(Rs. in lakhs)	
Primary	1 660	0.163
Middle	1 660	0 400
High	2 000	1.150

Cost of Building 1976 242 lakhs

Addl cost 1981 +158 lakhs

Rs. 400 lakhs

Equipment 1976 53 lakhs

1981 +42 lakhs

Total : Rs. 95 lakhs

1.5 It is seen from the data provided in the Quarterly Employment Market Information that the total employment in the educational services in the district (both public and private) was over 10,000 in 1972. (This includes the non-teaching and inspecting and menial staff). In the targets set out (as in the Table above) for general education alone the manpower required will be 15,147 by 1976 and 18,894 by 1981. The additional teaching staff required under the above Plan will be as follows :

TABLE IV

Additional Teachers Required for Education

	1971	1976	Additional over 1971	1981	Additional over 1971
ALL SCHOOLS					
Teaching Staff					
Primary	4,702	7,587	+2,885	8,654	+3,952
Middle & High School	2,560	3,233	+ 673	4,840	+2,280
Non-Teaching Staff					
Clerical, Inspectorate and menial	2,008	4,327	+2,319	5,400	+3.992
Total	9,270	15,147	+5,877	18,894	+9,622

1.6 Expansion of the general educational structure even according to the more modest targets than those proposed for the whole of Tamil Nadu by the Task Force will result in creating about 1000 jobs a year. To this has to be added the additional employment in special teacher training schemes, industrial and agricultural training, etc indicated adove. (No proposal has been made in this report for the expansion of the number of colleges in the district; in any case such expansion will not deserve high priority as the facilities in the adjacent districts can he utilized to some extent.)

1.7 We would unreservedly endorse the Task Force's recommendation to add one teacher in each rural school to organise, with the help of other teachers, out-of-school education programmes to provide the equivalent of four years of schooling to the estimated 52 per cent of children who continue to be dropouts from the primary classes. This would call for a further expansion of teaching staff from about 200 to start with in 1973-74 to 1500 to 1981-82.

1.8 There are now only four adult education centres in the district. Of over 40,000 centres proposed in the Perspective Plan for the entire State to launch a five-year functional literacy programme (each centre giving two courses a year of four months' duration) a substantial proportion of such centres will be needed in Dharamapuri district where the literary percentages, according to the 1971 Census figures, are very low, especially in the rural areas and among women.

TABLE V

Literacy in Rural Areas

Taluk 1	Total 2	Male 3	Female 4	Literates 5	Male 6	Female 7
Hosur	147,235	74,971	72,264	27,225	20,427	6,798
Denkanikottah	197,799	101,580	96 219	35,008	26,538	8,470
Krishnagiri	348,622	175,978	172,644	66,339	49,215	17,124
Uthangarai	139,423	70 900	68,523	29,269	21,929	7,340
Harur	266,647	135,585	133,062	58,938	43 628	15,210
Palacode	134 645	67 796	66,849	22,382	16,854	5,525
Dharmapuri	299,463	151,727	147,736	63,175	46,638	16,537
District Total	1,533,834	778,537	755 297	302,233	225,229	77,004

1.9 There is need to remedy the very low literacy rate of barely 10 per cent among women, and to raise the percentage of literates among men from 30 to at least 60 by the end of the decade. Many of the villages are very large, with over 5,000 persons each. Even with one literacy centre, separately for men and women in each of the 655 census villages, the requirements of part-time teaching staff will be large. Since the adults who have to be taught will be available only for a small portion of the day, part-time staff, seconded from the local schools should be adequate and local school buildings could be put to use for classes Some additional work will also be involved in the organisation of the classes and preparation of suitable lessons or textbooks. But these will not create additional new jobs; payment of additional remuneration for such extra-curricular work should help to attract school teachers for conducting these classes and help to supplement teachers' incomes and thus attract educated persons to take up teaching and get themselves trained.

1.10 It was surprising to learn that, in spite of these expanding needs of personnel for future educational programmes, the present low literacy rate in the district and the increasing numbers of matriculates and others with higher qualifications swelling the live registers of the Employment Exchange, a decision was taken at the official level to suspend admissions to the three teachers' training institutions in the district with a total annual enrolment capacity of over 200. (One of them at Hosur is exclusively devoted to training Telugu-medium teachers, another at Krishnagiri is wholly for women teachers.) It is necessary not only to rescind this suspension with immediate effect but also to increase the enrolments to 300 next year. Seats for teacher training should thereafter be raised to 500 after three years, i.e , in 1975 and 600 in 1980. If possible, shorter-term but intensive courses should be planned to make more hands available for implementing the educational expansion programme drawn up by the Task Force in the modified form suggested in this report for Dharmapuri district. There should be three more training institutions by the beginning of the academic term in 1973, one wholly for women in Dharmapuri, two for men (or mixed schools), one at Harur and another at Kaveripattanam (or Palacode). This would involve immediate employment of additional teacher training staff of about 50. But it is clear that when enrolment capacity is doubled, as it has to be after 1975, there would also be a doubling of the teachers' teaching staff to 100 or more, depending on the effectiveness of the execution of the main general educational programme.

Occupational/Vocational Education

1.11 At present the arrangements for technical and vocational education in the district are most inadequate—almost non-existent except for one ITI at Hosur. Since the main thrust in development for the district must come from dryland farming, followed by new industry, poultry and dairy farming

and development of community services, the educational basis must be laid for such progressive diversification. The recommendations of the Tamil Nadu Task Force in the matter of vocational education, when applied to the district, will result in the following additions to the number of institutions.

TABLE VI

Schemes for Technical Training Institutions (with Locations)

	1972	1976	1981
Technical High School	—	3 (Thally, Shoolagiri, Veppanapalli)	6 (Morappur, Uthangarai and Pennagaram)
Comprehensive High Schools	1	7 (Each taluk headquarters)	16 (Each Block)
Industrial Training Institutes	1	4 (Krishnagiri, Harur and Dharmapuri)	4 (+Palacode) (—* Dharmapuri)
Agricultural Training Institutes	1	4 (Uthangarai, Denkanikottah and Harur)	6 (+Nallampalli Veppanapalli)
Forest Workers' Training Institute	1	1 (Anchetty)	1
Animal Science College (Proposed)	—	1 (Hosur)	1
Agricultural College	—	—	1
Polytechnic at Dharmapuri	—	—	1* (By upgrading the ITI)
	4	20	36

Agricultural Training

1.12 Immediately, priority should be accorded to the setting up of three more agricultural training schools at Uthangarai, Bargur and Shoolagiri (or Denkanikottah) on the model of the schools existing one at Papparapatty. The annual enrolment rate should be immediately raised to 40 (from 20 now at Papparpatty) and the schools should give intensive training in dryland farming technology and practices. While some of the trainees can be utilised or the expanded extension services proposed for dryland farming, selection of candidates should be so regulated as to enable some of them to go back to their own lands and adopt the new methods and demonstrate the new technology to other farmers. This means that a percentage of the candidates admitted for training should be from land-owning families. Though the location of these schools has been suggested on the basis of a fair geographical diversification within the district to take account of different cropping patterns, the object should be to attach an agricultural training school to a research centre or a testing station, with linkage to demonstration plots.

Industrial Training

1.13 The industrial plan for Dharmapuri will call for more training facilities than those now available at the I.T.I. in Hosur. It is reported that the trainees in Hosur now usually drift to Bangalore where the opportunities for employment are greater. Three more ITIs should be added by 1976 at Krishnagiri, Harur and Dharmapuri. It is suggested that the proposed ITI for Dharmapuri should be so designed as to be capable of being upgraded into a polytechnic later, at least by 1981 and another ITI should be set up at Palacode by that year.

1.14 The proposal for setting up technical high schools and comprehensive high schools and their numbers (indicated by the Task Force) should result in the creation of about 10 of them by 1976 and 22 by 1981. This is quite a substantial and ambitious programme for the district considering its present backwardness, but should be quite feasible and help contribute to the strengthening of the technical infrastructure services required for both agricultural and industrial development.

Estimate and Outlays

1.15 **Buildings and Equipment** : The cost of implementing the recommendations of the Task Force in regard to general and technical education in Dharmapuri will be as follows :

	General Education	Technical/ Vocational Education
	(Rs. in lakhs)	(Rs. in lakhs)
1. Cost of additional buildings	400	200
2. Cost of equipment	95	100
3. Improvements to existing buildings and equipment and maintenance	150	—
Total	645	300

1.16 **Recurring Costs** : All education is free in Tamil Nadu up to the pre-university course. On the basis of the Task Force estimates of recurring costs on teaching staff, the annual expenditure will progressively rise by Rs. 146 lakhs in 1976 over present levels and by Rs. 109 lakhs in 1981 over the level of 1976. Assuming a gradual increase over the ten-year period, the total additional recurring costs are estimated at Rs. 15 crores. The total will thus come to Rs. 21.45 crores of additional expenditure on general education. If we assume an additional employment of 9,622 in schools, plus 1,500 additional teachers for dealing with the dropouts, a total employment will be provided for 11,122 persons. The recurring costs on adult literacy programmes has been taken at one-third of the cost per student and since this will be mostly at the primary level, the gradual increase from now on will involve an approximate total, over the ten-year period, of Rs. 1.20 crores. This will not require additional staff though some additional expense. The teachers' training and vocational and technical training institutions for agriculture and industry are estimated to cost in buildings and equipment Rs. 3 crores and recurring costs on teaching, Rs. 4.50 crores till 1981 making a total of Rs. 7.50 crores. The over-all total outlay on all educational programmes for the district until 1981 will thus amount to about Rs. 30 crores of which Rs. 9.45 crores will be in capital for buildings and equipment and the balance will be recurring costs.

CHAPTER II

EXPANSION OF THE HEALTH, FAMILY PLANNING AND COMMUNITY SERVICES

2.1 There are large and serious gaps in the existing structure of health services in Dharmapuri which have to be remedied speedily before the district can catch up with the rest of the State in this field. Apart from the purely welfare aspects of the improvement of medical aid and sanitation, it has an important role in raising efficiency and productivity and also in promoting the effective implementation of family planning schemes.

2.2 The available data show that there are about 54 doctors in all for a population of nearly 17 lakhs (or about 3 for every one lakh) and about 325 hospital beds (of which one-fourth is now provided in private and missionary hospitals) working out to 20 beds for every 100,000 people. There are no beds at all for patients suffering from tuberculosis or infectious diseases and hardly any dental clinics; one mobile sterilization team and one mobile IUCD team which are reported to be operating cannot obviously pay sufficient attention to the family planning campaign, the importance of which cannot be too strongly emphasised for the district. A large number of ayurvedic and homeopathic doctors and dispensaries are reported to be available but no information is available of the quality of the physicians or treatment available; but the obvious gaps in the allopathic treatment facilities will compel the sick to seek relief in these centres of indigenous medicine.

TABLE I

Public Health Service in Dharmapuri (1970-71)

		No of Centres	No of Doctors
1.	Primary health centres	16	16
2.	Family planning welfare centres attached to primary health centres	16	16
3.	Maternity and child welfare centres	128	—
4.	Sub-centres including those set up under family planning programmes	42	—
5.	Hospitals/dispensaries		
	(a) Rural	7/8	13 (+8 Pharmacists)
	(b) Urban	1/nil	9/nil
		Doctors 54+8 Pharmacists	

(Contd.)

6.	**Hospital Beds**		
	a. Beds in primary health centres	96	
	b In other hospitals/ dispensaries		
	(i) Urban	50 in govt hospitals/nil in panchayat union dispensaries	
	(ii) Rural	102 in govt hospitals/ 10 in panchayat union dispensaries	
	(iii) Hospitals run by voluntary institutions	2/ beds 75 (estimated)	
	(iv) Beds in special hospitals		
	a. Tuberculosis	one unit	beds nil
	b. Leprosy	one unit	beds nil
	c. Infectious diseases	—	—
7.	Special units for control of communicable diseases	nil*	
8	Dental clinics	one—not functioning for want of qualified assistant surgeon	
9.	(a) Mobile sterlisations teams	1	—
	(b) Mobile IUCD teams	1	—

		No of Centres	No. of Doctors
10.	Indigenous systems of medicine		
	(a) Ayurvedic hospitals/ dispensaries (private)	22	22
	(b) Homeopathic dispensaries (private)	125	125 (estimated)
	(c) Unani dispensaries (private)	1	1

*There is one voluntary institution "ELEP" for treating leprosy patients at Royacottah. Hospital buildings are under construction in Dharmapuri.

Health Plan

2.3 The district's health and medical administration has to make much leeway before it can effectively begin to implement the recommendations of the Task Force on Health and Family Planning. The major tasks are the training of secondary-level medical and para-medical personnel on the scale required for such expansion and the provision of new buildings and equipment where they do not exist, and this means most of the areas The implications of the Task Force's proposals for Dharmapuri district (wtih certain modifications) are outlined in Table II to show the personnel requirements of the Health Plan by 1981.

Personnel Requirements

2.4 The doctor : population ratio recommended by the Task Force is one to 3000 of the population. The requirements in Dharmapuri on this basis will be over 700 doctors by 1981 but provision has been made in the above estimates only for about half their numbers in the public hospital system, the balance being expected to be provided by private doctors, missionary hospitals and private practitioners of indigenous systems of medicine who, now numbering nearly 148, may increase in future years. Similarly the number of beds required on the basis of the Task Force's ratio of 1 bed for every 1000 would now be 1678 and about 2,200 by 1981; it is assumed that about 200 beds may be available in hospitals and nursing homes set up by voluntary agencies when development gathers momentum in the district The Task Force has adopted a ratio of 1 nurse to 5 beds; the ratio suggested above may be slightly in excess because it was felt that mini-health centres should have two beds and one nurse each partly to create more employment for para-medical personnel and partly to provide local treatment for minor ailments and to reinforce the family planning programmes

TABLE II

Implications of the Health Plan for Dharmapuri

S.No.	Existing					Proposed (1981)				
	Numbers	Beds	Doctors	Nurses	Ancillary	Numbers	Beds	Doctors	Nurses	Ancillary*
1. District Headquarters Hospital	1	50	9	NA	NA	1	300	30	60	20
2. Taluk polyclinic hospitals	7	102	13	NA	NA	7	600	84	140	50
3 Primary health/polyclinic centres	16	96	16	NA	NA	16	480	60	120	50
4. Mini-health centres @ 1 per 10,000 population	—	—	—	—	—	200	400	200	200	200
5. Leprosy treatment centre	—	—	—	—	—	1	50	6	12	6
6. T.B. wing (in 1, 2 & 3)	—	—	—	—	—	—	44	6	12	5
7. Infectious diseases centres (in 1, 2 & 3)	—	—	—	—	—	—	26	6	12	5
8. Indigenous Medicine (siddha & homeopathic) (in 1, 2 & 3)	—	—	—	—	—	—	30	6	12	5
Total :...	24	248	38	—	—	225	1930	398	568	341

*Includes compounders, male nurses, ward-boys but exclude peons, attenders, clerks and other administrative staff.

Family Planning

2.5 In the absence of reliable information about the number of couples in Dharmapuri district who are now effectively protected by sterilization, IUCD or conventional contraceptives, we must proceed on the assumption that their numbers are relatively small. Besides the District Family Planning Bureau, there are family planning units in each of the 7 taluk hospitals and in each primary health centre (16); there are also mobile units whose performance seems to be on the low side The total staff of about 165 is obviously inadequate for the needs of Dharmapuri.

2.6 On the basis of the targets, laid down by the Task Force for the State, of sterilizations of 9 per thousand, IUCDs of 3 per thousand and conventional contraceptives for 15 per thousand, the proportionate targets for the district would be as below to cover half the number of couples with 3 or more children.

TABLE III

Family Planning Targets for 1981 for Dharmapuri

1.	Sterilization : 9 per 1000 per 2 2 million—1981	19,800
2	I U C. Ds : 3 per 1000 per 2 2 million—1981	6,600
3.	Conventional Contraceptives : 15 per 1000 per 2.2 million—1981	33,000
	Total ·	59,400
	Effective couples @ 135 every 1000 population in 1981	297,000
	"Spacers" i e couples with three or more children @ 62 per 1000 population	136,400

2.7 The object must be to cover the entire number of couples with more than 3 children and the mini-health centres should be utilised for the purpose in addition to the Family Planning Organisation. The other couples not covered by 1, 2 & 3 above must be reached through intensified campaigns of family planning education.

2.8 The staffing pattern suggested by the Task Force for Family Planning is one auxiliary nurse-midwife for 5,000 of the population, widening of the duties of the Block Extension Educator, appointment of Asst. District Officers @ one for 8-10 PHC's (which means two in all for Dharmapuri) plus over-all direction and supervision by other officers at the State level for audio-visual publicity, etc. The number of persons working as nurse-cum-midwife will have to increase to over 400 by 1981: this has to be in addition to those now working in the 128 maternity and child welfare centres and 42 sub-centres, some of the nurses attached to the polyclinic centres and mini-health centres should also be encouraged to participate in family planning work with special inducements and incentives.

Total Staff Requirements

2.9 Thus the Health and Family Planning Programme as a whole will call for the addition about 450 doctors, 1000 hospital nurses and women trained in midwifery and family planning methods and 350 ancillary personnel, anesthetists, male nurses, compounders and pharmacists This will exclude the semi-skilled and unskilled workers (like sweepers and attenders) and the administrative personnel whose strength may have to be equal to, if not larger than, the

number of nurses. The total additional requirements will thus be about 2,000 by 1981 of which 1,200 will be needed by 1976.

2.10 Of these, some doctors will probably have to come from outside the district to supplement those belonging to the district with medical degrees. Other personnel should be recruited from the matriculates already unemployed and trained. It is suggested that a training institution should be set up at Dharmapuri attached to the Government Headquarters Hospital, for training 50 girl matriculates and high school dropouts a year in midwifery and family planning practices; another 50 girl matriculates as hospital nurses and that 50 boy matriculates from the district should be trained as pharmacists and compounders, X-Ray and serum analysis assistants. These will be directly absorbed in the health services which should be expanded on the lines suggested by the Task Force as and when and at the rate at which trained personnel become available.

Costs

2.11 The capital cost of the new health centres and hospitals and the district training centre will depend on the standards of construction and the equipment they need. It is unlikely to exceed Rs. 5 crores on purely functional standards. The annual additional recurring costs when the new centres are set up and trained personnel recruited, (as and when they become available) can be taken as Rs. 10 crores for the ten-year period making a total of Rs. 15 crores on the Health Plan.

Community Services

2.12 Both under India's Fifth Plan and Tamil Nadu's Perspective Plan, the need to enlarge the scope of community services over a wide range has been accepted and commitments made in principle in terms of the probable resources to be allocated for the purpose. The number of children in Tamil Nadu as a whole to be covered by the feeding programme will be 4 million of which 1.72 million will be below 3 years; *kuzhandaigal kappagams* (balwadis) will increase from 1,707 now to 12,500 by 1984. Pre-school education will be given to about a million children by attaching them to primary schools. There will also be the nutrition programme for pregnant or lactating mothers, linked perhaps with family planning and child welfare centres, and midday meals for school children. In Dharmapuri district midday meals are reported to be provided in nearly 1,600 centres (presumably all primary schools) to about 66,500 of poor families' children. There are 34 balwadis covering about 600 children.

2.13 To these will have to be added measures for improving sanitation and supply of safe drinking water where it is not available. Already various schemes have been drawn up and the proposed LIC loans (of which only half are returnable in 25 years) should encourage panchayats, panchayat unions or municipalities to implement schemes on hand and take up more wherever gaps are discovered. Only about 100 villages and 15 per cent of the rural population have been covered by piped water supply schemes. About 9,000 drinking water wells are reported to be available but even the few handpumps installed are out of order. The number of wells for drinking water should be increased in the next five years by 3,000 and by 1981 to 6,000 to cater to the larger population and cover the remaining villages and hamlets, especially places where scheduled castes and tribes are living. A further increase may be needed later but the position should be reviewed in 1976.

2.14 The Health Plan recommends the provision of a septic tank and latrine in every mini-health centre and polyclinic but panchayats and panchayat unions should be persuaded to provide a sufficient number of sanitary latrines in every village after a model unit is set up by the District Authorities in every village at an approximate cost of about Rs. 500 per unit. Waste disposal and environmental sanitation can thus be integrated with the Community Development Programme, with local resources and initiative being linked to such welfare schemes.

2.15 For balwadis and pre-school education, there will have to be additional whole-time workers (or teachers) whose numbers must eventually increase to 1,500 (@ one woman worker for each centre). Presumably the midday meals programme will be largely manned and supervised by teachers and grown-up students except for the work of preparation which may require one person for each centre. If nutrition for women is linked to family planning and child welfare centres, the work of preparation of foods would require assistants to part-time social workers or health department staff. Finally, the phased addition of about 1,000 wells a year for drinking water would give employment at an average of 5 full-time jobs a year per well or 5,000 persons in all. In full operation, all these community services schemes should be able to create employment opportunities for about 10,000 persons by 1981, progressively increasing by 1,000 every year from 2,000 in 1974. These employment levels will depend on the effective implementation of welfare schemes.

CHAPTER III

TRANSPORT DEVELOPMENT IN DHARMAPURI

3.1 Dharmapuri has a total of 2,626 kilometres of surfaced roads including 154 km of national highways, 1,230 km of state highways and 1,242 km of municipal and panchayat union roads. For a total area of 9,643 sq. km in the district, this is not a high proportion, though not too low either. Considering that three blocks—Thalli, Pennagaram and Pappireddipatti—have large forest areas and vertical hills, the network of the roads in the remaining areas—most of them acting as feeders to the main national highway running through the most important towns and centres in the district—make most of the large villages accessible by road. It is reported that about 81 villages (with more than 500 persons) are not connected by road; no details are available of the actual size of these villages thus deprived of aceess but many of them presumably are medium-sized and are remote. The metre gauge Salem-Bangalore railway line on the western side running for a length of 142 km and the broad gauge Madras—Salem main line running within the district for 58 km supplements this road transport system. The metre gauge line needs to be improved with provision of better passenger and goods services but presumably these improvements may be expected when development creates a demand for better train services.

3 2 The main transport problems in the district now are : (1) The filling in of the gaps in the road system according to the priorities indicated by development or the deficiencies pointed out by the people in the various areas facing difficulties in the transport of agricultural produce or passenger movement; (2) The upgrading and strengthening of the panchayat union and district roads in areas where heavy movements are expected because of the new factories to be set up and more raw materials to be supplied (such as larger sugarcane movements to the Palacode mill for fuller use of its capacity, present and potential); and (3) More attention to maintenance, especially where district or panchayat union roads and village reads are subjected to erosion during rain because of the undulating terrain and seasonal floods in jungle streams. (This may call for construction of more culverts and bridges). The schemes already on hand or those under implementation under the Special Rural Works and the Drought Prone Areas Programmes will be completed in the next three or four years till 1976 at a cost of nearly Rs. 3 crores.

3.3 It is however true that the proportion of roads to total area or even to the total population is one of the lowest in Dharmapuri compared with the other districts in the State. The low per capita income, the predominantly rural character of the population and the absence of mineral resources and mineral-based industries have all been responsible for this relative deficiency. There are, however, gaps in the road system which have to be filled; these are mostly in the Thalli, Pennagaram, Palacode and Kelamangalam blocks in the western half of the district and in the Shoolagiri and Veppanapalli blocks in the north. Priority will naturally have to be given to the Palacode and Kelamangalam blocks because of the industrial expansion envisaged there. Other areas where industries are located by private entrepreneurs on the basis of their own expectations of markets, manpower and raw material supplies will also need transport facilities, when their decisions on locations are available.

3 4 However, it is necessary to emphasize that road construction is not an end in itself. Roads will be only as good as the number of vehicles available to run on them to serve the transport needs of the areas and accelerate economic activity. A detailed traffic survey will have to be undertaken to estimate the potential passenger or goods traffic in the developing sectors and the quality of the roads they require before large investments are made in new road construction. Road metal is available in Dharmapuri at site in all areas; quarrying of rock and road formation can give employment in the off season (January to May) or in seasonal drought periods, in areas where landless workers or small farmers remain unemployed or are available for such works. There should, therefore, be a sufficient number of road construction schemes always on hand which can be put into execution at short notice.

3.5 Immediately more investments should be encouraged in road transport vehicles. The present average of about one vehicle per two kilometres of motorable road is too low to justify large road investments, even though road construction is a necessary element of the infrastructure for development and may have to precede most other forms of development. The number of vehicles registered in the district on 1.4.1971 was as follows :

Motor cars (including jeeps and station wagons)	163
Taxi cabs	31
Buses	227
Goods vehicles (public and private)	271
Tractors and trailers	181
Motor cycles, scooters, etc.	321
Others (ambulances, school buses, road rollers, etc)	25
Vehicles Total No	1219
Total surfaced road (km)	2626
Of which motorable (km)	1440

3.6 While it is true that a large number of vehicles registered outside operate in the district, they are mainly using the national highways and the major district roads which connect important centres within or outside the district.

3.7 The following tables show the vehicular position of the various classes of road transport operators in the district.

TABLE I

Nos. of Vehicles with Transport Operators

Sl. No.	Category	1.4.1970	1.4.1971	(+) or (—)
1.	Route buses (permnaent)	184	189	+5
	Route buses (temporary)	11	15	+4
2.	Public carriers	209	228	+19
3.	Spare buses	28	23	—5
4.	Private carriers	12	32	+20
5.	Contract carriages	26	19	—7
6.	Omnibuses	16	12	—4

TABLE II

Categories of Bus Routes

(Numbers)

Year	Town Bus	Intra-Dist.	Inter-Dist	Inter-State	Total
1969-70	14	99	40	17	170
1970-71	14	102	32	11	159
1971-72	18	111	26	16	171

3.8 A liberal licensing policy is required on new intradistrict routes so that passenger traffic may be promoted and the likely traffic trends may be studied. There is evidence of congestion on some routes and sometimes also long waiting periods at bus stops; seasonal peaks in passenger traffic will have to be met. The flexibility required in operation according to traffic patterns which may vary can come only from small operators. Wherever roads have to be upgraded or reinforced in order to render them fit for motor vehicles, there should be no delay in undertaking the works for the purpose. The same thing will hold good for goods vehicles, though it is possible to foresee that around Palacode within a radius of 45 km, the movement of additional quantities of sugarcane by road to the Palacode mill will call for more vehicles, better culverts and better roads from the areas growing sugarcane. The selection of the roads which need strengthening can be left to the panchayat union which will be in the best position to assess the needs of the areas in which additional irrigation or other facilities will enable the production of more cane.

Outlays

3.9 The investment in road construction and maintenance (except of national highways) required for the next 10 years should be kept at an average level of Rs. one crore a year, to reach a total of Rs. 10 crores by 1981. Excluding vehicles registered outside the district but with route permits inside Dharmapuri on inter-district and inter-state routes, investment in transport vehicles should be left largely to the private sector with encouragement being given to small operators with a fleet strength of up to 6 vehicles. The object should be to increase the number of buses and trucks to 500 in each category (or a total of 1000 in both) by 1981. Bank finance will be available to operators to commission these vehicles. This would call for an investment, (excluding cost of private taxis, cars, auto rickshaws in urban areas, etc) of Rs. 5 crores. The total investment in transport will thus amount to Rs. 15 crores.

Employment

3.10 Employment in road construction in 1972 in Dharmapuri was given as 2,067; on the basis of one full-time worker for every Rs. 3,000 of annual investment in road construction, it should be possible to maintain an average of 3 500 jobs a year for the proposed average annual outlay of Rs. one crore. Actually the jobs may rise from 2,500 next year to about 4,000 in 1981. On the basis of seven jobs for every bus or lorry put on the road (driver+conductor/assistant+clerical and accounts workers and workshop mechanics, etc.), Dharmapuri's road transport is probably now giving over 3,000 jobs; this should rise to 7,000 in ten years, of which direct employment may be taken as 5,000 and indirect 2,000. The additional employment, in roads and road transport, in 1981 will thus be 2,000 and 4,000 respectively The secondary employment given as a result of the larger traffic at wayside points and terminals to porters, roadside catering shops, petrol pumps, etc. will fall within the residual tertiary sector examined elsewhere.

CHAPTER IV

THE MANPOWER SITUATION : DEMOGRAPHIC BACKGROUND

4.1 Dharmapuri district had a population of 1,677,775 in 1971 (according to the Census) of whom 143,941 (8 6%) belonged to urban areas. Population density for the district as a whole was 174 per sq. km indicating a relatively more favourable land-man ratio than Tamil Nadu's (317 per sq. km) and that of the whole country 178 per sq km). Though the population appears to have been evenly spread out among the four former taluks in 1951, sub-region-wise, there has since been an uneven growth. For purposes of comparison, the new taluks, Palacode, Uthangarai and Denkanikottah have been taken along with the taluks of which they once formed a part and the following trend emerges therefrom.

TABLE I

Population Trends (Taluk-wise) 1951-71

Taluk	1951	1961	% Increase 1961 over 1951	1971	% Increase 1971 over 1961
Dharmapuri	313,113	374,581	+19 6	485,963[1]	+29.7
Hosur	270,687	325,354	+20.2	376,080[2]	+15 6
Harur	221,227	215,603[3]	— 2 5	280,197	+30 0
Krishnagiri	287,359	416,713	+45 0	535,535[4]	+28.5
Total	1,092,386	1,332,251	+21 9	1,677,775	+25 9

Note : 1. Includes figures for Palacode sub-taluk, formerly part of Dharmapuri taluk
2. Includes figures for Denkanikottah taluk, formerly part of Hosur taluk
3. Excludes figures for Uthangarai included in Krishnagiri taluk.
4 Includes figures for Uthangarai separated from Krishnagiri in 1970 and made a separate taluk.

4.2 The distribution of the population among the seven existing taluks and the trends in urbanisation are seen in the next table :

TABLE II

Taluk-wise and Town-wise Population

Taluk	Population 1971 (Nos)	Towns	Population (Nos) 1961	1971	% Increase
Dharmapuri	339,549	Dharmapuri	28,031	40,086	43.01
Palacode	146,414	Palacode	—	11,769	—
Krishnagiri	396,112	Krishnagiri	23,827	35,383	48 50
		Kaveripattanam	9,416	12,107	28.58
Uthangarai	139,423	Nil	—	—	—
Harur	280,197	Harur	9,075	13,5°0	49.31
Hosur	163,826	Hosur	11,683	16,591	42.01
Denkanikottah	212,254	Denkanikottah	11,215	14,455	28 89
Total	1,677,775		93,347	143,9+1	54.37

4.3 Though the over-all percentage of urban population to the total is only 8.6, the average growth rate in urbanisation of more than 5 per cent a year in the last decade is explained partly by the upgrading of Palacode into a town and partly by migration into the relatively more prosperous four major towns—Dharmapuri, Krishnagiri, Hosur and Harur—and perhaps also to the merger of some nearby villages into these four. This rate of urbanization need not, therefore, cause any great concern. There are about a dozen large villages with a population of 6000 and upwards which if treated as growth centres and developed in the next ten years can act as counter-magnets and filter towns to check the pressure on the four major towns where the existing services and employment opportunities—or the possibilities of their rapid expansion in future—are not very large.

Future Growth Rate

4 4 The population of this district was almost stationary between 1900 and 1921; in the next three decades the decadal rate of growth was low, i.e., 16 8 per cent (1921-31), 15.7 per cent (1931-41) and 12 5 per cent (1941-51). The reasons for the sudden spurt in the growth rate since 1951 have probably to be found in the decline in mortality rates, especially among children. Children in 0-14 age-group constituted 42.4 per cent in the district in 1971 as compared with 37 5 per cent in Tamil Nadu and the national average of 42 per cent. This sudden rise in the growth rate from 1.5 per cent per year between 1921 and 1951 to 2.5 per cent in the last two decades, poses special problems of accelerating development. The decadal growth rate of population in the district is expected to increase further by 30 per cent during 1971-81 (i.e. 3 per cent a year) according to the calculations made by the Tamil Nadu Planning Commission's Task Force on Mobilisation of Financial Resources. Any policy for manpower utilisation must keep in view this population forecast of 2,208,300 in 1981.

TABLE III

Dharmapuri : Workers and Non-Workers According to Age-groups

(Numbers)

	Total	Men			Women		
		Total	Workers	Non-Workers	Total	Workers	Non-Workers
All ages	1,677,775	852,274	495,116	357,158	825,501	115,762	709,739
0—14	711,664	357,908	43,885	314,023	353,756	14,435	339,321
15—19	133,613	73,302	54,239	19,063	60,311	11,087	49,224
20—24	124,142	61,101	55,786	5,315	63,041	12,684	50,357
25—29	125,075	56,888	55,733	1,155	68,187	14,823	53,364
30—39	218,262	106,932	105,764	1,168	111,330	26,491	84,839
40—49	160,366	86,834	85,718	1,116	73,532	19,070	54,462
50—59	104,729	56,727	54,957	1,170	48,022	11,243	36,779
60 +	99,724	52,484	38,996	13,488	47,240	5,920	41,320

Source : Census of India : 1971

4.5 It will be seen from the age-group table of workers and non-workers that 58,320 persons between 0-14 are classified as workers, three-fourths of them being boys. Child labour is thus a fact of life, however much one may disappove of it, especially in view of the Constitutional provision that these children should be taught in schools until they complete the age of 14. This,

however, is no reason why any future manpower policy should provide for their participation in work as a permanent feature, especially when determined efforts are being made to implement the Constitutional provision. We must also assume that school dropout rates will tend to decline with the development of the district, that more children will continue to receive middle school and high school education, or participate in vocational training schemes between the ages of 15 and 17. It is also possible that some boys and girls in this age-group will be taking up the work now done by those under 14 when the latter are persuaded to stay on at school. In any case, there seems to be no need for the State to assume special obligation for providing gainful employment to persons below 18 at this stage of the district's development.

4.6 The additions during the next decade to the district's active working force will, therefore, come from those who are now in the age-group 8-17. (Since no data are available from the Census according to the persons in each age-group, it is necessary to work out the estimates on certain assumptions regarding the percentages in the various age-groups.)

Numbers

Age Groups (years)	Persons	Men	Women
1 All age-groups	1,677,775	852,274	825,501
2. 0—19	845,277	431,210	414,067
3. **Deduct from (2)**			
(a) 0—7 24 % of the total population	402,666	204,546	198,120
(b) 18—19	53,109	27,059	26,050
4 Balance (8—17)	389,502	199,605	189,897

4.7 As against the men and women who will be coming of age as shown above during the next ten years, there will be a certain proportion of wastage due to death, sickness, physical handicaps and perhaps also some migration. On the other hand, persons now between 50-59 will be moving out of the labour force due to old age or death (though it is seen that there are 44,976 persons shown as workers in the age-group above 60), some old persons may, however, continue to be engaged in many household occupations. The net addition to the working force may therefore be estimated as follows:

Numbers

Age group	Men	Women	Total
Total 8—17 Yrs.	199,605	189,897	389,502
Deduct			
(1) Natural wastage 5% (death, illness, etc.)	10,000	9,500	19,500
(2) Migration 10% (males only)	20,000	—	20,000
(3) Replacement of workers (between 50—59)	54,957	11,223	66,180
Balance	114,648	169,174	293,822
Deduct 65% of women non-participants (see below)	—	117,000	117,000
			—
Net Total .	114,648	52,174	166,822

4.8 According to the Census Report, the total number of non-workers in the district numbered 1,066,897 composed of 357,158 males and 709,739 females. While among males, non-workers comprise mostly of persons under 19 and those above 60, there are non-workers in all age-groups among women. (We have to keep in mind that the 1971 Census adopted stricter criteria for defining a worker than those accepted in the 1961 Census). There is no means of saying how much of this is voluntary non participation for doing household work or for social reasons and how much due to lack of education and suitable employment opportunities.

4.9 As in the case of the boys, we must assume that girls under 14 will also be increasingly retained in schools and progressively more of them between 14-17 will continue in school or training schemes or take up the work now done by those under 14. Only about 22 per cent of women in the working age-groups (18-59) are now classified as workers. If we assume, optimistically, that as a result of increased educational opportunities, gradual social change and the availability of employment, this proportion of working women would rise to 35 per cent by 1981, about 52,174 women, of the 169,174 shown above, will be the additional number of workers, and the rest will be (as at present, voluntarily or otherwise) non-participants in the labour force.

4.10 To the figures thus arrived at, we may have to add the existing backlog of unemployed as shown in the live register of the Employment Exchange and the possible incidence of unemployment among those not covered by them. Programmes of development and schemes for creating employment opportunities outside them should therefore aim at a target of 180.000 additional jobs in all the sectors, primary, household industry, the manufacturing and tertiary sectors and other public and community services. The people to whom these opportunities have to be created are already born and in existence in the district and increasing proportions of these youth will have gone through some kind of schooling.

CHAPTER V

OCCUPATIONAL PATTERN : CENSUS DATA

5.1 In the absence of processed data from the Census of 1971 relating to the present employment pattern, it is not possible to make firm estimates of the existing levels of unemployment in the various occupations or in the sub-regions in Dharmapuri district. Some tentative conclusions can be drawn, for purposes of devising future employment policies, from the details of the numbers engaged in the various occupations given in the Census in existing categories of "workers" and from the figures given in the Employment Market Information on the numbers of persons employed in the organised/or reporting sectors and numbers enrolled on the live registers of the Employment Exchange.

5.2 Outside agriculture, the main kinds of employment are to be found in trade and commerce, miscellaneous services and some kinds of processing and manufacturing. But this broad occupational pattern does not provide any evidence on the probable periods of unemployment in a year or the incomes derived by a majority of the participants in such activities.

5.3 The taluk-wise breakdown of the Census occupational data shows a comparative shortage of agricultural labourers in relation to cultivators in Hosur, Denkanikottah and Palacode. Agricultural labourers are large in numbers in Krishnagiri taluk but there the opportunities for casual wage employment in agricultural work are also correspondingly large because of the irrigated area under the Pennar Dam which facilitates multiple cropping and the existence of some large holdings (especially in the Bargur block) which will require seasonal casual labour. Agricultural labourers are shown in large numbers in Harur and Dharmapuri taluks also; the scheduled tribes are concentrated in Harur taluk and it is not clear how many of them would fall into the category of agricultural labourers. But considering the more limited scope for irrigated agriculture in Harur and Dharmapuri, other efforts will be required to provide additional or off-season employment for these sections of the population.

5.4 The number of persons engaged in construction are low in all taluks, except perhaps Harur and Dharmapuri, possibly for the reason that construction activity hitherto has been very limited except when Government-sponsored irrigation or road works are taken up. Urban workers constitute about 10 per cent of all workers in Krishnagiri and Dharmapuri and over 8 per cent in Hosur; they are engaged mostly in trade and commerce and miscellaneous services including servicing and repairing. This group may require special attention with a view to developing available skills to raise efficiency of operation through systems of non-formal education.

5.5 The Census classification of occupations, however, does not by itself imply that the numbers of persons shown in each category have sufficient work to earn an income sufficient for a livelihood. According to data available with the Collectorate, there were about 3000 persons in various village occupations like carpentry, blacksmithy, bee-keeping, coir products, oil-pressing, gur and country sugar manufacture, brick-making and pottery.

The tribals in the Harur-Uthangarai areas are capable of weaving coarse blankets. There are hundreds of handlooms and about 60 powerlooms in the Dharmapuri region; basket-making and sericulture are providing occupations to workers in Denkanikottah taluk. It has not been possible to assess the extent of full-time employment or the incomes derived from them.

5 6 Some idea of the extent of unemployment/under-employment in the agricultural sector can be obtained from the available data on the size of holdings. These are not very accurate, in view of the several discrepancies found while analysing them, but they can help to determine the number of small or marginal farmers with holdings of 2 hectares (5 acres) and below who, in the conditions of rainfed dryland farming in Dharmapuri, may not be able to find work for all their family members on their farm (or even for themselves) throughout the year There are over 150,000 such small holdings in the district; about two-thirds of these are to be found in Dharmapuri, Palacode, and Uthangarai taluks—the less developed southern half of the district. These are the areas in which short-term rural works programmes to be taken up during the off-season (January to May) will have to be formulated.

Annexure to Chapter V

TABLE

Census Occupational Classification of Workers

Numbers

Occupational classification	Rural		Urban	
	Male	Female	Male	Female
Cultivators	300,212	44,783	4,362	411
Agricultural labourers	100,360	57,451	1,922	994
Livestock, forestry, fishery, plantation, etc.	4,592	1,329	246	33
Mining and quarrying	1,977	187	130	25
Manufacturing, processing and household industries	5.667	816	1,499	220
Servicing, repairs, etc.	6,539	484	5,183	261
Construction	2 870	454	1,320	154
Trade and commerce	12 208	1,542	10,412	1,111
Transport, storage and communications	2 668	33	4,270	254
Other services	21,385	3,753	7,294	1,467
Total Workers	458,478	11 032	36,638	4,930

CHAPTER VI

EMPLOYMENT TRENDS IN THE REPORTING SECTOR

6.1 The Employment Market Information does not cover persons engaged in (a) agriculture, (b) self-employment occupations, (c) household small-scale units employing less than 10 persons, and (d) construction activity in the private sector, except when it is undertaken for executing a Government contract. The numbers of both employers and employees in Dharmapuri district have increased in recent years as shown below :

TABLE I

Employment Trends : Reporting Sectors : 1966-72

Numbers

At the end of	Public Sector		Private Sector		Total	
	Establishments	Employees	Establishments	Employees	Employees	Women
March 1966	—	11,522	—	1,897	13,419	—
March 1967	—	16,855	—	1,869	18,724	—
March 1968	98	19,143	108	1,915	21,058	—
March 1969	111	20,038	228	3,907	23,945	3,629
March 1970	119	21,606	258	6,496	28,102	5,008
March 1971	131	23 658	261	7,800	31,458	6,210
March 1972	153	26,455	289	6,749	33 204	4,849

6.2 During the six years since the district was separately constituted (by detaching its four major taluks from Salem district of which they had formed a part) there has been an impressive increase in employment of nearly 19,800 persons, which gives an annual average increase of 3,300. The secondary effects of this increased development activity in two sectors should have created additional employment in the household and self-employed (non-reporting) sectors of which there is no estimate. Even on a conservative calculation of one other job for every two created in the reporting sectors, there could have been 1,700 jobs a year (covering hotels, domestic service, transport, private professional services of tailors, hair dressers, repair shops, retail trade, entertainment and so on). There is thus evidence already of the district's capability for creating about 5,000 jobs in a year even on the present scale of development activity.

6.3 The main areas in which this increase in jobs has occurred are teaching (owing to the steady additions to the number of schools at all the three levels—primary, middle and secondary), the very modest increase in public health facilities, the extension of rural electrification, which required more hands for the public electricity distribution system and accelerated road construction. Up to 1968, private sector employment was more or less stagnant but it has since shown an impressive increase, partly due to employment on Government contracts. The main lines of increase in public and private employment are shown in the two following tables.

TABLE II

Employment in the Public Sector

Numbers

Nature of Employment	Establish-ments (1972)	Employees		
		1970	1971	1972
Primary sector				
Agricultural services	4	192	269	238
Forestry	2	300	323	324
Silk cocoons	1	503	405	365
Manufacturing				
Wooden furniture	1	56	53	61
Stone polishing	1	9	17	22
Sundry hardware	1	—	45	49
Infrastructure				
Road construction	—	902	839	2,067
Waterways	5	168	352	488
Electricity distribution	1	1,354	2,384	2,994
Services				
P F. and insurance	1	47	44	44
Banking and financial	3	67	150	144
Bus transport	1	31	32	37
Warehousing	1	6	6	5
Communications	1	1,204	1,137	1,159
Administration				
Quasi-Government	39	6,725	7,191	1,315
State Government	20	4,682	4,850	5,069
Educational services	31	3,511	3,611	9,815
Medical services	7	1,025	1,168	1,262
Veterinary services	2	150	142	150
Welfare services	2	55	54	58
Community services	17	567	586	781
Total (including others) ..	153	21,606	23,658	26,455

TABLE III

Employment in the Private Sector

Numbers

Nature of Employment	Establish-ment 1972	Employment		
		1970	1971	1972
Mining	2	—	—	242
Rice milling	6	20	32	40
Sugar production	1	—	347	624
Sugar (indigenous)	1	98	13	40
Oil crushing	3	40	16	28
Sago manufacture	9	63	151	147
Beedi manufacture	9	157	111	97
Textile (cotton, silk)	4	89	81	83
Wood working	2	18	18	17
Matches	7	46	43	112
Bricks and tiles	4	58	37	39
Motor repairing	4	39	49	49
Building construction	14	1,825	545	605
Road constructions	1	1,154	1,205	1,667
Trade (wholesale)		401	374	415
Banking and financial	10	445	358	351
Bus transport	37	389	486	539
Educational services	17	189	202	216
Medical services	10	52	52	151
Recreation services	44	393	387	444
Catering services	29	269	325	309
Total (including others)	289	6,496	7,800	6,749

Women

6.4 The employment of women in the reporting sectors of public and private employment seems to have suffered a setback lately because of the completion of some major construction schemes and disbandment of labour. From a total of 3,629 in March 1969, employment of women went up to 5,008 in March 1970 and 6,210 in March 1971 but thereafter declined to 4,849 in March 1972. This indicates the need to have a sufficient number of projects on hand on which work could start soon after the completion of a major public construction contract. (It is not always easy to find such work in the same area in which labour is disbanded on the completion of a project and mobilty of women workers is very limited.) Outside this area of manual labour in public works, women are mainly employed in local administration, education, medical and community services, and in the processing and reeling of cocoons, all in the public sector.

Trends in Unemployment

6.5 The recent disturbing rise in unemployment in Dharmapuri district is indicated by the increase in the registrations at the Employment Exchange, especially of fresh entrants to the labour force lacking work experience.

TABLE IV

Live Registrations at the End of Four Calendar Years : (1968-1971)

Numbers

	Dec. 1968	Dec. 1969	Dec. 1970	Dec. 1971
With Work Experience				
Professional, technical	528	771	1,106	1,412
Administrative, Executive and managerial	46	96	122	162
Clerical, sales, etc.	56	54	115	44
Agricultural, dairy, etc.	43	52	78	76
Mines, quarrying	2	5	7	3
Transport and communication	263	370	531	802
Craftsmen, etc.	141	138	214	279
Sports, services, etc.	95	234	305	175
Others with work experience	1	7	5	5
Sub-total	1,175	1,727	2,483	2,958
Without Work Experience				
Graduates, arts	40	39	93	114
Graduates, science	35	97	174	174
Graduates, commerce	2	7	8	11
Matriculates	2,093	1,967	2,863	4,700
Middle school	1,687	1,694	2,206	3,503
Literates	1,339	1,797	1,971	3,722
Workers without occupations	582	507	1,092	4,252
Grand Total	6,953	7,835	10,890	19,434

Source : District Employment Officer, Krishnagiri

6.6 The increase in the number of persons with work experience is also unduly large. In the developing economy of the district, a rise in the joblessness of experienced workers from 1,175 at the end of 1968 to 2,958 at the end of 1971 is a matter for concern. There should be considerable scope, if a proper manpower plan is drawn up, for using their skills in the development of the district. The other major feature is the joblessness among the out-of-school youth, both school-leavers and school dropouts. In the next category are the illiterates; who have presumably no inherited skill of any kind and have not had any opportunity to gain any work experience. In one year their numbers have gone up four-fold from 1,092 to 4,252, a rise which is perhaps partly due to an increasing faith in the usefulness of the employment exchange. Lastly, there is a steady rise in the numbers of women registering themselves at the exchange. The figures (available for the mid-year) for the last four years are as follows:

	June 1969	June 1970	June 1971	June 1972
Number of women on the Live registers	1,364	3,994	5,875	7,103

CHAPTER VII

PROBABLE TRENDS IN MANPOWER DISTRIBUTION 1971—81

7.1 An element of uncertainty is unavoidable in estimates of the probable numbers of young men and women who would continue to participate in agriculture, working on family farms as cultivators—taking advantage of the new opportunities opened up by the proposed changes in cropping patterns in dryland farming and additional irrigation facilities—or as agricultural workers for whom there will be a greater need when the gross output in agriculture is doubled in the next ten years, or in the relatively low income occupations connected with livestock farming, fishery and forestry. There are also self-employment opportunities in household processing, manufacturing or supply of services and goods of which only rough estimates can be made.

7.2 Even with the present average rate of growth in urbanisation of about 5 per cent a year, the urban proportion will only be 10 per cent of the district's projected population of 2.2 million. The predominance of the rural element will continue to be a feature of the district. To the extent to which the accelerated tempo of agricultural activity does not provide them sufficient work for a livelihood they should be given opportunities in rural works programmes—soil conservation, afforestation, irrigation works, road construction, and rural drinking water supply schemes. Whether agricultural work will provide a sufficient income to the small or marginal farmers and landless workers as a result of the proposed schemes will be partly known by the response received to the demands for labour under these various rural works schemes. Flexible programmes will, therefore, be required to provide jobs, especially in the agricultural lean season from January to May. Sanction of funds must be made in time to enable parts of construction or other work to be completed during the first half of the year, to leave workers free to take up agricultural operations during the second half In drought years or in any area where agriculture does not provide sufficient work, rural works can continue during the rest of the year also.

7.3 The highly favourable cultivator-agricultural labourer ratio in Dharmapuri (35:16) shows that landless labour does not present the acute problem that it does, say in Kerala (11:19). Andhra Pradesh (58:68) or in Tamil Nadu as a whole (46:45). There are five other major districts in Tamil Nadu where agricultural labourers are substantially below the numbers of cultivators—Tiruchirappalli (63:37), Ramanathapuram (41:27), North Arcot (51:40), South Arcot (53:46) and Salem (41:32). Compared even with these, the Dharmapuri ratio is the most favourable; again, some of the taluks within the district show a more favourable cultivator-labourer ratio than others: eg. Hosur (3:1), Denkanikkottah (49:17 5), Krishnagiri (2:1), Uthangarai (29:17), Harur (11:6), Palacode (33:13) and Dharmapuri (64:29). This would indicate that any rural works or other employment schemes intended for manual unskilled workers should preferably be started in Uthangarai and Harur, where there is an average of more than one worker for every two cultivators and hence workless periods are likely to be longer.

7.4 According to the available data on the size of land holdings (see Annexure to this Chapter) it is seen that of about 89,226 holdings below one

hectare (2.5 acres), nearly half (42,330) are in the three blocks of Dharmapuri taluk and in Palacode sub-taluk; Uthangarai with about 9,500 such small holdings also falls in this category where cultivators' families are likely to be under-employed for a good part of the year. At the other end are some blocks with large holding as shown below :

Blocks	No. of Holdings over 4 Hectares	Area Covered (hectares)
1. Kelamangalam	850	9,136
2. Hosur	1,139	8,605
3. Shoolagiri	1,604	11,338
4. Veppanappli	1,876	9,629
5. Krishnagiri	716	9,282
6. Barugur	2,632	13,485
7. Kaveripattanam	3,104	18,942
8. Uthangarai	1,050	7,899
9. Harur	889	7,946

7.5 There will be need for wagepaid labour on all these large farms, especially during normal periods of agricultural activity. With the accelerated tempo envisaged in the agricultural plan, it is expected that the increase in the rural, uneducated landless labour force, would be fully absorbed, though there may be a certain amount of underemployment for lack of sufficient work in the slack season. With the increase in the size of families, there will be a further gradual reduction in the size of larger holdings due to partition of property. (Since the ceilings for dry land are sufficiently high, ceiling legislation may be neutral factor in partition and fragmentation of holdings).

7.6 Any estimate of the proportion of the additional labour force which will stay on in agriculture as cultivators or agricultural labourers will, in the circumstances explained above, appear somewhat arbitrary. About 25 per cent of the population is now categorised as cultivators; if the same proportion is maintained in 1981, there will be 2 lakhs more of cultivators; agricultural labourers (now 10 per cent) will increase by about 60,000. The total of about 510,500 workers (349,768 cultivators and 160,727 agricultural labourers) in agriculture in 1972 has to be viewed in the context of about 407,700 hectares of net sown area and 466,500 hectares of cropped area, plus the area to be reclaimed from waste, which give a little over one person for one hectare. The present disability of these people is the low productivity of the land on which they work; if this is improved with the new agricultural strategy recommended, there will be sufficient work not only for those now depending on land but also for at least 10 to 15 per cent more in double cropping in the additional irrigated areas, application of fertilizers and plant protection measures, weeding, seed multiplication and distribution and harvesting. The availability of off-season employment in the rural works scheme recommended elsewhere will also provide additional inducements for these presons to stay on; rural works programmes have, therfore, a double purpose and their importance should on no account be under-emphasised. So long as dryland agriculture as in Dharmapuri has to be labour-intensive, it is necessary not to do anything which may deplete the labour force in the agricultural sector and lose it to the slums in urban areas.

7.7 Earlier, it has been pointed out that children below 14 are now workers in agriculture and household occupations. When they are increasingly retained in schools, persons in the 15-18 age-groups and some of the women

not in the labour force now may take up their tasks. For all these reasons, it is possible to take a somewhat optimistic view of the additional numbers that are likely to be absorbed in the private unorganized sectors—agriculture, livestock, forestry, fishery, private construction, wholesale and retail trade, private professional and personal and domestic services and so on. While these employment opportunities will be created by the investments proposed in the district's economy, they will not necessarily form part of the job targets in the public sector investment programme (which are set out in the next chapter).

7.8 For the reasons explained (in paragraphs 3, 4, 5 and 6 of this chapter) we can provide for a 10 per cent increase in the number of cultivators (including those on whom ownership rights may be vested of reclaimed land, or allotment of surplus land after imposition of ceilings, or those acquiring land by succession, partition, purchase or other transfers). An increase of 12½ per cent in the number of agricultural labourers, of whom there is a relative shortage in some taluks in the western half of the district, is also permissible. The larger incomes arising from the planned doubling of the agricultural output (both irrigated and dryland) by 1981 as a result of the additional land from reclamation and irrigation and the new cropping strategy, including the more profitable sunflower, can well support this additional manpower in agriculture which may be estimated as in the table below :

Number of Persons

	Cultivators		Agricultural Labourers		Total	
	Men	Women	Men	Women	Men	Women
1971	304,574	45,194	102,282	58,445	406,856	103,639
Additional 1981	30,000	5,000	12,000	7,500	42,500	12,500
Total :	334,574	50,194	114,782	65,945	449,356	116,139

Estimated gross cropped area in 1981 (including double cropped area) . . . 525,000 hectares Grand total of agriculturists : 565,495 (cultivators + agricultural labourers)

7.9 According to the Census, there were 6,200 workers in livestock, fishery, forestry and plantations. Besides these existing workers getting more work and incomes as a result of development (under the schemes on hand for animal husbandry and afforestation), about 30 per cent more will find it either necessary (for family reasons or lack of mobility, education, etc.) or profitable enough to stay on in their traditional occupation, encouraged by schemes for this sector. This would mean an addition of 1,600 men and 600 women to this group, in addition to those directly engaged in the public programmes, in this sector.

7.10 One of the major schemes for development and rural employment recommended in the agricultural plan for Dharmapuri is mulberry cultivation on about 10,000 hectares by 1981. About 800 hectares now give work to about 2,000 families in mulberry and cocoon rearing. The Plan assumes that 6,000 hectares more will be irrigated of the additional 10,000 hectares; this means further work for a family on mulberry cultivation and in the rearing of cocoons. Some of these families may also be able to pursue other agricultural work, but in terms of full-time employment, it could be assumed that there will be an equivalent of 20,000 additional jobs in 1981 on these 10,800 hectares, (after making allowances for whatever employment is now being given by cultivation of other crops in these areas). The difference, however, will be that more women will be fully occupied in the cocoon-rearing sheds than the

men in growing the mulberry in the field. A fair allocation of jobs might be about 7,000 for men and 13,000 for women, exclusive of the jobs to be created in reeling, twisting or spinning yarn and silk weaving.

Small and Cottage Industries

7.11 Any estimate of the growth of employment in the small-scale and decentralised sector would largely be a matter of surmise since self-employment and wage employment would both be combined in small units. Though 400 registered small-scale processing or industrial units exist, it was not possible to obtain much information on their present working, since (it seems) many have either not started working or have closed down; public loan assistance to these units is at a very low level. However, some of these units like powerlooms, machine shops, carpentry units, fabrication shops, etc. may be revived or developed and become viable when there is a general spurt in construction and manufacturing activity and more incomes and investment flow into the district. From an estimated 750 persons now probably engaged in such small-scale industries (outside the reporting sector) this work force could be doubled by 1976 and doubled again by 1981 (to 3,000) with offers of more incentives, technical guidance and financial, asistance to small units. The development of ancillary units for construction, supply of parts and materials, with guarantee of a market can do much more to promote this sector. This will largely benefit men but about 500 women can find opportunity in work suited to them.

7.12 The decentralised sector is even more imponderable. Various kinds of activities, most of them undertaken during the agricultural slack season or by persons not directly engaged in cultivation—such as women, children and aged persons—have been mentioned. Examples are coir manufactures bee-keeping, handloom-weaving, palm gur-making, bamboo basket-weaving, tamarind-processing, processing of hides and skins, cutting firewood and charcoal-making and so on. Estimates varying from 3,000 and over have been made of the persons now engaged in these occupations. The 1971 Census showed 7,166 males and 1,036 females as workers engaged in manufacturing and processing and household industry.

7.13 With various other opportunities in agriculture and industry and in the tertiary sector, more people should find this sector more profitable in future. Those already in it may find more employment and incomes if they can sell more of cottage industry products. As a result of economic development, there will be scope for handlooms, coir products, more bee-keeping (as an adjunct to sunflower cultivation) tobacco-curing. mat-weaving and so on. In the case of caste or family occupations, there will be a tendency for sons and womenfolk to continue to work on them for lack of other work or for lack of mobility. Assuming an increase of 40 per cent in this group would mean addition of 3,000 persons, about 1,400 of them being females.

Private Construction

7.14 There are no estimates available of the outlays in private housing or other construction. There are about 300,000 residential houses and households in the district. Even if the relatively more prosperous among 27,000 urban households and the large rural landholders with 4 hectares or more (numbering over 22,000) were to build new houses or extend and repair existing dwellings and construct farm buildings, there could conceivably, and probably will, be an investment on an average of Rs. 2 crores a year for the next ten years. (This would mean 2,000 houses at the rate of Rs. 10,000 each or half that number

at double the cost). The availability of bricks and tiles form the Hosur factory would be additional encouragement for private construction. Assuming that Rs. 50 lakhs of this will be spent on wage payments, and that 60 persons can be paid in a year on a full-time basis for every lakh of rupees spent, there can be 3,000 persons in employment in private construction every year: to this should be added expenditure and employment on maintenance. Over the ten years, it is safe to assume that additional employment in this category will be 2,000 in the first year rising to 6,000 in 1981, with men taking a slightly larger share, say 3,500 of these jobs.

Trade and Commerce

7.15. In the trading and financial sectors the rising tempo of economic activity may only keep existing workers more active than before by increasing their turnover. The Lead Bank for the district (the Indian Bank) has identified several growth centres, and recommended that some important unbanked areas be served by new bank branches. The LIC will also find more business in the district and employ more personnel.

The probable trends are indicated below :

Numbers

	(Census 1971)	1976 (Estimated)	1981 (Estimated)
Trade and Commerce			
Rural	13,750	—	—
Urban	11,523	—	—
Total :	25,273	—	—
Reporting Sector	(June 1972)		
EMI DATA			
Wholesale trade (private)	384	600	1,500
Provident fund and insurance (public)	44	100	300
Banking and Financial Services			
Private	338	600	1,000
Public	157	300	600
Total:	923	1,600	3,400

Of this net addition of about 2,300, about 300 may be women in the clerical and administrative grades.

Retail Trade

7.16 The present employment in retail trade in the household and other non-reporting establishments is considerable, though not precisely measured except under the Census Occupational classifications which gave a total of over 25 000 as workers in this category. (In the reporting sector the figure is given as 37). The additional employment (or self employment) in retail trade directly flowing from the development envisaged may not be considerable because the benefits will be in the shape of the larger turnover for those already in the field Even so, on an estimated addition of 5 persons for each of the 500 large villages and about 50 persons in each of the towns, an additional employment of 3,000 persons can be expected, of which 1,000 may be women.

Residual Tertiary Services

7.17 On the rate of growth in employment in the residual tertiary sector, estimates can fluctuate widely according to the degree of optimism or conservatism on which the expansion of the demand for various kind of services is estimated or the pace at which the development plan will be implemented. There are hardly any data on the range of such services now provided or the persons making a living out of them, except when these fall within the reporting sector as a result of being undertaken in the large establishments. The EMI report for 30.6.1972 lists the following :

Recreation service	389
Catering service	313
Total	702

7.18 Data on small-sized cinema houses, hotels and restaurant workers, tailors and garment-makers, electrical and mechanical repairs men, domestic servants, hair-dressers and launderers, self-employed craftsmen and artisans (like goldsmiths, blacksmiths carpenters, and stone masons), professional private transport operators including bullock carts, educated professional workers like lawyers, accountants and their assistants are all lacking except for the Census classification (1971) for the district under the following two categories of workers :

Numbers

Classification	Total	Men	Women
1) **Servicing and repairs**			
Rural	7,023	6,539	484
Urban	5,444	5,183	261
2) **Other services**			
Rural	25,138	21,385	3,753
Urban	8,761	7,294	1,467
Total .	46,366	40,401	5,965

7.19 Obviously many of these persons will get more work and income as a result of development activity in the district; but if the district is able to sustain 46,000 persons even at its present relatively lower level of development, it should not find it difficult by 1981 for 3,000 more persons to find work in repairs and servicing and 4,000 more in the other domestic and personal services. About 3,000 of these will be women. There will be more teachers, personal, industrial and office workers and larger purchasing power in the agricultural sector, resulting in outlays on various services not now rendered and in catering to their needs more men can find a living. There will be more cycles, radios, electrical pumps and gadgets, electrical wiring and repairing work in offices, and educational and medical institutions. Eating shops and hotels are bound to increase and there will be a lot more of tailored garments because of more money, changes in sartorial habits and a larger population, with more children at school.

Peripheral Markets

7. 0 It is also necessary to emphasise the importance of what may be described as "peripheral" markets, in which the quality of the goods may not be up to approved standards and their price or the net income derived from producing and selling them may be below certain accepted norms but

still sufficient to make some people earn a living. With the proposals for vocational training contained in the educational plan, it is possible that there will be more of out-of-school youth possessing some skills which they can put to use to produce some wanted goods or services. Carpenters, tailors, and people trained in shoe-making and production of leather goods with improved tools will all find scope for engaging themselves in fruitful work in producing simple household furniture, door and window frames, cheap garments for rural children or adults and so on To encourage this, it is suggested that in the major towns, the Government should construct sheds and let them out at nominal rents to out-of-school boys and girls to be used as working and sales centres. Arrangements should also be made to provide sewing machines or other tools on concessional hire-purchase terms. Wherever cheap raw materials can be, and are, supplied, some check should be exercised on their use and final sales to prevent malpractices Enlargement of the scheme should be gradual, after evaluation of modest experiments, say in 20 sheds in each of the four main towns at first, to be extended later to the others. The employment generated under this programme will be part of the tertiary activity envisaged above and no separate estimate is made.

7.21 To sum up this part of the manpower analysis, the additional employment that can be generated under various heads by 1981 is shown below :

Table : Employment in the Unorganized Sectors : 1981

	Men	Women	Total
1. **Agriculture :**			
a) Cultivators	30,000	5,000	35,000
b) Agricultural labourers	12,500	7,500	20,000
2. Livestock, fishery, forestry	1,600	600	2,200
3. **Sericulture :**			
Mulberry cultivation and cocoon-rearing	7,000	13,000	20,000
4. **Decentralised industry**			
a) Small industries	2,500	500	3,000
b) Cottage industries	1,600	1,400	3,000
5. **Construction :**			
Private housing	3,500	2,500	6 000
6. **Wholesale trade and commerce**	2,000	500	2,500
7. **Retail trade**	2,000	1,000	3,000
8. **Tertiary sector :**			
a) Servicing and repairs	2,000	1 000	3 000
b) Domestic and personal service	2,000	2,000	4,000
Total	66,700	35,000	101,700
Total additional working force	120 000	60 000	180,000
Balance	53 300	25,000	78,300

Conclusion

7.22 Though the figures are estimates based on current data and probabilities, they are by no means speculative or mere expressions of hopes. However, these opportunities will not be created unless the sectoral targets for public programmes (outlined in the next chapter) are achieved. The two are inter-dependent and cannot be viewed separately. Public investment and the outlays in the organised private sector envisaged for the development plan as a whole will have to provide the thrust for the unorganised sector, which really has to contribute even more to creating employment.

Annexure to Chapter VII

Size of Land Holdings in Dharmapuri District (Block-wise)

Blocks	Up to 1 Hectare		1—2 Hectares		2—4 Hectares		Over 4 (Hect)		Total	
	Nos.	Area (Hect.)	Nos.	Area (Hect.)	Nos	Area (Hect)	Nos.	Area (Hect.)	Nos.	Area (Hect)
Dharmapuri	10,884	5,377	4,976	6,399	2,943	7,183	892	3,422	19,695	22,381
Pennagaram	8,992	5,881	6,136	9,036	3,407	8,277	1,119	5,528	19,654	28,722
Nallampalli	8,234	5,728	5,264	7,482	2,520	7,130	779	4,479	16,797	24,819
Kelamangalam	1,186	1,740	2,924	5,119	2,142	6,875	850	9,136	7,802	22,870
Hosur	2,535	1,234	1,606	2,181	1,402	3,637	1,139	8,605	6,682	15,657
Shoolagiri	3,965	2,116	3,100	4,465	1,523	6,630	1,604	11,388	10,192	24,549
Veppanapalli	2,439	2,218	579	984	891	2,785	1,876	9,629	5,785	15,616
Krishnagiri	4,312	3,792	632	1,069	1,014	3,342	716	9,232	6,674	17,485
Bargur	3,408	3,126	596	1,017	1,471	4,978	2,632	13,485	8,107	22,606
Kaveripattanam	3,643	3,482	664	1,094	1,362	4,758	3,104	18,942	8,773	28,276
Palacode	14,221	6,668	9,860	9,922	6,516	12,302	2,096	9,763	32,738	38,655
Thalli	7,482	5,549	2,862	5,651	3,339	12,873	1,225	3,911	14,908	27,984
Uthangarai	9,457	11,227	4,319	9,305	5,102	17,466	1,050	7,899	19,928	45,942
Pappireddipatti	2,421	1,354	5,474	6,168	1,912	5,215	642	2,974	10,449	15,711
Morappur	2,122	1,302	6,412	9,319	5,549	13,839	1,828	11,144	15,821	35,604
Harur	3,225	2,760	6,032	9,249	4,947	12,204	889	7,946	15,093	32,159
Total . . .	89,226	63,554	61,436	88,460	46,040	129,494	22,441	137,483	219,098	419,036

Hect.—Hectares

Source: District Statistical Officer, Dharmapuri.

CHAPTER VIII

SECTORAL TARGETS OF EMPLOYMENT—1973-82

Agricultural Extension

8.1 Under the proposed agricultural plan, more employment would be created in the extension services, research and demonstration centres, supply of inputs like seeds, fertilisers and pesticides and in the soil conservation programme. In June 1972, the number of persons engaged in all public agricultural services was shown as 289, an average of 18 per block or only one person for more than two (Census) villages. The need for strengthening these services was stressed earlier in the Agricultural Plan. The introduction of new varieties in ragi, cumbu, cholam, progaganda for choice of the right sowing season, the drive to persuade cultivators to introduce sunflower cultivation (through demonstrations, supply of seeds and know-how) and arrangements for purchase of seed, timely supply of fertilisers and plant protection equipment would all call for a much larger staff in the district's agricultural services. There are about 600 large villages. To start with, there must be at least as many persons in the extension services by 1973; though not necessarily located in each and every village, more extension units should be set up, each responsible for a group of proximate villages.

8.2 With the progressive increase in the supply of seeds, fertilisers and pesticides, the extension of research and demonstration, soil survey and conservation measures, the staff will have to be increased gradually to about 1200 in 1981. Details of the manpower needs of the Agricultural Plan are shown below:

Additional Staff for Agricultural Research and Extension

(Numbers)

	1973-74	1975-76	1980-81
1. Soil survey of 4 taluks	20	20	—
2. Soil conservation units (one for each block) (16x6)	96	96	96
3 Research · (a) main stations	40	60	100
(b) 3 sub-stations	30	30	30
4 Demonstration units (one for each block)	80	100	150
5 Extension services	500	1000	1200
Total	766	1306	1576

Rural Works Schemes

8 3 In the main the additional employment in agriculture should come as a result of the greater activity and higher incomes resulting from the new cropping strategy and thus help to provide a livelihood to the additional working force which is not only expected to stay on but also required in the farming

sector to provide manpower as cultivators or as agricultural labourers. However, considering that 80 per cent of the land will always continue to be under dryland agriculture, and with the prospect of lack of work for the poorer agriculturists from January up to May (or June), a scheme of rural works will be necessary to provide work and income during the off-season for about 120 days in the year. An inducement will thus be provided to retain the required manpower in agriculture. This will incidentally benefit also those who may have no agricultural work even during the normal season (July to December), and during drought years. The continuance of Rural Works Programme during the second half of the year should be guided by the number of such persons who are so willing to work on these schemes. The following programmes (suggested in the Agricultural Report) can provide the equivalent of 20,000 full-time jobs in a whole year but will really help reduce underemployment and poverty in the rural areas and stem the tide of migration to urban areas. At the same time, much overdue improvements in the primary sector can be accomplished since all these schemes are essentially productive.

Number of Persons to be Employed in Rural Works Programmes in Agriculture and Irrigation (120-180 days)

Description	1973	1976	1981
1. Soil conservation : (40,000 hectares a year)	25,000	25,000	25,000
2. Land reclamation @ 4,000 hectares per year and 5 persons per hectare	20,000	20,000	20,000
3 Improvement of pasture land 15,000 ha. (3,000 hectares a year)	5,000	5,000	nil
4. De-silting of 2,200 tanks @ 200 tanks a year	1,500	1,500	1,500
5. Deepening of 20,000 wells @ 2,000 wells a year and 5 persons for each well for 120 days	10,000	10,000	10,000
Total	61,500	61,500	56,500

8.4 The need for special Rural Works Programmes should decline soon after 1981 when the main tasks are accomplished by such productive use of idle rural labour to strengthen the infrastructure and economic development is able to provide other gainful work for the workers. On the basis of an average wage of Rs. 3 per worker for 120 days in a year, the above programmes would cost Rs. 225 lakhs (including supervisory charges) a year for the next ten years.

Irrigation

8.5 The irrigation sector is likely to create the following additional full-time employment opportunities :

(No. of persons)

Description	1973	1976	1981
1. Maintenance of irrigation works	400	700	1,000
2. Construction of surface project canals	2,000	4,000	6,000
3. Construction of new wells—5500—550 wells a year @ 5 persons for each well for one year + supervisory and clerical staff	3,000	3,000	3,000
Total	5,400	7,700	10,000

Power

8.6 The power programme assumes extension of electricity to all villages except perhaps remote hamlets. It will call for an expansion by nearly half of the existing staff working on maintenance and repair of sub-stations and transmission lines. It is expected that the employment on maintenance will rise from 3,000 (in 1972) to 4,000 by 1976 and 5,000 by 1981. During the next five years when electricity is extended to other villages, there will be additional employment on the grid but this will end thereafter leaving only maintenance work.

Mining and Quarrying

8.7 At present about 250 persons are shown as engaged in mining and quarrying in the EMI reporting sector. When the proposals for granite polishing and export of polished stones are implemented the number of mining workers should increase. Also irrigation, road and other construction, concrete structures in public buildings would require gravel. The Census classification shows 2,320 persons as engaged in mining and quarrying. Besides giving fuller work for these persons, the new development schemes can absorb about 1,000 persons more in mining and quarrying with women sharing the jobs almost in equal proportions.

Industrial Development

8.8 The total employment in organised manufacturing was 1,658 (on 30 6.72) of which only 106 was in the public sector in furniture-making, stone-polishing and sundry hardware. (Because of the difficulties of the Palacode Sugar Factory, employment there had declined from 624 at the end of March 1972 to 383 in June 1972 but this should be capable of being immediately restored.) The other main areas of private sector employment were in the manufacture of sago, beedis, matches, stone-polishing, steel and motor repair workshops.

8.9 The additional employment in the proposed new industrial projects recommended may be estimated as below :

Manpower Needs of Proposed Industrial Projects

(No. of Persons)

		1976	1981
I.	**Agro-Industries**		
	Palacode sugar	800	1,000
	Distillery	100	120
	Bottling plant	100	250
	Maintenance units	50	75
	Silk-spinning—(Hosur)	250	500
	Silk-weaving	150	250
	Spun silk	—	500
	Solvent extraction		
	(a) Kaveripattanam	100	125
	(b) Bargur	150	200
	Milk-processing—(Hosur)	200	300
	Poultry	350	500
	Ragimalt—(Denkanikkottah)	50	75
	Fruit—canning and can-making	50	100
	Poultry feed	25	50
II.	**Construction Industries**		
	Bricks and tiles—(Hosur)	100	150
	Furniture—(Dharmapuri)	75	150
	Stone-cutting and polishing	200	350
	Metal fabrication	25	50
III.	**Transport and Automobiles**		
	Scooter assembly	750	1,000
	Agricultural tillers	50	100
	Mechanised repair plants	35	50
	Total .	3,610	5,895

Residual Industry

8.10 In the residual factory industrial sector, in which present employment is about 800 (comprising beedi, sago, matches, steel products and repair shops) it is possible to envisage the growth of more private sector units when more technical and industrial skills are developed in the district and development in other areas gathers momentum. On a conservative estimate it should be possible to double this employment by 1976 to 1,600 and raise it further to 3,000 by 1981. The organised industrial sector as a whole could thus create 4,500 more jobs by 1976 and advance further to reach a total of 8,000 additional jobs by 1981.

Construction : Public Buildings, Housing and Tourist Lodgings

8.11 The ten-year plan for Dharmapuri envisages much construction activity. Besides irrigation works, roads and bridges, public buildings will have to be provided for agricultural research centres, schools and vocational training institutions, hospitals and health centres and new administrative offices at a cost of over Rs. 15 crores (exculding equipment). There were only 457 building workers in the district in the reporting sector but this number excludes those working on private construction or under contractors for non-governmental works. The 1971 census enumerated 4,798 persons under this category, but even this is not a large number compared with the tasks on hand in both private and public building construction. Estimating the labour costs of public buildings at about one-third, the outlay on wages may be of the order of Rs. 5 crores. Public building construction work under all categories would need over 2,000 workers per year on an average, but since some time will elapse for financial sanctions and approval of designs it is assumed that there will be 1,000 building workers in the reporting sector by 1974 and 2,500 by 1976, gradually rising to 3,500 by 1981.

8.12 Public buildings for offices and institutions will not be enough in the backward conditions in Dharmapuri district today. The existing housing accommodation is most inadequate even in the major towns and many of the new residential buildings have been requisitioned for locating offices, banks, post offices, etc. aggravating the shortage of living accommodation. A beginning has been made in Dharmapuri town in providing quarters for Government staff but substantial additions will be needed to this programme to house doctors and other medical personnel, teachers, training instructors and research staff With the cooperation of the Tourist Department, substantially more single-room accommodation should be provided not only in the main tourist centres in the district (Hogenakkal and Pennar Dam, for example) but also in the main towns where the limited tourist-bungalow accommodation is mostly required for district officials on tour and the public is now being deprived of the facilities by pre emptive advance booking by district officials. Private accommodation in the available private lodging houses is of such deplorable sanitary and hygienic standards that most tourists from outside are scared away.

8.13 Both to remedy the deficiency in housing and tourist facilities and to set an example to private hotels, a modest construction programme will be necessary, involving an outlay of Rs. one crore per year of which one-fourth will be for tourists and the rest intended for housing for public employees. Banks and the LIC should be encouraged to construct their own buildings and providing extra space in them for commercial offices, by being allotted land at convenient locations. Touring officers should be provided adequate accommodation so that they do not deprive other tourists of the facilities they need. This additional construction programme would also help to raise employment from about 500 in 1974 (when it may begin) to 2 500 in 1981 In public construction as a whole there will be scope for 6,000 more workers in 1981.

Transport

8.14 With the prospective doubling of buses and trucks (see Transport Plan) it may be expected that direct employment will be 5,000 in 1981 as against about 2,300 now; indirect employment will be 2,000 in the shape of more hands in additional petrol and oil stations and tyre-mending units.

Social Services

8.11 The potential levels of employment in the main social services (indicated in the educational and medical programmes) are summarised below :

	1972 (E.M.I. Data	1976	1981
Education			
Technical	132	350	500
General (public)	8,840	6,000	+10,000
(private)	213		
Research	840		
Addl. for dropouts	—	750	1,500
Health			
Public	1,283+	1,200	+2,000
Private	162+	250	+350
Veterinary	164+	300	+450
	—	+8,850	+14,800

Administration

8.15 Apart from the special development institutions suggested for agriculture, training and medical or welfare schemes, the general administration of the district will need strengthening at many points to execute the plan. The local administration (panchayat and panchayat unions) will have to share the tasks of raising some local resources and implementing schemes, even though the State Government will take the major share of the responsibility for formulation, sanction and execution according to national or state priorities and objectives. The quasi-Government staff was 1,315 in the district on 30.6.72 and the State Government staff 5,432 (outside Education and Health Services). The local level staff (belonging to nearly 600 village panchayats, 18 town panchayats and 2 municipalities) should be allowed to expand by 2,000 to undertake community welfare programmes. Correspondingly, State Government staff will increase by about 6,000, making a total addition of 8,000.

8.16 The employment generated in the public sector and the organised private sector is summarised in the attached table. This excludes the employment under rural works programmes *which was taken as the equivalent of 20,000 full-time jobs.* If effectively pursued, these works could not only make up for deficiencies or delays in the other programmes, but also cover the likely gap between the estimates of the additions to the working force in 1981 and the targets and forecasts of the employment opportunities to be created in the organised and unorganised sectors.

8.17 It will be seen from the table below that there may be a gap of 9,000 jobs (7,500 for men and 1,500 for women) which perhaps may be manifested not so much in terms of full-time unemployment as of under-employment or seasonal unemployment and relatively low incomes in the unorganised and self-employed/household sectors. Much will depend on the tempo of growth

in the agricultural sector and the levels of incomes and purchasing power it generates in the rural sector, which will set the pace for expansion in the rest of the district's economy.

Additional Employment in the Public and Organised Sectors : 1981

Numbers

	Total Additional 1981	Men	Women
Agriculture			
Research and extension	1,576	1,400	176
Livestock, factory	1,200	1,000	200
Irrigation			
(a) Maintenance	1,000	1,000	—
(b) Construction (medium and minor)	9,000	6,000	3,000
Power			
(Maintenance)	2,000	2,000	—
Mining (organised private)	1,000	500	500
Industry : (a) New Projects	6,000	4,000	2,000
(b) Others	2,200	1,500	700
Construction (Public)	6,000	3,000	3,000
Transport	7,000	7,000	—
Education : general	10,000	4,000	6,000
Vocational	500	300	200
For dropouts	1,500	500	1,000
Health and family planning	2,000	1,000	1 000
Sanitation and community services	5,000	2,000	3,000
Drinking water supply	5000	5,000	—
Administration : local	2,000	1,200	800
State	6,000	4 000	2,000
Total :	68,976	45 400	23,576
Over-all Employment Gap	9,000	7,500	1,500