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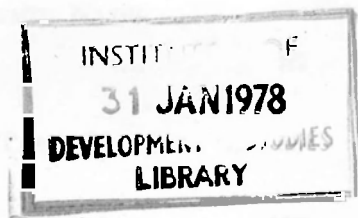
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RURAL EMPLOYMENT IN TAMIL NADU

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AND

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PREFACE

This study on Rural Employment in Tamil Nadu has several objectives. For one thing it attempts to quantify rural employment and unemployment, relying mainly on the census data for this purpose. The 1961 census records very low levels of overt unemployment, affecting 0.32 per cent of the male population and 0.02 per cent of the females 94 per cent of which numbers fall within the age-group 15-59 in rural Tamil Nadu. The 1971 census changed the definition of workers, whereby, though the population in the State increased between 1961 and 1971 by over 10 millions, the total number of workers decreased by 11.44 per cent. On unemployment, its final estimates are not yet available. The 1969-70 National Sample Survey estimated rural unemployment at 1.3 per cent of the rural population, 2.4 per cent among rural males and 0.1 per cent among rural females. This study itself computes 2.48 per cent of the rural population as being unemployed. Whether it be 1.3 per cent or 2.48 per cent, all this sounds very reasonable: unemployment in the western developed economies becomes a problem when it goes beyond 4 per cent. If it is 1-2 per cent, it is termed frictional, and is the normal concomitant of mobility, growth and redistribution. In the case of Tamil Nadu and India, however, there are additional elements that have to be taken into consideration. The conflicting figures are not important yet and can be resolved in definitive studies because so much remains to be achieved.

One obvious factor is the bigness of our population. Here one per cent of the population being unemployed is on all fours comparable with 10 per cent of a 50 million population being unemployed, which is the average population of a rich industrialised country.

A second more serious element is that the real problem in the State and Country is not overt unemployment only, but under-employment and disguised employment. The study makes a distinction between disguised employment

and under-employment. Disguised employment is the excess of labour over that which is required to produce the same output. Under-employment is underutilisation of labour for any given level of demand. If to produce 100 quintals of paddy with a given technology, 5 workers are needed but 8 workers are employed, then 3 workers are disguisedly employed. If the 5 workers produce the 100 quintals in 9 months and have nothing to do for the remaining 3 months, then under-employment is 5×90 days = 450 man-days. On this definitional basis and using a variety of computation methods, the study estimates that, in 1971, out of a rural work force of 100 lakhs, somewhere around 5 lakh persons were overtly unemployed, around 12 lakhs were disguisedly employed, and 38 lakh workers – equivalent to 137 crore man-days – were under-employed in rural Tamil Nadu. This disguised employment is more than double the overt unemployment, while unemployment is in turn more than double that of disguised employment in the rural areas.

The reasons for this widespread predominance of disguised employment and under-employment are multifaceted. They are first a function of the mass poverty in the State and the Country. That is, there are major segments of rural society which are too poor to refuse work even when they know that they will be working below their capacity and earning a sub-marginal wage. This is an important issue, because employment generation is regarded as a means of combating poverty in the State. The study begins by pointing out that over 70 per cent of those who are employed in rural Tamil Nadu are poor. Other empirical studies in Andhra Pradesh, Gujarat and Uttar Pradesh have also drawn the conclusion that employment creation *per se* results in wages that fall below the minimum by 40 per cent. This is not to say that rural employment generation is not an essential part of the strategy to eradicate rural poverty, particularly where such employment is aimed at the creation of durable assets and at increasing the Net State Output. But it is only part of the poverty eradication strategy, the other parts being

the redistribution of income-earning assets, namely, land and capital, the provision of education, health, housing, drinking water and the system of transfer payments from the rich to the poor through tax and fiscal instruments. Again, it may be conceded that, on the principle that half a loaf is better than no bread, and until rural poverty has been eradicated in Tamil Nadu, the work-sharing mechanisms that disguised employment and under-employment represent may be accepted as a second or third best. Employment creation and poverty eradication in the rural areas are two distinct objectives and should be conceived as complementing, not substituting for, each other.

The other reasons for the dominance of disguised employment and under-employment in the rural countryside is the rate at which rural population has been growing (16.35 per cent), in the 'sixties, so that the number of the new entrants in the rural labour force has increased from 0.62 per cent for males and 0.02 per cent for females of all rural non-workers in 1961 to 1 per cent and 0.1 per cent in 1971. There is also the seasonality of the agricultural industry which makes for under-employment. Again, its make-up of double and triple cropped areas and well-endowed forests precludes a high incidence of overt unemployment, making for under- and disguised employment. In fact the institutions associated with the family farm make our employment statistics based on the individual as the employment unit not very meaningful, but have important employment policy corollaries. Employment generating projects in this context are likely to be less significant in raising living levels than overall programmes aimed at area development, accelerated production and improved distribution.

Also the joint family and the rural community systems make for various kinds of work-sharing schemes. The number of under- and disguisedly employed has been increased by a large number of small and marginal farmers (29 per cent) giving up their lands and joining the ranks of landless agricultural labourers, whose number has increased by 56.4 per cent for the State, 92 per cent among male labourers

and 19.5 per cent among female labourers. Another explanatory factor is the fall in the percentage figures for workers in the secondary and tertiary sectors—rural and urban—over the past decade, so that workers from industry and the services have moved in as agricultural workers, making for under-utilisation of labour in various forms.

At this point where the migration of workers from the secondary and tertiary sectors of Tamil Nadu into its primary sector is referred to, one of the limitations of a study deliberately confined to rural employment stands out. That is, such a study ignores the substitutability of the various forms of employment, unemployment and under- and disguised employment. Here the growingly overt unemployment in Tamil Nadu's urban areas must be studied and analysed in order to explain the under-employment in its rural areas. The rural-urban migration, however, works usually the other way round. As construction activity in the urban areas increases and conditions of full employment are created for construction workers for instance, workers from rural areas are attracted by urban employment prospects, which usually results in the disguised or under-employment of the countryside becoming overt unemployment in the urban areas. The push and pull factors leading to such migration include not only the pull of the city lights, but also the push of poor urban industrial relations. Industrial unrest resulting in factories declaring lock-outs has resulted in increasing the number of agricultural labourers. In 1970 and 1971 there were 585 strikes and lock-outs in the State affecting 2,78,980 workers. There was thus a migration from the State's urban centres, Madras, Coimbatore, Madurai and Salem to the rural areas, including the hinterland, during the period. This inter-relatedness of urban and rural employment and unemployment situations means that measures devised to deal with overt urban unemployment by themselves are like stopping a few holes in a sieve. Rural employment policy then must form a major part of the Country's comprehensive and wide-ranging employment strategy. Any policy specifically and prefer-

essentially directed at augmenting rural employment must aim at literally increasing work opportunities in the villages (which, unlike in the cities, is contractual, time-bound and of shorter duration) should be governed by five important criteria : (i) it should step up job opportunities and spread them over the year ; (ii) it should seek at the least not to decrease *per capita* annual incomes ; (iii) it should redress the imbalance in the rural-urban distribution of the State product ; (iv) it should serve to revive the rural-urban terms of trade to favour the latter ; (v) all these objectives should be secured by rendering cityward migration unattractive rather than by controlling it directly. Where migration to the city adds to the urban unskilled unemployed, the integrity of the rural economy which is sought to be made viable would also be impaired. In the main, policy must aim at working out a just, equitable and balanced if not self-sufficient rural economy.

The role of education in rural employment is an ambivalent one. There is no doubt that sound education qualifies a person for his employment, as in the case of engineers, doctors, economists, etc., and that, other things being equal, the higher the educational qualifications, the higher is the wage earned. This is seen indirectly in the 1961 census results, which show only 8 per cent of all male workers and 2.38 per cent of female workers as educated. However, among agricultural labourers, 78 per cent of men workers and 98 per cent of women workers are illiterate. In the work force as a whole, 62 per cent of men and 88 per cent of women are illiterate. But this study also makes the comment: "rather unexpectedly, nearly, two-thirds of the unemployed population are literate". That is for India. In Tamil Nadu the situation is even more "unexpected". In the 1961 census, only 11 per cent of the unemployed are illiterates. In fact the largest number of unemployed—to the extent of 38 per cent—is to be found among those who have had their education up to and beyond matriculation. Among women unemployed, over 60 per cent have quite high educational qualifications. This educational

profile of the State's rural unemployment means that education is not employment-oriented, that education in the State is not only a baby-sitter for the parents and a marriage broker for the community, but also a short-term substitute for employment and a temporary, though expensive, storage place for the unemployed. These features have profound policy implications for the restructuration of education in relation to employment in the State.

The study makes an assessment of the existing rural employment programmes in the State—the community development, the khadi and village industries, the rural manpower, and crash schemes for rural employment, the intensive rural employment, HYV, SFDA and MFAL programmes. The general conclusion drawn is that we are very good at conceiving, planning and launching programmes and very poor at executing and following them up. The emphasis of both these programmes should be on both employment intensity and a productivity orientation. They generally lack in the latter regard, and this calls for mobilising the only resource with which the rural areas are abundantly endowed—underutilized manpower—for the building of an enduring rural infrastructure—power, roads and irrigation—which will increase production and the marketable surplus, income and the demand for rural goods and services. Moreover, the execution of the programmes calls for increasing decentralization and devolution to the local authorities, which is not taking place, and where and when it does, is open to the double temptation of “doing it on the cheap” and “local empire building,” both of which should be avoided. Finally, there seems to be a case for crying halt to new employment creation schemes and instead to plan the entire Fifth Plan programme and its annual phases in such a way that they are labour intensive. In fact the study shows that the rural employment schemes came in such rapid succession one after another, that there was no time to evaluate previous schemes, to plan the new ones on the basis of the lessons learnt, and to pursue a certain

objective to its logical conclusion. The crash attribute of employment schemes might now be replaced by a more sustained perspective policy which keeps both short-term targets and long-term objectives clearly in view in the district and State annual and five-year plans.

The schemes have reduced under- and disguised employment between 1961 and 1971. The rural manpower and crash scheme for rural employment reduced under-employment by 101 lakh man-days or 4.3 per cent and if the effect of the village industries programme is added, the under-employment reduction becomes 5.4 per cent. In the future, the trend will work so as to convert under- and disguised employment increasingly into overt unemployment, following mechanisation in the primary sector and the growth of the rural labour force. In regard to the future size of Tamil Nadu's rural labour force, alternative models have here been set forth. Under one set of assumptions, the workers will increase by 18 per cent in 1974 and 30 per cent in 1980 (with 1961 as the base), the percentage of primary sector workers will still be large at 56.2 in 1974 and 56.6 per cent in 1980, so that even though overt rural unemployment falls from 23.3 per cent to 21.5 per cent between 1974 and 1981, disguised and under-employment will continue at its present massive proportions. In the second model, a rather sharp reduction in the percentage of rural population and those employed in the primary sector as between 1974-79 is postulated, calling for the creation of 25.54 lakh jobs, which in turn requires the investment 21.17 per cent of the State income as computed by the State Planning Commission. These orders of magnitude of investment are daunting, but need not be if and when broken down into the link roads that need to be constructed, the local industry that needs to be shifted here from congested urban centres, the fact that no new employment schemes are necessary but a broadening and full execution of existing ones and the specific programmes that need to be developed district by district. Such prototype development programmes have been outlined for the districts of Kanyakumari and Tirunelveli, with briefer profiles for

Coinbatore, Chingleput, South Arcot, Thanjavur, Dharmapuri and Salem districts. Thus it is no accident that this micro-study of Tamil Nadu's rural employment ends with detailed disaggregated district programmes to increase production and provide employment. This is the direction in which the State's rural development programme must also develop.

This monograph is the joint product of the Research Officers of the Madras Institute of Development Studies, J. Viswanathamurthi and C. L. Narasimhan. They have received the co-operation of many government departments notably that of the Census, Labour and Employment, State Planning Commission, Rural Development and Khadi and Village Industries. The Institute's statistical and social science facilities were also placed at the disposal of the study. The study was completed early in 1973 and over a year was spent by the authors in checking the statistics and some of the projections and drawing the conclusions. The analysis and views expressed in the study, in line with the Institute's objectives, are the responsibility of the authors, J. Viswanathamurthy and C. L. Narasimhan. The study is the first one that attempts to portray the profile of rural employment in the State and forecasts its contours for the Fifth and Sixth Plans, along with means of meeting the problems that might arise. As such, I commend it to the attention of the Government of Tamil Nadu and to specialists in the field of employment.

Malcolm S Adeshiah

CHAPTER 1

SCOPE AND NATURE OF STUDY

Rural unemployment has arisen mainly from the failure or inability to utilize labour fully rather than from unemployment of the other resources. The continuance of this phenomenon or its retrogressive recurrence is due to two factors viz., the predominance of self-employed workers in family farms, who receive no wages. It is also due to the seasonal variations in the demand for labour which in turn is due to the seasonality implicit in all agricultural production in areas not opened up to scientific agriculture and for others not served by perennial irrigation facilities. The present study seeks to investigate and delimit the problem of rural employment in Tamil Nadu. Is there any noticeable difference between this State and the Country at large in respect of patterns and degree of employment and unemployment? What is the size and nature of employed and unemployed in the rural areas, to both of whom we refer as if they were a homogeneous entity? If they are not, is it possible to treat of them as a homogeneous entity with minor conceptual adjustments? Have policy measures been geared to tackle the problem? Have these come to grips with basic causes or only the symptoms thereof? And finally, what remedial measures are necessary to tackle the problem more adequately? The study has also made a rough estimate of the disguised employment of human resources in the rural areas and of underemployment. Relief for this must receive a priority next only to that of unemployment itself.

An attempt has been made to answer these questions in the five chapters of the monograph, which follow.

The first chapter brings out the similarities and the dissimilarities as between the Country and the State in respect of the problems connected with unemployment in the country side while the second chapter analyses the problem peculiar to the State in all its characteristic magnitude, ramifications and brings out the interdistrict differences and the causes thereof. Such a survey has confirmed the broad diagnostic patterns of unemployment and underemployment, the besetting insidiousness, endemicity and intractability of underemployment in relation to rural unemployment which is more due to straightforward reasons such as want of capital, lack of opportunity and know-how. The former is more inchoate and pervasive, and the result of deeply encrusted attitudinal and environmental factors, less the result of reaction to identifiable problems. This finding has tended to confirm the now familiar policy of State action and intervention involving the structure of land exploitation and community life rather than the extension of traditional private initiative through exhortation and initiative.

The third chapter highlights the importance of the primary sector and of agriculture in particular as a major source of employment in the rural areas. In the fourth chapter an assessment has been attempted of the various programmes planned and implemented so far in order to tackle the problem, along with some suggestions to render them more purposive and successful.

The last chapter essays an estimate of the unemployed rural population in Tamil Nadu as at the end of the Fourth and Fifth Plans, and also offers some suggestions to solve the problems.

In this study, the following definitions have been adopted: Employment has been defined as entailing physical or mental labour and is not measured in terms of productivity, output and income. The unemployed appertains to all employable people not only current additions to the labour force. It includes not only those who are seeking a job for the first time but others who are looking

for new situations after one or many spells of employment. However, a new estimate of unemployment for 1961 and 1971 has been worked out in Chapter 2 according to working definitions of or hypotheses regarding terms like disguised employment or underemployment.

Disguised employment can be measured by the extra number of workers engaged in agriculture over and above those required to produce the same output without any improvement in the techniques of production.

Underemployment refers to underutilisation of human labour i.e., the total number of mandays in excess of those required for the job.

The labour force refers to the total number of workers employed plus those who are unemployed.

The crude workers rate denotes the total number of workers as a percentage of the total population.

The labour force participation rate denotes the total number of workers as a percentage of the total labour force.

The incidence of unemployment denotes the unemployed population of the total labour force.

The workers in the primary sector consist of the cultivators, agricultural labourers and the workers engaged in farming, forestry, fishing, hunting, horticulture and ancillary activities.

The workers in the secondary sector consist of the workers employed as domestiques and those employed in manufacturing and construction industries.

The workers in the tertiary sector consist of those engaged in trade and commerce, transport, storage and communication, education, health and other services.

The study is based on the secondary data taken from the Census of India, those volumes in particular, relating to Tamil Nadu for the period 1961—71. All limitations to

which census data are subject, apply to this study as well.¹

Finally a note on the definitions of employment and unemployment in contemporary India neither of which is satisfactory for two reasons; the word employment refers to physical exertion and exercise of the faculties of body and mind to the exclusion of other important factors that serve to describe it quantitatively and qualitatively like productivity, income, etc. Also the word conveys a wrong notion of unemployment as such whereas we witness the prevalence of poverty on a large scale though the incidence of unemployment is not comparably high or even low. This calls for a re-definition of employment and unemployment with a realistic, action-biased orientation. In a country like India where a large proportion of the population is dependent upon agriculture, which can only provide what must be considerably less than full employment in terms of reward and working hours, a state of full employment can be reached if, as hitherto, every one who has a job of any kind even for a part of the year is taken to be employed. However, if employment is defined in terms of productivity, then a whole army of disguisedly employed and underemployed from the ranks of agriculture and the self employed who do not make ends meet become overtly unemployed. The income criterion will swell the ranks of the unemployed even further. This fuller definition is necessary because the severity and deprivation of underemployment can be felt as keenly as unemployment itself, as for instance in the case of the worker or the labourer who does not contrive to earn a living wage or who has not enough to provide for his family. Hence in computing the number of gainfully employed who receive more than a subsistence wage as determined from time to time, those among the labour force to whom this description does not apply would

1. As we shall discover in Chapter 3 the Census figures of unemployment in the countryside in the districts are much lower than those reported by developed and industrialised economies of Western Europe and the U.S.A.

be treated as unemployed. An index should be constructed for each district which will take into consideration all the necessities of life for its inhabitants and which will indicate the need based wage; all those who earn below this wage should be declared as underemployed. Degrees of underemployment should be reckoned as co-efficient of degrees of unemployment according as they yield incomes per capita, which are less than a national subsistence minimum.

In policy if they are already in some service, every effort should be made to provide them with that wage required to meet all their necessary expenditures and in case of the unemployed population, preference should be shown in the matter of recruitment to that family which is earning less than the need based income.

In the case of peasant families the amount of land required to produce a minimum money income should be fixed over an extended period into the future and the government can allot lands to those families which possess an uneconomically small holding from out of the surplus acquired through the implementation of the land ceiling law.

An estimate has been made of the total number of poor workers on the basis of the intake of less than 2200 calories per day. This estimate classifies nearly 72 per cent of the workers as living below the poverty line in the whole of Tamil Nadu and this on the basis of minimal norms of consumption of food alone. It can be well imagined as to what would happen to our estimates if minimum quantities of clothing, shelter, food and light, were also added to minimal norms. The districtwise breakdown of "unemployed—employed" workers is set forth below in Table 1.

72.6 per cent of the workers earn less than Rs. 33 per month (at current prices). This is highest in Kanyakumari and lowest in Tiruchirapalli. Hence the need to redefine employment in terms of income. Employment cannot be said to have been provided for all unless they are assured of a need based wage.

TABLE 1—Districtwise Distribution of the Poor Workers in Tamil Nadu: 1971.

Districts/ State	Total Workers (in thousands)	Percentage of Poor Wor- kers to Total		Total in Thousands	Poor Workers Total per- centage
		Small agri- cul- tural labour- ers	Other Wor- kers		
Chingleput	1016	17.9	39.2	42.7	79.1
North Arcot	1368	25.8	38.8	35.4	76.3
South Arcot	1296	29.2	45.2	25.4	77.9
Coimbatore	1804	7.2	44.0	48.6	70.4
Salem-	1834	21.7	39.3	39.3	66.5
Dharmapuri					
Nilgiris	192	3.9	11.6	84.3	64.5
Madurai	1478	17.8	47.4	34.7	73.5
Tiruchirapalli	1443	29.9	38.2	31.7	66.4
Tanjavur	1301	18.2	51.8	30.0	79.7
Ramanathapuram	1035	23.5	34.7	41.7	72.7
Tirunelveli	1159	16.2	36.9	46.8	81.0
Kanyakumari	352	15.9	40.0	44.1	86.3
State	14368	21.0	39.0	40.0	72.6

Source: Framework of a Plan to Abolish Poverty by Dr. C.T. Kurien, MIDS Seminar, January 1973.

CHAPTER 2

THE EMPLOYMENT SITUATION IN INDIA AND TAMIL NADU COMPARED

This chapter analyses the problem of unemployment with particular reference to the State of Tamil Nadu over the years 1961 to 1971 in order to find out in what distinctive respects this State differs from the national economy.

The First Five Year Plan distinguishes between three types of unemployment¹: Unemployment arising from deficiency in aggregate demand—the kind prevalent in most of the advanced countries. This is true at any given level of prices which in turn are determined by the costs of planned development, capital scarcity, low factor productivity, technological backwardness and inter-factor supply constraints.

Unemployment arising from shortage of capital equipment and other complementary resources and balancing factors. This is the kind obtaining in most of the developing countries.

Frictional unemployment: This kind is to be met with, both in the developing and developed countries.

As has been pointed out by the plan document, the second type of unemployment is found to a larger extent in India. The rural economy in India is further beset by two other types of unemployment, namely disguised employment and underemployment. To repeat, by

1. First Five Year Plan ; Planning Commission ; Government of India, 1951; New Delhi.

disguised employment is meant a false kind of activity without any basis in the income criterion.

From the spatial point of view, the problem of unemployment in the Country can be divided into rural and urban categories. The urban areas, as a rule, register a higher ratio of the frictional and the straightforward kinds of unemployment whereas disguised employment and under-employment are more widely prevalent in the rural areas. A distinctive feature of urban unemployment is the relative preponderance of the educated among the unemployed resulting from a disequilibrium as between supply and demand, between the mass production of educated persons by the universities and the slow growth in the job opportunities awaiting them. *Prima facie*, a similiar correlation is apparent between the levels of literacy and the incidence of unemployment, comparing in particular the figures for the districts of Nilgiris, Thanjavur, Tirunelveli and Kanyakumari in Tables 41 and 43.

On the other hand, the role of agriculture as a primary source of employment coupled with the seasonality of its occupational and production patterns are the two main causes of disguised employment and under-employment. The hidden and concealed kinds of unemployment is potentially far more dangerous to the economy than the overt and for each individual, total unemployment of the urban areas.

In India as much as 80 per cent of the population depends upon agriculture as owner or as tenant-cultivators or as landless labourers, while the rest of the population earns its livelihood through service or household or cottage type of industries or to the extent that industrial system of many workers engaged in common tasks working under a single roof has taken root in the villages. All this leads on to the employment position in the State and in the rest of the country.

Employment in Indian Union and Tamil Nadu : 1961

In Tamil Nadu, 79.31 per cent of the total population lives in the rural areas as against the corresponding National figure of 82.02 per cent. The crude workers' rate in Tamil Nadu is 49.63 per cent which is 4.57 per cent greater than the all India figure of 45.06 per cent. Furthermore, 62.19 per cent of males and 37.11 per cent of females living in the rural areas have been classified as workers in Tamil Nadu as against 58.22 per cent and 31.42 per cent respectively in the Indian Union. Of all the workers, 86.24 per cent are between 15 and 59 years of age. The corresponding figure for male workers is 85.72 per cent and that for females is 87.12 per cent. The corresponding proportions of this working age group in the national aggregate are 84.53 per cent and 79.64 per cent respectively. In Tamil Nadu the figure for females quite approaches that for males, evidencing roughly equal opportunities and participation rates as between the sexes, in contrast to the marked concentration of employment among males in the Indian Union as a whole. The relative position can be read off from Table 2.

**TABLE 2—Rural Workers-Percentage in 15-59 Age Group :
Tamil Nadu vs. Indian Union : 1961.**

Country/State	Persons	Males	Females
India	82.78	64.21 (84.53)	18.57 (79.64)
Tamil Nadu	86.24	53.63 (85.72)	32.61 (87.12)

Source : *Census of India : Vol. IX, Part II (B) (I) and (II) and Census of India : Part II (B) (II) and (III), 1961.*

(Figures in brackets indicate the proportion of the number of persons to the relative totals expressed as a percentage.)

This high women's participation rate in Tamil Nadu in contrast to that obtaining in the Indian Union may be accounted for by the higher percentage of literacy among females in this State (11.57 per cent as against 9 per cent for all India) and the high percentage of scheduled castes among the females in the rural areas (20.76 per cent) who are willing to take up any work whatever. There has been need to argue in the later sections that those districts with a high percentage of scheduled caste/tribe population also show a high participation rate.

The high participation rate of females is noticeable not only in the crude workers' rate, but also in the labour force participation rate. The participation rate is low for males in Tamil Nadu as compared to that for the entire Union and high for females in Tamil Nadu as can be seen from Table 3.

TABLE 3—Participation Rate (15-59 age group) for Tamil Nadu and Indian Union: 1961.

Country/State	Persons	Males	Females
India	99.34	65.23 (99.44)	34.11 (99.93)
Tamil Nadu	99.63	61.95 (99.44)	36.68 (99.94)

Source : *Ibid.*

(Figures in brackets indicate the proportion of the number of persons expressed as a percentage of their respective group population totals.)

Sectoral and Industrial Distribution of Workers

The 1961 Census classification of industrial workers is based on the "major activity" concept, that is, the activity to which they devote a major portion of their work time. The workers are accordingly classified into ten categories: cultivators, agricultural labourers, workers in the mining, quarrying, livestock, forestry, fishing, hunting, orchards and allied activities, household industry, manufacturing other than household industry,

construction, trade and commerce, transport, storage and communication and other services.

Tamil Nadu has a lower proportion of workers dependent on the primary sector; 73.68 per cent of the workers depend on this sector for a living of whom 44.73 per cent are males and 28.95 per cent are females. The corresponding all India figures are 82.89 per cent, 51.95 per cent and 30.94 per cent respectively.

In this State 11.82 per cent of the workers are engaged in the secondary sector as against the country's average of 7.49 per cent. 12.83 per cent of male workers and 10.14 per cent of the female workers are engaged in the secondary sector in Tamil Nadu, whereas the country's averages for that sector are only 7.68 per cent and 7.17 per cent respectively.

Tamil Nadu differs from the Union even in respect of the tertiary sector. 14.50 per cent of the State total workers are engaged in this sector in the State against the country's average of 9.62 per cent. There is a high rate of dependence on this sector among males as well as females compared to all India figures as can be seen from Table 4.

TABLE 4—**Sectoral Distribution of Rural Workers in India and Tamil Nadu: 1961.**

(as percentage)

Sector	India			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
Primary	82.89	51.95	30.94	73.68	44.73	28.95
		(80.92)	(86.42)		(71.50)	(77.33)
Secondary	7.49	4.93	2.56	11.82	8.02	3.80
		(7.68)	(7.17)		(12.83)	(10.14)
Tertiary	9.62	7.31	2.31	14.50	9.80	4.70
		(11.40)	(6.41)		(15.67)	(12.53)
All	—	64.19	35.81	—	62.55	37.45
	100.00	(100.00)	(100.00)	100.00	(100.00)	(100.00)

Source: *Ibid.*

(Figures within the brackets indicate the percentages to their respective totals.)

Of the many causes that account for this difference in the sectoral distribution of workers in Tamil Nadu and that obtaining in the rest of the country, the most influential may well be the smaller size of the average holding in Tamil Nadu in comparison with that of other states. In the other states especially in the Punjab the size of the holdings is considerably larger as seen in Table 5.

Uttar Pradesh, Orissa and Bihar would probably fall in the same size class. Yet significantly, the corresponding figures in col. 3 are much higher than those for Tamil Nadu.

TABLE 5—Statewise Average Size of Operational Family Farm : 1961.

Sl. No.	Country/State	Size of operational family farm (in acres)	Percentage of workers dependent on agriculture
1.	Punjab	13.78	66.6
2.	Maharashtra	12.87	64.5
3.	Rajasthan	16.01	78.4
4.	Gujarat	12.53	67.3
5.	Madhya Pradesh	10.60	78.8
6.	Karnataka	10.48	73.4
7.	Andhra Pradesh	8.04	72.2
8.	Uttar Pradesh	5.27	77.4
9.	Orissa	5.19	84.2
10.	Bihar	4.80	79.5
11.	Tamil Nadu	4.58	64.5
12.	West Bengal	4.10	59.5
13.	Kerala	1.83	55.0
14.	India	7.39	71.7

Source : *Report of the Committee of Experts on Unemployment Estimates, Government of India.*

A wide variation can be noted between the States in the proportion of industrial workers to the total labour force and that for Tamil Nadu. In Tamil Nadu the percentage of workers classified as cultivators is smaller while the percentage of workers classified as agricultural labourers is higher in contrast to the corresponding averages for the country as a whole. This is equally true of the percentage of workers engaged in livestock, forestry, fishing, etc.

The percentages of workers engaged in mining and quarrying, household industry, manufacturing other than household industry and constructions exceed the corresponding all India averages. In the other three industries with the exception of transport, storage and communication, the proportion of workers engaged is relatively higher in Tamil Nadu. This can be seen from Table 6.

TABLE 6—Percentage Distribution of Industrial workers in India and Tamil Nadu Compared : 1961.

Industry	India		Tamil Nadu	
	Males	Females	Males	Females
Cultivator	61.09	58.87	52.98	47.80
Agricultural labourer	15.77	24.82	17.70	28.86
Livestock, forestry, fishing, etc.	4.06	2.73	0.61	0.92
Mining & quarrying	0.53	0.65	2.51	1.19
Manufacturing	1.91	0.71	3.01	0.89
Household industry	4.35	5.95	6.14	7.79
Construction	0.89	0.26	1.13	0.35
Trade & Commerce	2.62	0.98	2.91	1.27
Transport, Storage, etc.	0.82	0.03	0.67	0.01
Other Services	7.86	4.40	12.34	11.52
All	100.00	100.00	100.00	100.00

Source : *Ibid.*

To sum up, six differences between the employment situation in Tamil Nadu and that for the entire country may be noted.

(1) Higher labour force participation rate and crude workers rate among females in Tamil Nadu.

(2) Relative to one above, as compared to the rest of India, low labour force participation rates among males in the State. This low figure should be understood as highlighting the higher figure for females rather than as being low in itself.

(3) Relatively lower dependence of workers on the primary sector for a living.

(4) A higher percentage of workers among agricultural labour than among cultivators.

(5) A strikingly smaller percentage than the all-India figure of workers depending on livestock, forestry, fishing, hunting, etc.

(6) Relatively higher percentage of workers depending on other industries.

Unemployment Situation in 1961

The extent of unemployment in rural areas has remained unexplored for some years and the First Five Year Plan document pointed out that the rural unemployment was difficult to estimate and quantify. Some authorities place it at 30 per cent; but then there is the added problem of endemic underemployment, where quantitative estimates are more difficult to work out. However considerable attention has been devoted in recent times to the quantification of this malaise. The rural labour surveys conducted by the National Sample Survey Organization over a number of rounds provide vital statistics on rural unemployment.

Unemployment computed in the 14th and 15th rounds of the NSS revealed that the incidence was as low as 3.64

per cent and 3.17 per cent for males and 9.83 per cent and 8.35 per cent for females. A declining trend was registered during the 16th round also (2.59 per cent for males and 6.49 per cent for females). The 17th round revealed a spurt in the incidence as the figures rose to 3.74 per cent for males and 8.53 per cent for females respectively. However, in the 19th round, it declined again to 2.68 per cent and 7.85 per cent. In the 21st round the situation changed again; the figures had risen to 11.82 per cent for males whereas it had declined to 3.50 per cent for females. The above inferences are drawn from Table 7.

TABLE 7—Incidence of Unemployment in Rural areas by Sex (All Ages).

(As percentage of labour force)

N.S.S. Round No.	Duration of survey and Research Period	Males	Females
9th	May 1955-November 1955 (usual status a year)	0.85	0.23
10th	December 1955-May 1956 (one day)	2.01	2.62
11th & 12th	August 1956-August 1957 (one day)	4.50	9.48
14th	July 1958-June 1959 (one week)	3.64	9.83
15th	July 1959-June 1960 (one week)	3.17	8.35
16th	July 1960-June 1961 (one week)	2.59	6.49
17th	September 1961-July 1962 (one week)	3.74	8.53
19th	July 1964-June 1965 (one week)	2.68	7.85
21st	July 1966-June 1967 (one week)	11.82	4.35

Source : *Report of the Committee of Experts on Unemployment Estimates; Planning Commission, Government of India, New Delhi.*

The conclusions of the 21st round *prima facie* appear to be a more plausible estimate. The unemployment percentages present in the other rounds were probably low. This may have happened because the periods of investigation fell within the agricultural season.

The 1961 Census, does seem to suggest that unemployment in the rural areas was not severe. This must be the result of the definitions adopted concerning the worker and the unemployed. The census classifies only 0.29 per cent of the male population and 0.03 per cent of the female population of rural India as having been unemployed in 1961. See Table 8 below.

TABLE 8—Unemployed as Percentage of Population, Labour Force and Workers by Sex in Rural Areas : 1961.

Unemployed as Percentage of	Males	Females
Population	0.29	0.03
Labour Force	0.50	0.10
Workers	0.51	0.11

Source : *Census of India, Part II (B), (I), (II) and (III), 1961.*

From the above table, it is also clear that the unemployed form a negligible share of only 0.50 per cent of the total male labour force and 0.03 per cent of the female labour force.

Moreover rural unemployment is concentrated mostly in the 15—59 age group, the incidence among males being 0.55 per cent and among females 0.11 per cent; for the other age groups, namely, 0—14 and 60+, the corresponding figures remain at 0.30 per cent for males and 0.10 per cent for females, 0.12 per cent for males and 0.05 per cent for females respectively. This information is summarized in Table 9.

TABLE 9—Incidence of Unemployment in Different Age Groups by Sex in Rural Areas: 1961.

Age Groups	Persons	Males	Females
0 - 14	0.24	0.20 (0.30)	0.04 (0.10)
15 - 59	0.41	0.36 (0.55)	0.05 (0.11)
60 +	0.08	0.06 (0.12)	0.02 (0.05)

Source : *Ibid.*

The 1961 Census underscores the known fact that unemployment is more acute among males than among females. It is an important point nevertheless that of the total 0.41 per cent unemployed in the 15-59 age group, 0.36 per cent are males whereas only 0.05 per cent were females. It is possible that, because more women than men are agreeable to take on part-time employment, employers availed themselves of the services of the former.

The unemployed males and females can be broadly divided into two further categories, namely those who are seeking jobs for the first time (in other words new entrants) and those who are seeking subsequent work opportunities. The new entrants to the labour force constitute the bulk of the unemployed population—67.80 per cent. Of this latter figure 60.19 per cent are males and 7.61 per cent females.

Rather unexpectedly, nearly two-thirds of the unemployed population are literates. The 1961 Census classifies the unemployed in the 15-59 age groups into four categories according to their educational attainments; illiterates; literates without education; primary or junior basic and matriculation and above. 23.49 per cent of the total unemployed population are illiterates and 22.89 per cent of them are literates without any formal education; another 26.87 per cent have completed their

primary or junior basic schooling and 26.75 per cent are matriculates or have higher qualifications. The proportion of illiterates among unemployed females is as high as 40.28 per cent whereas, for males, it is only 21.61 per cent. The corresponding figures for women literates without any formal education and for others who have finished junior basic schooling are 8.82 (24.47) per cent and 10.15 (28.73) per cent respectively, whereas 40.75 per cent (25.19) of the women had passed the matriculation or higher examinations. (The figures within brackets indicate the corresponding male figures.) The foregoing information is summarized in Table 10 below.

**TABLE 10 – Incidence of Unemployment among
Educated in Rural India (by Sex) – 1961**

(As percentage of total unemployed)

Educational Status	Total persons	Males	Females
Illiterates	23.49	21.61	40.28
Literates without any formal education	22.89	24.47	8.82
Primary or Junior basic	26.87	28.73	10.15
Matriculation and above	26.75	25.19	40.75
All	100.00	100.00	100.00

Source : *Ibid.*

In other words the 1961 Census emphasises the high incidence of unemployment among educated males. Figures about educated unemployment do not offer details of under-employment and disguised employment. This is a vital gap.

How far does the employment scene in Tamil Nadu conform to the all India picture ?

In this State, 0.32 per cent of the male population and 0.02 per cent of the female population were classified as un-

employed by the 1961 Census. The unemployed population forms 0.50 per cent of the male labour force and 0.05 per cent of the female labour force as seen from the Table below.

**TABLE 11—Proportions of Unemployed Persons :
India and Tamil Nadu Compared: 1961.**

Unemployed as percentage of	India		Tamil Nadu	
	Males	Females	Males	Females
Population	0.29	0.03	0.32	0.02
Labour force	0.50	0.10	0.50	0.05
Workers	0.51	0.11	0.51	0.05

Source : *Ibid.*

The table reflects two facts :

(1) The male unemployment figure for Tamil Nadu more or less follows the national pattern.

(2) The incidence of unemployment among females differs. Probably the reason for the low incidence of unemployment in Tamil Nadu among women who, by some modes of reckoning, work better than their male counterparts, is more social than economic and can be briefly ascribed to a tradition of participation by women in economic activity that appears to be well founded in Tamil culture.

The age-wise distribution of the unemployed summarised in Table 12 yields a further insight into the problem. Tamil Nadu conforms broadly to the all-India figures with regard to the incidence of unemployment among males in the 15-59 age group whereas, for females, the incidence figure is low for the State in relation to the country's average for the same age group. Moreover the pressure of unemployment among females for the same age group is far less in Tamil Nadu than the all-India average. This information is exemplified in Table No. 12 below :

TABLE 12.—Unemployment in Different Age Groups by Sex in Rural Areas in India and Tamil Nadu : 1961.

Age Group	India			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
0-14	0.24	0.20 (0.30)	0.04 (0.10)	0.25	0.23 (0.41)	0.02 (0.04)
15-59	0.41	0.36 (0.55)	0.03 (0.11)	0.32	0.30 (0.55)	0.02 (0.06)
60+	0.08	0.06 (0.12)	0.02 (0.05)	0.04	0.03 (0.05)	0.01 (0.03)

Source : *Ibid.*

The concentration of unemployment in the 15-59 age group is further supported by Table 13 which sets forth the distribution of the unemployed as between different age groups. The concentration is relatively higher in Tamil Nadu in contrast to the country's average. This is true of all the males and the females in those age groups. Furthermore, the severity of unemployment is felt more keenly among females at the all-India level whereas the situation is quite the opposite at the State level. These facts are brought out in Table 13 below.

TABLE 13.—Distribution of Unemployed as between Age Groups in India and Tamil Nadu by Sex in Rural Areas : 1961.

(As percentage of total unemployed)

Age group	India			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
0 - 14	5.59	4.66 (5.20)	0.93 (9.01)	5.52	5.13 (5.45)	0.39 (6.35)
15-59	92.19	83.27 (92.91)	8.92 (85.96)	93.62	88.16 (93.82)	5.46 (90.93)
60+	2.22	1.69 (1.89)	0.53 (5.03)	0.83	0.67 (0.73)	0.19 (2.72)
All	100.00	89.62 (100.00)	10.38 (100.00)	100.00	93.96 (100.00)	6.04 (100.00)

Source : *Ibid.*

As noted before, a distinction has been made in the tabulation of unemployment figures between people who seek to enter the labour force for the first time and others who enter the employment market again after a spell of work for whatever reason. The new entrants to the labour force constitute the bulk of unemployed both in the State and in the country. However, some notable differences emerge on further examination of the unemployment patterns of Tamil Nadu and the country as a whole.

While in the State, the new entrants constitute three-fourths of the total unemployed, the corresponding proportion is only two thirds for the country as a whole. There are fewer females among the new entrants in Tamil Nadu as compared to the average for the country as a whole.

Secondly in Tamil Nadu, the proportion of unemployed who are seeking subsequent job opportunities is smaller. This difference is more pronounced in the females than males. This may be explained by recourse to the fact that the incidence of unemployment among females in Tamil Nadu is as noted before, smaller than the all India average. The foregoing conclusions are drawn from the figures tabulated below.

TABLE 14—Fresh Entrants to Labour Force and Re-entrants: All India and their Number in Tamil Nadu Compared: 1961.

Category	India			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
New entrants	67.86	60.19	7.67	74.96	70.22	4.74
		(67.17)	(73.72)		(74.70)	(79.03)
Re-entrants	32.14	29.47	2.73	25.04	23.78	1.26
		(32.83)	(26.28)		(25.30)	(20.97)
Total	100.00	89.60	10.40	100.00	94.00	6.00
		(100.00)	(100.00)		(100.00)	(100.00)

Source : *Ibid.*

(Figures within brackets indicate percentages to their respective totals)

The most important inference from the foregoing analysis with serious social consequences is the prevalence of large-scale educated unemployment in the rural areas. Paradoxically the prevalence of unemployment among the rural educated is greater than among illiterate persons. In this regard the situation in urban and rural areas is largely similar. In the Indian economy, the proportion of unemployed with matriculation or higher qualification is greater than that of illiterates. This is a serious situation as clearly brought out in the table below that calls for an innovative remedy.

TABLE 15—Distribution of Educated Unemployed according to Attainments in Rural Areas in India and Tamil Nadu : 1961.

Educational Attainments	(As percentage of total unemployed)					
	India			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
Illiterates	23.49	21.61	40.28	11.66	11.77	9.98
Literates without Formal Education	22.89	24.47	8.82	25.34	26.52	6.65
Primary or Junior Basic	26.87	28.73	20.15	25.23	25.40	22.44
Matriculation and above	26.75	25.19	40.75	37.77	36.31	60.93
All	100.00	100.00	100.00	100.00	100.00	100.00

For the country, the figures of the unemployed with Primary or Junior basic qualification are higher than that for matriculates and literates without any formal education which in themselves are nevertheless surprisingly high. The most striking feature of course is the relatively low share of illiterates in unemployment.

But, in Tamil Nadu, the proportion of unemployed among matriculates and those with higher qualifications is by far the highest, followed by literates without any formal education. This is closely followed by the unemployed with primary or junior basic qualifications. The proportion of illiterates among the unemployed males is low, and it is lower than the country's averages at less than 50 per cent of that figure.

Among the females, unemployment is high among illiterates in Tamil Nadu while for the country as a whole the proportion of illiterates among unemployed is very low. The proportion of unemployed females with primary or junior basic qualification is not very significant in the country, whereas it is quite significant at the State level.

This comparison highlights two important facts, that in Tamil Nadu, the proportion of unemployed with educational attainments is considerably higher (83.37 per cent) than in the country as a whole (50.90 per cent), and secondly, the proportion of illiterates among the unemployed in Tamil Nadu is strikingly low (9.93 per cent) as compared to the average of 49.23 per cent for the country as a whole.

To sum up, five differences in the unemployment situation as between Tamil Nadu and India may be noted:

(1) Low incidence of unemployment among females in Tamil Nadu.

(2) Relatively lower unemployment among females of the State in the 15-59 age group as compared to that for the country as a whole.

(3) Higher proportion of new entrants in the total unemployed.

(4) Strikingly high percentages peculiar to this State of educated unemployment among males as well as females. The percentages for the State are remarkably higher than the corresponding national figures.

(5) Low percentage of illiterates seeking jobs.

These, in brief, are the qualitative and quantitative differences between the unemployment situation obtaining in 1961 in the State and the country as a whole. Any remedial policy directed at relieving unemployment must address itself to the aspects of the problem that are peculiar to this State; like the distribution of workers between the various occupations; to the nature of the unemployment problem which is typical of the region and the factors behind it; the quality of the unemployed people and other social factors such as custom, tradition, religious belief, attitudes and also beliefs that may be special to the people living in the State's rural areas. These factors contribute a great deal to the success or failure of any programme and hence any macro-step designed academically without reference to the context might not yield quick results, as these factors vary not only from State to State but from district to district or on occasions even from village to village.

EMPLOYMENT IN 1971

In spite of a marked increase in the population from 360 millions in 1961 to 438 millions in 1971, the total number of workers has, according to the 1971 Census, reportedly declined from 161 millions to 151 millions. Admittedly, additions to the population, join the lowest age group which falls outside the labour force. Also for any given increase in population, the changes in the numbers constituting the age groups will not increase proportionately. Yet this paradoxical situation needs to be explained empirically explaining the given prospects for the employment situation when the additions to the population reach working age. That is to say, for a 21.6 per cent increase in the population, the fall in the proportion of workers is 9.4. And then these are the results of a change in the census definition of workers. The 1961 definition of workers was elastic and included most housewives, full-time students, etc. The discrepancy that arose as a result of the change in the definition has been noted by the

Director of Census Operations in his Provisional Report which states : "...It does not, however, mean that the number of persons who were previously working have now been deprived of work in 1971 or that the number of unemployed has unduly shot up. As already explained, the persons basically engaged as housewives, students, etc., have reported their main activity accordingly. In the present census, they have not been taken as economically active workers unless their contribution to work was substantial and the persons concerned returned that work as their main activity. This can particularly be noticed when we consider the female participation rate which shows a big decline between 1961 and 1971"

This discrepancy has become the major reason for the non-comparability of the 1961 and 1971 Census figures on employment. Hence it is necessary to present them separately and make projections based upon the 1971 and not on the 1961 Census. The change in the definition will also result in an abnormal increase in the number of housewives and full-time students who were included with the workers in the 1961 Census.

According to the 1971 Census, 80.12 per cent of the population still live in the rural areas which is only 2 per cent less than the figure for a decade ago; of whom 41.05 per cent are males and 39.07 per cent are females. Also no major or radical changes had set in in the basic distribution of the State's population.

As noted earlier, due to a change in the definition of the word worker, there has been a fall in their number. The percentage of workers to the total population, that is, the crude workers' rate, was 45.06 per cent in 1961 of which 29.65 per cent were males and 15.41 per cent females. As against this, the crude workers' rate in 1971 for all India was 34.53 per cent of which 27.43 per cent were males and 7.10 per cent females. The decline which is marginal with regard to males is drastic in the case of females being of the order of more than 50 per cent.

The provisional figures related only to "cultivators," "agricultural labourers," and "the others". The primary

sector—agriculture—occupies the first place with a preponderant majority of the workers engaged in it. 50.83 per cent of the total workers are classified as cultivators (44.53 per cent males and 6.35 per cent females) and 29.98 per cent have been classified as agricultural labourers (19.79 per cent males and 10.19 per cent females) while the “other workers” constitute 19.14 per cent (15.12 per cent males and 4.02 per cent females). The primary sector (leaving aside such occupations as fishing, forestry, hunting and orchardry for which figures are not available) provides employment for 80.86 per cent of the total workers, which is two per cent less than the corresponding figure for 1961. However, since this figure excludes the Division ‘O’ of major industrial divisions, no useful comparison can be made between the 1961 and 1971 Census. But if we take out the Division ‘O’ in the 1961 Census, the percentage remains at 79.19 which is 1.67 per cent less than the corresponding figure in the present situation. We can, on the strength of the foregoing, conclude that the pressure on the primary sector has increased which will in the sequel only swell the already considerable volume of disguised employment and under-employment in the rural areas. While there is general decline in the percentage of the workers, those classified as agricultural labourers have shown a 5.9 per cent increase. This information is summarised in Table 16.

TABLE 16 - Industrial Distribution of Workers in Rural India : 1961 and 1971

Category	1961			1971		
	Persons	Males	Females	Persons	Males	Females
Cultivators	60.30	61.09	58.87	50.88	46.95	27.98
Agricultural labourers	19.02	15.77	24.82	29.98	21.05	45.98
Other workers	20.68	23.14	16.31	19.14	36.60	26.09
Total	100.00	100.00	100.00	100.00	100.00	100.00

Sources : 1. *Census of India : 1961, Part II (B) i and ii*
 2. *Census of India, Provisional Report 1971*

This spurt in the number of agricultural labourers might have been caused either by the natural growth of that class or by the influx of small cultivators and other casual workers into its ranks.

For Tamil Nadu urban migration reported to be of the order of 30.26 per cent of the population is 13 per cent more than that of 1961. This is made up of 35.04 per cent of males and 34.10 per cent of females.

The percentage of workers to the total population, that is, the crude workers rate, has fallen to 38.19 per cent of which 20.82 per cent are males and 17.37 per cent are females, as against the (corresponding) 1961 Census figures of 49.63 per cent, 31.05 per cent and 18.58 per cent respectively. In the 1961 Census, 62.19 per cent of the male population and 37.11 per cent of the female population had been treated as workers, whereas in 1971, the corresponding figures declined to 59.25 per cent and 25.32 per cent respectively. However, Tamil Nadu has retained its position *vis-a-vis* other states with respect to the crude workers rate between 1961 and 1971.

It is also reported that there has been a marked increase in the percentage of workers depending upon the primary sector between the two census periods followed by a decline in the number of persons supported by the secondary and tertiary sector. The position can be verified in detail from Table 17.

Dependence on the primary sector has increased in Tamil Nadu over the last decade. In 1961, 73.68 per cent of the workers were dependent on this sector as against the present figure of 80.94 per cent. Tamil Nadu has now got closer to the all India average in this respect. This is one of the important changes in recent times. On the other hand, there is a marked decrease in the percentage of workers dependent on the secondary and tertiary sectors. The 1971 figures are 9.08 per cent and 8.98 per cent as against 11.82 per cent and 14.50 per cent in 1961 in that order. Here again, Tamil Nadu has come closer to the

TABLE 17—Sectoral Distribution of Workers in Rural Areas of Tamil Nadu and India Compared: 1971.

(as percentage of population)

Sector	India			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
Primary	80.86	*64.32 (67.40)	*16.54 (73.91)	80.94	60.94 (79.10)	20.00 (87.13)
Secondary				9.08	7.42 (9.64)	1.66 (7.22)
Tertiary	19.14	15.12 (32.60)	4.02 (26.09)	8.98	8.67 (11.26)	0.31 (5.65)
All	100.00	79.44 (100.00)	20.56 (100.00)	100.00	77.03 (100.00)	21.97 (100.00)

* excludes workers engaged in livestock, forestry, fishing, hunting, and allied activities and as orchardists.

(Figures in Brackets indicate percentage to their respective totals.)

Source : (1) *Provisional Report of Census of Tamil Nadu.*

(2) *Census of India 1971 Paper 1 of 1971 supplement.*

country's average. In the country at large, 19.14 per cent of the workers as against 17.11 per cent in 1961 are dependent on the secondary and tertiary sectors, the corresponding figure for Tamil Nadu being 17.06 as against 26.32 per cent in 1961. Reduced dependence on these sectors over the decade is an all-India phenomenon to which trend Tamil Nadu has conformed in a greater degree. This might have been caused by two factors. The first is the influx of workers from other sectors to the primary sector (A phenomenal increase in the percentage of workers depending on the primary sector was noted earlier, the spurt being of the order of 9 per cent. This is not, however, borne out by any notable increase in Tamil Nadu's migration figures between 1961 and 1971, mentioned in the foregoing paras.)

Secondly, a stricter criterion of eligibility may have been adopted for inclusion in the secondary and tertiary sectors. For example a full-time student who spent a day in his father's shop in a fortnight was treated as an economically active worker, his basic classification as a full-time student being overlooked in the 1961 Census. This has been rectified in the 1971 Census.

There is also a change with regard to the distribution of workers as between different industries. For the first time the workers engaged in livestock, forestry, fishing, hunting, plantations, fruit-growing and allied activities have been provided for in a separate category which had been clubbed together with mining and quarrying in the 1961 Census.

Tamil Nadu has come very close to the country's average even in respect of industry-wise distribution of workers. This can be seen from Table 18.

In a decade the distribution of the workers in Tamil Nadu has varied so much and of all the changes, the one which compels attention is the growth of the agricultural labour force in spite of a fall in the crude workers' rate and also in their number in the different industries. Agricultural labourers who formed 17.70 per cent of the all male workers and 28.86 per cent of all female workers have gone up to 30.89 per cent of the male workers and 62.18 per cent of the female workers in 1971. The spurt in numbers is marked and remarkable in the case of female agricultural labourers when viewed against the background of a marked fall in their own crude workers' rate (by about 32 per cent). This disparity was noted by the Registrar-General and Census Commissioner, and he states that, in 1961, talk of land reform which had been announced as imminent and was being discussed, led several agricultural labourers to declare themselves as cultivators of land rather than as agricultural labourers. Apparently, they did so in the hope of establishing their right as cultivators. This deficiency in the 1961 Census was rectified by adopting a different definition altogether. In addition to this, once the enumeration was over

TABLE—18 Industry-wise Distribution of Workers in Rural India and Tamil Nadu : 1971

Industries	India			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
Cultivators	50.88	44.53 (43.35)	6.35 (27.98)	40.27	35.16 (45.61)	5.11 (22.30)
Agricultural labourers	29.98	19.79 (21.05)	10.19 (45.93)	38.08	23.81 (30.89)	14.27 (62.18)
Livestock, Forestry, Fishing, Hunting, etc.				2.56	1.96 (2.55)	0.60 (2.59)
Mining & Quarrying				0.37	0.39 (0.38)	0.08 (0.30)
Manufacturing, Processing, etc.				3.65	2.71 (3.52)	0.94 (4.15)
Servicing, repairs other than household industry	19.14	15.12 (32.60)	4.02 (26.09)	4.10	3.57 (43.63)	0.53 (2.83)
Construction				0.96	0.84 (1.09)	0.12 (0.51)
Trade and Commerce				3.35	3.01 (3.93)	0.34 (1.49)
Transport, Storage and Communication				0.83	0.83 (1.04)	0.30 (0.14)
Other Services				5.83	4.86	0.97
All	100.00	79.44 (100.00)	20.56 (100.00)	100.00	77.03 (6.39)	21.97 (4.01)

Source: *Ibid.*

* Figure for individual industries are not available. Figures in the brackets indicate percentage to the respective totals.

instructions were issued that, where cultivation, agricultural labour or household industry was reported as the economic activity, if there was no further indication of which among these formed the main activity of the persons reporting, cultivation should be treated as the principal activity. Now this mistake has also been rectified and hence the spurt in numbers of agricultural labourers category (Census of India 1971: Paper I of 1971 supplement).

This also explains the spurt in the number of workers dependent on orchards, plantations, etc., who have been bracketed with mining and quarrying. Hence, while there has been a phenomenal increase in the former there is a remarkable decline in the latter.

The workers in the transport, storage and communications sector have increased by more than 100 per cent over a decade. This must have been the cumulative effect of the increase in the length of roads and the number of of motor vehicles in active use as shown in Table 19.

The 100 per cent increase in the workers depending on Transport, Storage and Communication might well have been caused by the 63 per cent increase in the road length and 152 per cent increase in the number of motor vehicles plying on the roads over the decade.

There was also an increase in the number of workers in the Trade and Commerce sector. The percentage shot up from 2.30 to 3.35 between the census period which represents a 45 per cent increase. This would be adequately accounted for by the increased trading activity over the last decade; in the State's external trade, for example, there has been a 100 per cent increase in exports. The growth in the volume of the State's external trade is set forth in Table 20.

In addition to this, there has been a steady and rapid increase in the number of dealers registered under the Tamil Nadu General Sales Tax and Central Sales Tax Act

TABLE 19.—Total Length of Surfaced and Unsurfaced Roads and the Number of Motor Vehicles in Tamil Nadu.

	Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Roads & Motor Vehicles												
1. Surfaced Roads		33,061	34,677	37,559	41,284	43,974	44,125	45,895	47,318	48,929	49,972	52,375
a. Cement Concrete		859	932	1,033	1,033	1,033	1,040	1,083	1,135	1,181	1,205	1,205
b. Bituminous		13,958	14,433	15,624	17,252	17,391	18,224	19,257	20,020	20,724	21,852	23,352
c. Waterbound Macadamised		18,244	19,312	20,902	22,999	25,550	24,861	25,550	26,163	26,924	26,915	27,818
2. Total Unsurfaced Road		10,958	20,935	20,247	19,834	20,816	21,442	21,745	21,933	23,024	22,865	21,530
Total Road Length (1+2)		44,019	55,612	57,806	61,118	64,790	65,567	67,640	69,251	71,853	72,837	73,905
Number of Motor Vehicles on the Road		55,356	56,649	64,979	68,012	74,619	77,761	86,240	93,534	1,04,111	1,18,150	1,25,274

Source: Tamil Nadu Economic Appraisal, 1971.

TABLE 20—Exports and Imports of Tamil Nadu.

	YEAR						
	1962— 63	1963— 64	1964— 65	1965— 66	1966— 67	1967— 68	1968— 69
Exports	6,934	8,824	8,773	8,083	12,009	12,981	15,644
Imports	11,030	12,031	14,932	16,572	29,033	34,148	31,989

Source: *Ibid.*

TABLE 21—Number of Dealers Registered under the Tamil Nadu Sales Tax Act and Central Sales Tax Act in Tamil Nadu.

	YEAR									
	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
A*	1,19,568	1,22,571	1,25,529	1,36,335	1,46,944	1,56,671	1,62,354	1,67,478	1,69,148	1,71,301
B*	29,423	32,657	36,579	39,616	44,582	50,090	51,618	56,097	60,481	60,410
A+B	1,48,991	1,55,228	1,62,108	1,75,951	1,91,526	2,06,761	2,13,972	2,23,575	2,29,629	2,31,711

A* : Dealers registered under the Tamil Nadu General Sales Tax Act, 1959.

B* : Dealers registered under the Central Sales Tax Act, 1956.

Source: *Ibid.*

as well. From 1,48,991 dealers in 1961 the number went up to 237,588 in 1970-71 making for a 59.05 per cent increase. The details are summarised in Table 21.

Finally, there has been a minor increase in the number of workers engaged in construction. This is the result of increasing urbanisation that is taking place, and which has been a marked feature of Tamil Nadu's growth, large buildings made possible by wider acceptance of technological innovations in civil engineering and the direct participation of the State Government in the construction of residential accommodation both for the weaker sections of society, the middle classes, industrial workers and its own employees. The tenements constructed under the aegis of the Tamil Nadu Housing Board over the period 1961-'71 are broken up according to the category of beneficiaries in Table 22.

While an increase in the number of workers engaged in trade and commerce, transport, storage and communication, construction and manufacturing is registered, the workers subsumed in the other services have declined from 14,91,827 in 1961 to 6,34,519 in 1971, a 57 per cent decline. This is due in large measure to higher disaggregation and the cautious definitions adopted in 1971 as a result of which most of the workers were placed under one industry or the other. Often in the past censuses, these were lumped together for administrative convenience.

While the Census Reports have not yet essayed any approach to the problems of unemployment, the National Sample Survey, conducted during 1969-'70, sought to tabulate some information on the problem. The result itself was based on a survey of 3,956 sample households and 19,476 individuals in Tamil Nadu.

The survey estimated that during the period under review, 1.3 per cent of the rural population was unemployed of which 1.2 per cent were males and 0.1 per cent were females. It pictures the unemployment in the rural areas as being less severe than in the urban areas. Of the

TABLE 22—Tenements under the Management of the Tamil Nadu Housing Board.

	YEAR									
	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
Houses for										
Low Income Group	888	1,084	1,447	1,709	2,142	2,416	2,831	3,268	3,868	4,368
Middle Income										
Group	238	263	489	646	776	872	1,040	1,265	1,715	2,265
Slum Improvement/ Clearance										
Tenements	635	1,237	1,651	2,589	3,849	4,073	5,597	8,595	10,395	11,795
Tamil Nadu										
Government ren- tal housing flats	1,510	1,636	1,798	1,892	2,228	2,270	3,986	4,794	5,296	5,796
Subsidised in dust- rial housing										
tenements	—	54	246	292	342	402	462	462	462	486
Fireproof										
tenements	—	—	—	—	—	—	793	843	2,618	3,040

Source: *Ibid.*

total unemployed, 2.6 per cent were graduates, 15.8 per cent were matriculates and 58.6 per cent were illiterates. This shows that the situation in so far as unemployment was concerned had not changed as rapidly as one might have expected in a decade.

In the next chapter the employment situation in Tamil Nadu and associated problems are analysed and discussed.

CHAPTER 3

RURAL LABOUR FORCE—RURAL TAMIL NADU

This chapter discusses some aspects of the composition of the labour force in the districts of Tamil Nadu as it was in 1961 and in 1971.

Rural Population : In Tamil Nadu nearly 70 per cent of the population live in the rural areas and they are distributed among the districts more or less evenly with the exception of the Nilgiris district. The rural population of Salem, Thanjavur, North Arcot, South Arcot and Tiruchirapalli alone account for 55.17 per cent. The rural population in the following five districts exceeds 10 per cent of the State's entire rural population: Salem (13.33 per cent males and 12.83 per cent females), South Arcot (10.90 per cent males and 10.71 per cent females), Thanjavur (10.59 per cent males and 10.65 per cent females), North Arcot (10.43 per cent males and 10.26 per cent females) and Tiruchirapalli (10.86 per cent males and 10.47 per cent females). In addition to this, these districts have also a large proportion of the population living in the rural areas as is illustrated in Table 23.

The districts South Arcot, Salem, Thanjavur, North Arcot and Tiruchirapalli have got a larger proportion of their population living in the rural areas as compared to the other districts. This may be due to a wider prevalence of rural characteristics. Again, these five districts account for 52.53 per cent of the State's total cropped area and 59.50 per cent of its total irrigated areas. They account for more than 65 per cent of the total forest area in the

TABLE 23.—Percentage of Population living in Rural Areas in the Districts of Tamil Nadu.

Serial Number	Districts	YEAR		
		1951	1961	1971
1.	Chingleput	82.66	79.25	65.24
2.	South Arcot	81.53	79.94	79.15
3.	North Arcot	88.21	87.13	85.82
4.	Salem	86.02	83.77	*79.89
5.	Coimbatore	80.17	70.99	64.41
6.	Nilgiris	71.77	56.06	50.76
7.	Madurai	72.15	67.10	66.88
8.	Tiruchirapalli	80.19	78.74	77.73
9.	Thanjavur	80.62	79.62	79.48
10.	Ramanathapuram	74.11	75.25	73.89
11.	Tirunelveli	68.74	68.95	67.83
12.	Kanyakumari	—	84.95	83.28
13.	STATE	75.79	73.31	69.74

* Dharmapuri is included with Salem to facilitate comparison. Kanyakumari district was formed only after 1951.

Source : (1) *Census of India ; District Census Handbook 1951.*

(2) *Census of India, Vol. IX, Part II (A) (i) 1961, and*

(3) *Provisional figures—1971—from Directorate of Census Operations, Madras.*

State and 55 per cent of the total number of cattle in the whole State. This could well have acted as “pull” factor which could explain the concentration of the population in the rural areas. It is against this background that any survey of the employment situation in these districts should be attempted and viewed.

EMPLOYMENT SITUATION IN THE STATE

The 1961 Census classified 49.63 per cent of the total rural population as workers, of which 31.05 per cent were males and 18.58 per cent females. The corresponding figures for the urban areas were 34.41 per cent, 27.07 per

cent and 7.34 per cent respectively. Though there is no major difference in the matter of employment between the males in the urban areas and those in the rural areas, the divergence is more pronounced in the matter of employment among females. It also points out that, in the rural areas, the employment potential is higher as compared to the urban areas. However, no immediate conclusions can be drawn because the factors making for this employment potential and the category of employment generated differ widely in the rural and urban areas.

Crude Workers' Ratio : The fact that some districts in the State have got a higher crude workers' rate than some others affords further insights. Salem district registers 53.70 per cent followed by Tiruchirapalli with 53.62 per cent, whereas that for Kanyakumari district is as low as 35.83 per cent and Thanjavur comes in between with its 44.84 per cent. Coimbatore (65.03 per cent) and Tiruchirapalli (64.41 per cent) have the first and second highest crude male workers' participation rate, while Ramanathapuram (43.76 per cent) and Salem (43.17 per cent) top the list in respect of the crude workers' rate for females.

Concentration of Work Opportunity

In Coimbatore district, this concentration is in favour of males (32.82 per cent), whereas, in Ramanathapuram, though the concentration is in favour of males, it is not as heavily weighted as in Coimbatore or Kanyakumari—the share of females being 22.58 per cent as against 29.15 per cent for males. Kanyakumari district deserves special mention not only for its low crude workers' rate, which, in inter-district terms, resolves itself into a low crude workers' rate for males as well as females and a heavy concentration of job opportunities in favour of males. This is summarized in Table 24.

A possible explanation for inter-district differences in the crude workers' rate is due to differences in the demand for labour, the extent of industrialization and

TABLE 24—Crude Workers' Rate in the Districts and Concentration of Job Opportunities in 1961.

Serial Number	Districts	Persons	Males	Females
1.	Chingleput	45.64	31.65 (62.24)	13.99 (28.47)
2.	North Arcot	50.07	30.90 (61.49)	19.17 (38.53)
3.	South Arcot	47.86	31.54 (62.64)	16.32 (32.88)
4.	Salem	53.70	32.33 (64.02)	20.37 (43.17)
5.	Coimbatore	52.29	32.82 (65.03)	19.47 (39.30)
6.	Nilgiris	49.93	29.58 (56.91)	20.35 (42.37)
7.	Madurai	50.59	31.63 (62.78)	18.86 (38.54)
8.	Tiruchirapalli	53.62	31.91 (64.41)	21.71 (43.03)
9.	Thanjavur	44.84	30.40 (61.37)	14.44 (28.62)
10.	Ramanathapuram	51.73	29.15 (60.22)	22.58 (43.76)
11.	Tirunelveli	49.06	28.92 (59.53)	20.14 (39.17)
12.	Kanyakumari	35.83	26.82 (53.04)	9.01 (18.23)
13.	STATE	49.03	31.05 (62.19)	18.58 (37.11)

Note : Figures in brackets indicate the percentage of the work force to the respective total sex populations. This, in effect, is the sexwise crude workers' rate. Figures outside of the brackets, of course, indicate the concentration of work opportunities.

Source : *Census of India, Volume IX, Part II (B) (i), 1961.*

urbanization, the extent and duration of school and college enrolment, etc. A further explanation for this is the composition of the population. It may be noted that Kanyakumari, a peculiar case even otherwise, has the lowest proportion of the Scheduled Caste population in the rural areas (4.12 per cent) but the level of literacy is very high (46.97 per cent). At the other extreme is Salem where the crude workers' rate is high (Table 24) but the level of literacy is the lowest (15.74 per cent).

It may, thus, be noted that the districts, which have a higher level of literacy have also a lower workers' rate. This might be due to two reasons: the districts with a higher literacy rate have quite possibly a higher percentage of the population attending schools and colleges. Secondly, it is also possible that a higher percentage of educated unemployment obtains in these districts. The latter would be a significant conclusion if it were true. It would show that educated unemployment is prevalent in the rural areas too, that educated persons have not found their way to participating in any scientific agriculture or that rural development has not thrown up any job opportunities except of the most rudimentary kinds in the rural areas. For example in Kanyakumari, 96.93 per cent of the unemployed males in the 15-59 age group are literates. Of them, 63.28 per cent have passed their matriculation or higher examinations. Similarly, 98.37 per cent of the unemployed females are literates. Of them, 84.31 per cent are matriculates or possess higher qualifications. The latter fact does show, that general education does not unfit villagers temperamentally for this ancient occupation of agriculture.

This conclusion is further supported by the fact that Kanyakumari has 41.66 per cent of its male population and 41.39 per cent of its female population in the 0-14 age group, and ranks last in its population in the 15-59 age group reckoned as a percentage of the total (52.97 per cent). The labour force participation rate in the 0-14 age group is also the lowest in Kanyakumari (5.33 per cent of its male population and 3.06 per cent of its female population).

No major change was noted in 1971 save for a steep fall in the crude workers' rate as a result of the adoption of a less inclusive definition. The 1971 Census (*Provisional Report*) for Tamil Nadu has classified 38.19 per cent of the population as workers. 58.55 per cent of all the male workers and 17.62 per cent of all the female workers go to make up this labour force. On the whole, the crude workers' rate declined by 11.44 per cent in 1971 as compared to 1961. This fall over a decade has been more pronounced in the case of female workers (19.41 per cent) than in the case of male workers (3.64 per cent).

Coimbatore district has not only retained its place with its highest crude male workers' rate (Table 24), but it has also wrested from Salem the latter's highest ranking for the overall crude workers' rate (Table 25). On the other hand, Kanyakumari has yielded place to Nilgiris which now registers the lowest crude male workers' rate of 30.61 per cent replacing Ramanathapuram which now ranks fourth in that list (Table 25). Kanyakumari remains last by registering the lowest crude workers' rate of 28.99 per cent.

One possible explanation for the high crude female workers' rate in Nilgiris which ranked fourth in 1961 may be that the females, who were included in the worker category in the 1961 Census, were neither housewives nor full-time students but were actually workers. Hence while other districts have registered a steep fall, it has been very modest in the case of Nilgiris. It is more likely, however, that, in this case, the local and particular explanation is also the true one; plantation labour, predominant in Nilgiris, has always been drawn for the most part from among women. The crude workers' rate for each district along with the percentages of decline over the period 1961—'71 is shown in Table 26. It is perhaps necessary to add that the variation has uniformly been one of decline.

TABLE 25—Crude Workers' Rate and Percentage of Decline in Rural Areas: 1961—1971.

District/State	CRUDE WORKERS' RATE				DECLINE			
	1961		1971		1961—1971		× 100	
	Persons	Males	Females	Persons	Males	Females	Persons	Males
Chingleput	45.64	62.24	28.47	36.09	56.95	14.46	9.55	5.29
North Arcot	50.07	61.41	38.53	37.24	57.35	16.54	12.83	4.14
South Arcot	47.86	62.64	32.88	35.91	58.49	12.68	11.95	4.15
Salem	53.70	64.02	43.17	39.63	60.45	18.12	14.07	3.57
Coimbatore	52.29	65.03	39.30	44.36	63.92	24.27	7.93	1.11
Nilgiris	49.93	56.91	42.37	41.01	51.00	30.61	8.92	5.91
Madurai	50.59	62.78	38.54	40.45	59.05	21.80	10.14	3.73
Tiruchirappalli	53.62	64.41	43.03	39.35	60.40	18.31	14.27	4.01
Thanjavur	44.84	61.37	28.62	35.08	57.33	12.71	9.76	4.04
Tirunelveli	49.06	59.53	39.17	39.10	56.39	23.64	9.96	3.14
Ramanathapuram	51.73	60.22	43.76	37.17	56.18	19.12	14.56	4.04
Kanyakumari	35.83	53.04	18.23	28.99	51.37	5.89	6.84	1.67
STATE	49.03	62.19	37.11	38.19	58.55	17.62	10.84	3.64
								19.41

Source: Census of India, Vol. IX, Part II (B) (i), 1961 and Provisional Report; Census of Tamil Nadu: 1971; Directorate of Census Operations, Madras.

Note: Dharmapuri is included in the figures for Salem to facilitate comparison. It is noteworthy that, almost certainly because of a stricter delineation of categories or sub-groups in the aggregate for the workers, there is an absolute decline in all the crude workers' categories (males, females and persons) between 1961 and 1971. The low participation rate for Nilgiris males, both in 1961 and 1971, stands out above the other variations in the computation methods.

In this decade, the concentration of work has shifted in favour of males, the fall in the rate being greater in the case of females. Ramanathapuram, which shared a more or less equal distribution of opportunities between males and females in 1961, has gone out of the picture in 1971. In other words the decline in the crude workers' rate of Ramanathapuram females has been considerable. Nilgiris is the only district in 1971 where females have retained their parity with males, though they have lost more heavily than the males (Table 25 and Table 26). In Table 26, however, they retain the highest work concentration rate for females in any district. In other districts work opportunities available to females have been lower. In other words, work opportunities for females and therefore their participation rate is much lower, in 1971.

SECTORAL COMPOSITION OF LABOUR FORCE

It is also necessary to examine the sectoral composition of the labour force.

The 1961 Census classification of industrial workers is based on the concept of major activity, i.e., the activity to which the workers devote a major portion of their time and labour. On the basis of this definition, the census of 1961 shows that a majority of the work force is engaged in the primary sector (73.68 per cent) in Tamil Nadu. Next to the primary sector, the tertiary or service sector is a major source of employment. It accounts for 15.67 per cent of

employment of males and 12.53 per cent of that for females. The secondary sector provides little employment to either males or females. The actual figures being 12.83 per cent and 10.14 per cent respectively. Here again there are inter-district variations as shown in Table 27.

The table records a heavy concentration of workers in the primary sector in South Arcot (82.89 per cent), Tiruchirapalli (80.63 per cent) and Ramanathapuram (80.20 per cent). A low concentration is evidenced in Kanyakumari (34.28 per cent). A sexwise analysis shows that South Arcot ranks first in respect of male workers concentration in this sector while Thaujavur ranks first in respect of female workers concentration in the same sector. Kanyakumari is the only district which has low concentrations of both male and female workers in agriculture. The reason may well be the high literacy rate and the low proportion of Scheduled Caste population that characterize the district. Among the many factors which influence concentration in this sector, some may be cited : availability of land, facilities for irrigation and the net area irrigated. (Refer to Appendix I.)

A high concentration of male workers in the secondary sector is recorded in Nilgiris district while South Arcot on the other hand reports a low concentration. Similarly, Kanyakumari (61.59 per cent) ranks first with its heavy concentration of both male and female workers in the secondary sector (Table 27) while South Arcot ranks last.

Kanyakumari has a higher percentage of male workers (34.99 per cent, Table 27) employed in the tertiary sector than any other district and Coimbatore (25.47 per cent) in the case of female workers. The overall figure of persons is also the highest for any district in the tertiary sector. South Arcot, Tiruchirapalli and Tirunelveli districts have reported low concentrations for this sector—both of male and female workers.

A major change that has taken place over the last decade is the spurt in the number of workers dependent on

TABLE 27—Sectoral Distribution of Workers in Rural Areas of Tamil Nadu: 1961.

Districts	SECTORS								
	Primary			Secondary			Tertiary		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Chingleput	70.03	66.82	77.28	13.77	15.71	9.39	16.20	17.47	13.33
North Arcot	78.47	76.06	82.35	8.95	11.21	5.31	12.58	12.73	12.34
South Arcot	82.89	82.73	83.21	5.71	6.91	3.39	11.40	10.36	13.40
Salem	75.67	73.99	78.20	11.50	13.20	8.92	12.83	12.81	12.88
Coimbatore	57.78	58.93	55.83	19.30	19.66	18.70	22.92	21.41	25.47
Nilgiris	41.72	37.34	48.08	33.23	31.70	35.44	25.45	31.49	16.48
Madurai	72.86	71.67	74.78	9.16	11.03	6.16	17.93	17.30	19.03
Tiruchirappalli	80.63	78.01	84.48	8.36	10.36	5.42	11.01	11.63	10.13
Thanjavur	78.53	74.85	86.28	7.92	9.35	4.91	13.55	15.80	8.81
Ramanathapuram	80.20	77.53	83.65	8.44	9.32	7.30	11.36	13.15	9.05
Tirunelveli	70.44	70.00	71.06	19.00	17.23	21.55	10.56	12.77	7.39
Kanyakumari	3.28	40.33	16.25	33.96	24.68	61.59	31.76	34.99	22.16
STATE	73.68	71.50	77.33	11.82	12.83	10.14	14.50	15.67	12.53

Source: Census of India, Vol. I, Part II (B) (i), 1961.

the primary sector (Table 27). This has naturally been accompanied by a corresponding decline in the number of workers dependent on the other two sectors. There has been occasion before to remark on this. This spurt has been phenomenal in the case of Nilgiris, Coimbatore and Kanyakumari. The only district where the spurt is all but imperceptible is Ramanathapuram. An increase in employment in the primary sector in that district is, however, more noticeable in the case of males compared to females. It is nevertheless generally true to assert, that with the exception of a few districts, agriculture in most of the others has come to support 90 per cent of the local population.

Secondly, the secondary sector has nurtured a growing volume of workers in Ramanathapuram. The improved situation is peculiar to this district alone, for all the others have reported a fall in the figures over the period 1961—'71. Likewise, Tirunelveli is the only district which has registered a 27 per cent increase in the workers employed in the tertiary sector.

The districts which enjoyed leading positions by virtue of high figures for one or more of the sectors all managed to retain their dominant positions and the general tendencies, where they were pronounced in 1961, continued to operate in 1971. This generalization holds true save for a few changes that have taken place in the secondary sector (Kanyakumari replacing Nilgiris) and in the tertiary sector (Kanyakumari replacing Coimbatore). The distribution of workers between the different sectors as it obtained in 1971 is set forth in Table 28.

DISTRIBUTION OF WORKERS IN RURAL INDUSTRY

The third important aspect in any study of employment is the distribution of industrial workers.

By and large, cultivation offered a sizeable share of the total employment available to the workers in 1961.

TABLE 28—Sectoral Distribution of Workers in Rural Tamil Nadu : 1971.

District/State	SECTORS					
	Primary			Secondary		
	Persons	Males	Females	Persons	Males	Females
				Persons	Males	Females
Chingleput	78.97	76.64	88.48	10.00	11.12	5.42
North Arcot	82.65	80.09	91.79	3.47	8.82	3.23
South Arcot	87.45	86.12	93.75	4.94	5.61	1.79
Salem	78.66	76.11	86.57	12.99	14.51	8.27
Dharmapuri	89.36	88.37	93.44	3.34	3.72	1.75
Coimbatore	74.62	71.12	84.06	14.64	16.46	9.74
Nilgiris	81.07	75.06	91.50	7.55	9.81	3.58
Madurai	84.77	82.16	91.87	5.86	6.94	2.92
Tiruchirapalli	82.78	80.29	91.00	8.50	9.63	4.61
Thanjavur	83.52	81.70	91.73	4.96	5.57	2.19
Pamanathapuram	80.58	79.36	83.96	9.46	8.81	11.28
Tirunelveli	72.30	71.70	73.73	14.93	12.93	19.60
Kanyakumari	67.93	71.33	37.26	15.15	12.74	36.81
STATE	80.94	79.10	87.13	9.08	9.61	7.22
				11.03	12.24	6.01
				13.88	11.09	4.98
				7.61	8.27	4.46
				8.35	9.38	5.16
				7.30	7.91	4.81
				10.74	12.42	6.20
				11.38	15.10	4.92
				9.37	10.90	5.21
				8.72	10.03	4.39
				11.52	12.73	6.08
				9.96	11.83	4.76
				12.77	15.34	6.67
				16.92	15.93	25.93
				8.98	11.26	5.65

Source : Census of Tamil Nadu 1971; Provisional Report ; Directorate of Census Operations, Madras.

In South Arcot, 53.38 per cent of the total workers were cultivators. In Tiruchirapalli, 62.16 per cent of the workers were cultivators and finally, the corresponding figure for Ramanathapuram was 63.36 per cent. (The figures are from Table 29.)

Next to cultivation, based either on tenancy or ownership, agricultural labour provides a large amount of employment. The employment potential of this sub-sector is as high as 30.49 per cent in South Arcot district. But, on the other hand, these two "occupations" have provided a negligible share of employment available in the sector as a whole — in Kanyakumari, Salem and Nilgiris districts, for example. In Kanyakumari the employment potential of the "cultivation" industry was only 23.11 per cent (28.72 per cent of males and 6.45 per cent of females, Table 29). Similarly, agricultural labour accounted only for 9.79 per cent of the total employment (9.85 per cent males and 9.63 per cent females). The cases of Salem and Nilgiris districts are similar.

The employment potential of these "industries" so defined has varied from district to district. However, "households" have turned out to be a major employer in all the districts in addition, of course, to "cultivation" and "agricultural labour". For example, it constituted 13.14 per cent and 12.44 per cent respectively of the total employment provided in Tirunelveli and Coimbatore districts respectively. This sector has turned out to be a fruitful source of employment, in the case of Kanyakumari, for instance, 22.58 per cent and especially for females, 57.74 per cent.

The other industries, namely "Construction", "Transport, Storage and Communication", "Livestock", "Forestry, Fishing", etc. which are more credibly classified as industries do not provide employment on a large scale as can be seen from the State's average of 0.83 per cent, 0.42 per cent and 0.50 per cent respectively for these categories of occupations.

TABLE 29—Industrywise Distribution of Workers in Rural Areas of Tamil Nadu.
(as percentage)

S.No.	DISTRICT	1. Cultivators						2. Agricultural Labourers					
		1961			1971			1961			1971		
		Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
1.	Chingleput	40.61	43.97	32.85	32.62	37.47	12.87	29.30	22.61	44.35	44.15	36.69	74.65
2.	North Arcot	58.81	62.04	53.61	45.04	52.27	19.19	18.99	13.16	28.38	33.20	23.28	71.56
3.	South Arcot	53.38	58.24	44.00	45.05	51.96	18.01	30.49	23.70	43.60	49.04	32.67	74.99
4.	Salem	61.21	61.71	60.44	43.16	47.65	29.23	14.25	12.05	17.59	34.04	27.21	55.18
5.	Coimbatore	37.97	40.78	33.22	31.54	36.28	18.72	18.91	17.18	21.82	41.69	33.47	63.92
6.	Nelgiris	27.12	24.30	31.22	6.14	7.62	5.22	14.47	12.87	16.80	9.97	8.74	10.47
7.	Madurai	48.41	51.29	43.80	37.51	42.90	22.88	24.23	20.14	30.82	44.34	36.43	65.82
8.	Thanjavur	41.22	44.28	35.08	33.50	37.92	13.39	37.02	30.37	51.00	48.28	41.74	77.87
9.	Tiruchirappalli	62.16	63.39	60.32	52.04	57.51	34.02	18.15	14.23	23.82	29.76	21.91	55.68
10.	Pannalathapuram	63.36	64.14	62.32	45.58	51.22	29.83	16.41	12.76	21.12	32.16	24.89	52.43
11.	Tirunelveli	43.88	47.50	38.64	31.29	37.36	16.89	19.12	14.52	25.72	38.00	30.55	55.66
12.	Kanyakumari	23.11	28.72	6.45	18.69	20.49	2.51	9.79	9.85	9.63	41.22	42.34	3.11
13.	Dharmapuri	—	—	—	60.60	65.48	40.40	—	—	—	27.72	21.89	51.83
14.	STATE	50.97	52.98	47.80	40.27	45.61	22.30	21.81	17.70	28.86	38.08	30.89	62.18

(Continued on page 52)

TABLE 29—(Continued)

S. No.	DISTRICT	5. Trade and Commerce				6. Transport, Storage and Communication			
		1961		1971		1961		1971	
		Total	Males	Females	Total	Males	Females	Total	Males
1.	Chingleput	2.44	2.65	1.98	3.04	3.33	1.84	1.02	1.36
2.	North Arcot	1.88	2.39	1.05	2.62	3.00	1.26	0.89	0.92
3.	South Arcot	1.65	1.77	1.43	2.40	2.56	1.62	0.32	0.72
4.	Coimbatore	2.91	3.55	1.84	3.91	4.57	2.14	0.41	0.62
5.	Salem	1.85	2.36	1.08	2.47	2.77	1.57	0.33	0.62
6.	Nilgiris	1.46	2.37	0.13	2.85	4.28	0.36	0.73	1.26
7.	Madurai	2.28	3.14	0.91	3.38	4.20	1.14	0.32	0.27
8.	Tiruchirappalli	1.57	2.25	0.57	2.89	3.46	1.34	0.32	0.67
9.	Tanjavur	3.22	3.69	2.23	4.59	5.10	2.28	0.49	0.69
10.	Ramanathapuram	1.84	2.76	0.65	3.50	4.38	1.06	0.23	0.74
11.	Tirunelveli	3.27	4.79	1.09	4.77	6.33	1.08	0.44	0.58
12.	Kanyakumari	4.77	4.95	4.24	5.47	5.59	0.44	0.93	0.81
13.	Dharmapuri	--	--	--	2.41	2.66	1.39	--	1.84
14.	STATE	2.30	2.91	1.27	3.35	3.90	1.49	0.42	0.47
								0.83	1.04

N = Negligible.

(Continued on page 54)

TABLE 29—(Continued)

S. No.	DISTRICT	7. Mining and Quarrying						8. Household Industry*					
		1961			1971			1961			1971		
		Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
1.	Chingleput	2.63	3.30	1.09	0.28	0.33	0.28	6.22	6.39	5.81	4.95	4.83	2.39
2.	North Arcot	0.97	1.19	0.33	0.33	0.36	0.25	5.67	6.49	3.35	3.11	3.53	1.63
3.	South Arcot	0.90	1.13	0.44	0.57	0.65	0.18	3.58	4.13	2.53	1.74	1.95	0.73
4.	Salem	1.35	1.52	1.08	0.91	0.94	0.81	7.53	8.14	6.61	5.48	5.75	4.64
5.	Coinbatore	1.06	1.26	0.73	0.24	0.24	0.23	2.44	10.82	15.20	6.38	6.70	5.52
6.	Nilgiris	29.16	25.70	34.19	0.70	0.82	0.51	0.48	0.70	0.15	0.53	0.79	0.09
7.	Madurai	3.21	3.58	2.63	0.36	0.38	0.30	3.39	3.78	2.72	2.30	2.60	1.45
8.	Thanjavur	2.16	2.89	0.61	0.03	0.03	0.07	2.90	2.66	3.40	1.97	2.15	1.17
9.	Tiruchirappalli	1.18	1.47	0.75	0.33	0.33	0.33	4.46	4.91	3.79	2.87	3.10	2.11
10.	Ramanathapuram	1.41	2.35	6.20	0.23	0.24	0.21	4.85	4.13	5.79	3.05	2.57	4.87
11.	Tirunelveli	2.48	4.04	0.24	0.43	0.46	0.37	13.14	8.39	19.96	7.27	4.03	4.94
12.	Kanyakumari	6.60	8.13	2.05	0.18	0.20	N	22.58	8.99	57.74	5.21	3.71	1.87
13.	Dharmapuri	--	--	--	0.38	0.38	0.30	--	--	--	3.65	3.52	4.15
14.	STATTE	2.01	2.51	1.19	0.37	0.43	0.17	6.74	6.14	7.79	1.14	1.23	0.73

* In the 1971 Census this industry has been termed processing, manufacturing and household industry.
N = Negligible.

TABLE 29—(Continued)

S. No.	DISTRICT	9. Manufacturing other than H.H. Industry*						10. Other Services					
		1961			1971			1961			1971		
		Total	Males	Females	Total	Males	Females	Persons	Males	Females	Persons	Males	Females
1.	Chingleput	4.04	4.80	2.32	4.40	4.89	2.40	12.64	13.37	11.27	6.68	7.27	4.18
2.	North Arcot	1.71	2.53	0.38	3.45	4.13	1.00	10.32	9.74	11.32	6.23	6.96	3.68
3.	South Arcot	0.64	0.86	0.21	2.19	2.52	0.63	7.86	8.11	7.37	4.49	4.89	2.69
4.	Salem	1.64	2.26	0.70	5.38	6.41	2.20	10.67	9.90	11.84	4.62	5.17	3.00
5.	Chombatore	3.89	5.30	1.51	6.13	7.38	2.76	19.61	17.22	23.61	6.23	7.03	4.04
6.	Nilgiris	2.46	3.74	0.59	4.80	6.41	2.01	22.87	27.39	16.32	6.28	8.12	3.07
7.	Madurai	1.99	2.85	0.60	2.47	3.09	0.78	15.38	13.64	18.14	5.33	5.83	4.04
8.	Thanjavur	2.12	2.76	0.76	2.30	2.66	0.67	9.85	11.39	6.62	6.21	6.77	3.78
9.	Tiruchirapalli	2.02	3.01	0.56	4.97	5.23	1.55	9.13	8.88	9.56	6.14	5.68	3.27
10.	Pamanathapuram	1.84	2.29	1.26	5.53	5.19	6.48	9.26	9.95	8.43	6.01	5.67	4.13
11.	Tirunelveli	2.83	3.91	1.27	6.28	7.24	4.00	13.04	13.60	12.23	7.18	7.88	5.56
12.	Kanyakumari	3.72	4.36	1.79	7.18	6.08	1.71	26.07	28.84	17.73	9.62	8.39	20.59
13.	Dharmapuri	—	—	—	1.23	1.42	0.43	—	—	—	4.43	4.69	3.41
14.	SFATE	2.22	3.01	0.89	4.10	4.63	2.33	12.20	12.43	11.52	5.83	6.39	4.01

*In the 1971 Census this industry has been referred to as servicing, repairs other than household industry.

Source : Census of India 1951, Vol. IX, Part II (E) (i) and Provisional Report of Census of Tamil Nadu, 1971, Directorate of Census Operations, Madras.

Though "the other services" category shows a high employment potential, it cannot really be considered an industry on the same scale as the others, because it is a residual category and all other services, which cannot be accommodated and which have not put up an impressive statistical showing in any one of the foregoing industries, have been aggregated into this one.

The distribution of the workers industrywise in 1961 (as shown in Table 29) underscores a salient fact that agriculture and household "industries" provide between them the bulk of rural employment. This leads one to a purely semantic and tautological conclusion that the rural areas of Tamil Nadu have remained stably agricultural, over 1961-'71 which has been a significant decade in planning. It is not, however, as fallacious as might be supposed. Urbanization has proceeded faster in Tamil Nadu than in many other states. Viable agriculture serves to form both market towns and administrative urban conglomerations, with occupational patterns biased in favour of secondary and tertiary sectors. In absolute terms it would be correct to claim that this kind of urbanization has been slow in coming to Tamil Nadu.

The increased concentration of workers in agriculture can be due either to natural growth as we have argued or due to intra-rural migration of workers from other non-agrarian industries to agriculture. The latter hypothesis is supported by the fact that there has been a marginal decline of workers dependent on other industries in some of the districts while dependence on agriculture has increased. In some of the districts many of the sectoral figures for persons have increased together without pointing to any dominant central tendency similar to that posited above. The conclusion that can be safely put forward is that, while work opportunities have increased in the aggregate (in response to population increases and in lesser measure, to plan outlays), the major share of the increase has come from agriculture and associated activities. It is also possible that it could have occurred

due to a more proper classification of workers enumerated, as the workers tabulated under "other services" category has declined from 12.20 per cent in 1961 to 5.83 per cent in 1971, a 52 per cent decline.

Another major change that took place during the last decade is that "agricultural labour" has become a major source of employment. This source had ranked second in 1961. The details of this are discussed in the next chapter. As seen from Table 29 the three industries which provided employment on a large scale in 1961 have retained their places in 1971 also. However, the importance of manufacturing, processing, and household industry has declined (from 6.74 per cent to 3.65 per cent). But servicing and repairs—activities other than household industry—have come to employ 4.10 per cent of the total work force as against 2.22 per cent in 1961.

The districtwise analysis reveals that the household industry ceased to be a major employer in Kanyakumari district, employing only 5.21 per cent of the total workers. Of the total female workers, it employed only 1.87 per cent as against 57.74 per cent in 1961. Though the importance of this industry has declined, Tirunelveli and Coimbatore have retained their places with a large percentage of household workers still engaged in this sub-sector.

Finally, despite their less significant contribution to the districts' employment potential, there is a slight increase in the percentage of workers dependent on the following industries: construction, trade and commerce and transport, storage and communication. This is notable in the case of females who appear to have been offered few opportunities in this sub-sector in Nilgiris and Kanyakumari districts.

OCCUPATIONAL DISTRIBUTION

The distinction between an industry and occupation has become gradually important because of the growth of large industrial firms, which comprehend several activities, such as manufacturing, marketing, transport and welfare, and catering services. The classification of

industrial workers tends to follow the activity of the firm and therefore workers performing diverse functions are included in a single group which is then defined by the major activity that the industry represents. An occupational classification of workers thus makes an useful supplement to their industrial classification. -

The occupational classification of workers in the rural and urban areas is given in Table 30.

TABLE 30—Occupational Classification of Workers in Rural and Urban Areas of Tamil Nadu : 1961.

Occupation	Rural			Urban		
	Persons	Males	Females	Persons	Males	Females
Professional, Technical and Related Workers	4.0	5.0	2.3	5.9	5.2	8.3
Administrative, Executive and Managerial Workers	3.1	4.3	0.5	3.5	4.2	0.6
Clerical and Related Workers	1.4	2.0	N	9.6	11.7	1.2
Sales Workers	7.7	9.3	4.4	13.2	14.9	6.3
Farmers and Fishermen	10.3	11.6	7.7	4.7	4.1	7.0
Miners and Quarrymen	0.9	1.0	0.8	0.2	0.2	0.3
Transport and Communication Workers	1.3	1.9	N	4.2	5.2	0.1
Craftsmen and Production Process Workers	63.6	56.7	77.8	48.7	44.8	64.6
Service, Sports and Recreation Workers	7.5	8.1	6.3	9.8	9.4	11.3
Workers Not elsewhere Classified	0.2	0.1	0.2	0.2	0.1	0.3
Total	100.0	100.0	100.0	100.0	100.00	100.0

N = Negligible

Source : *Census of India, 1961, Vol. IX, Part II (B) (ii).*

*For districtwise distribution of workers occupationally, see Annexure II.

The table shows that a large number of workers in rural areas are occupied as “farmers and fishermen” and as “craftsmen and production process workers” whereas, in urban areas, they are occupied as “craftsmen and production process” or as “sales workers”.

A large number of male workers in rural areas are employed as craftsmen or engaged in the production process, or as farmers and fishermen and as sales workers. On the other hand, a majority of the female workers in the rural areas are occupied in the crafts or in or production processes or in fishing and farming.

Conversely, in the urban areas, the important occupation for males are the “crafts and production processes” and “sales”. Most of the women are found employed either in the “service, sports and recreation” or in “the crafts and production process” sectors.

Another aspect which needs looking into is the relative concentration of occupations in the rural and urban areas and among males and females.

Certain occupations are met with more in the urban areas while some are to be found exclusively in the rural areas. Similarly, certain positions are filled by males to a greater extent than by females and *vice versa*. The relative concentration of occupations as between males and females in rural and urban areas is set forth in Table 31.

This table shows that three occupations, namely farming and fishing mining and quarrying, and crafts production work, are largely to be found in the rural areas whereas occupations like clerical trades and transport and communications work are concentrated to a greater extent in the urban areas. However, the share of the urban sector in all occupations (44.9 per cent) is higher compared to its share in the State's population (22.7 per cent).

Though in almost all occupations, the male workers predominate, the females tend to choose such occupations

TABLE 31—Concentration of Occupations in Tamil Nadu : Rural vs Urban and Males vs Females : 1961.

Occupation	Total	Urban	Rural	Males	Females
Professional, Technical and Related Workers	100.0	54.4	45.6	77.00	23.00
Administrative Executive, and Managerial Workers	100.0	48.5	51.5	95.5	4.5
Clerical and Related Workers	100.0	84.8	15.2	97.7	2.3
Sales Workers	100.0	58.6	41.4	86.7	13.3
Farmers and Fishermen	100.0	26.9	73.1	74.22	25.8
Miners and Quarrymen	100.0	11.4	88.6	73.7	25.3
Transport and Communication Workers	100.0	72.2	27.8	99.3	0.7
Craftsmen and Production Process Workers	100.0	38.5	61.5	65.1	34.9
Service, Sports and Recreation Workers	100.0	51.9	48.1	74.3	25.7
Workers Otherwise not Classified	100.0	N	N	N	N
Total	100.0	44.9	55.1	73.0	27.0

N = Negligible.

Source : *Ibid.*

as farming and fishing, crafts production, mining and quarrying. Even in the State's rural areas, certain occupations provide more employment to females than other sectors do. (Table 32.)

Broadly speaking, females have better chances of employment in the rural areas than in the urban areas and conversely, occupations that favour males and make for high concentration are to be found rather in the urban areas than in the rural areas. This concentration further increases in such characteristic urban occupations, as transport and communication, and clerical services. This pattern based on preference by sex is reproduced in recognizable measure in the rural areas too. Thus many women are engaged in crafts production, sports, recreation services and in mining and quarrying in rural areas. This concentration based on preference or aptitude is really remarkable in such traditional occupations as farming and fishing, mining and quarrying and professional and ancillary technical trades, and the professions in urban areas. The character of trade or occupation determines the occupational pattern of females more than the well-worn dichotomy between town and country. Contrariwise the training and education of females have fashioned and generated work opportunities suited to their skills rather than market demand—a feature which one would normally expect to find in an economy more developed than that of Tamil Nadu.

Levels of Education among the Employed

The 1961 Census classifies only 8.03 per cent of all male workers and 2.38 per cent of all female workers as educated.

Among the male workers, 62.19 per cent and 88.43 per cent among the female workers are illiterates, whereas 29.78 per cent of the male workers and 9.19 per cent of the female workers are literate without however possessing any formal education. From considerations of feed-back probability, one is led to expect a higher concentration of

TABLE 32.—Occupation Concentration in Tamil Nadu: Rural and Urban, Males and Females.
(as percentage)

Occupations	Rural			Urban		
	Persons	Males	Females	Persons	Males	Females
Professional, Technical and Related Workers	100.0	81.70	18.30	100.0	72.89	27.11
Administrative, Executive and Managerial Workers	100.0	94.31	5.69	100.0	96.91	3.09
Clerical and Related Workers	100.0	98.16	1.84	100.0	97.56	2.44
Sales Workers	100.0	80.88	19.12	100.0	90.84	9.16
Farmers and Fishermen	100.0	75.31	24.69	100.0	70.98	29.02
Miners and Quarrymen	100.0	73.08	26.92	100.0	72.84	27.16
Transport and Communication Workers	100.0	99.60	0.40	100.0	99.14	0.86
Craftsmen and Production Process Workers	100.0	59.54	40.46	100.0	74.09	25.91
Services, Sports and Recreation Workers	100.0	71.90	28.10	100.0	76.66	23.34
Workers Otherwise Unclassified	100.0	79.64	20.36	100.0	91.61	8.39
All	100.0	66.90	33.10	100.0	80.47	19.53

Source: *Ibid.*

TABLE 33—Educational Attainments of Rural Work Force: 1961.

Industries	1		2		3		4	
	Illiterates		Literates		Primary or Junior basic		Matriculation and above	
	Males	Females	Males	Females	Males	Females	Males	Females
Cultivation	56.99	95.27	37.47	4.15	4.89	0.56	0.65	0.02
Agricultural Labour	77.89	97.66	19.87	2.06	2.15	0.27	0.09	0.01
Mining and Quarrying	71.90	95.26	23.28	3.86	3.69	0.85	1.13	0.03
Household Industry	53.35	84.32	40.24	12.94	6.24	2.66	0.17	0.08
Manufacturing	38.30	87.87	47.80	9.97	11.16	1.97	2.74	0.19
Construction	54.83	98.02	36.24	1.72	6.45	0.26	2.48	Nil
Trade and Commerce	20.80	92.20	62.34	6.91	14.10	0.83	2.76	0.03
Transport, Storage and Communication	27.65	77.29	44.86	10.30	16.91	3.86	10.58	8.55
Other Services	55.94	93.31	28.37	2.96	8.88	2.60	6.81	1.13
All	62.19	88.43	29.78	9.19	6.60	2.18	1.43	0.20

Source : *Ibid.*

employment among illiterates than among the educated. In almost all the industries more illiterates are to be found among the workers than educated persons. This tendency is more poignantly exemplified among cultivators, agricultural labourers, miners and quarrymen.

It is seen from the table above that cultivation, agricultural labour and mining and quarrying absorb a large amount of male illiterate workers, while the illiterates among female workers have in all the industries availed themselves of the equal work opportunities. Their participation rate is, however, strikingly low in transport, storage and communication. On the other hand, illiterate males found fewer working opportunities in trade and commerce and transport, storage and communication, as compared to females without any educational attainments. The educated males in columns 3 and 4, however, make up for the opportunities lost by the less qualified of their sex while, by comparison, females of the same educational class have not fared too badly. This is because a certain basic minimum of education is required to run a business or to work in the transport, storage and communication industries.

Males and females who have done junior basic schooling and others who have passed their matriculation or possess higher qualifications were employed in the transport, storage and communication industries as also in trade and commerce or in other services.

Thus transport, storage and communications and trade and commerce are the only two sectors of industry where educated workers have been absorbed on any appreciable scale. This may be due to the specialisation and skill called for in these industries and which the educated alone in the labour force possess. (As the corresponding figures for 1971 are not available, no idea can be had of the changes that have taken place between 1961 and 1971.)

Summing up, a few important characteristics may be noted

The rural areas of Tamil Nadu have still a higher employment potential than the urban areas. However, the share of the rural areas in all occupations is lower than their share in the total population. Largely, rural areas offer rather better chances to females than urban areas in all the occupations. Changes over the last decade have generally favoured males and have led to a concentration of work opportunities among them. In 1961, females participated increasingly in certain occupations like crafts, production processes, mining and quarrying, etc. The districts with higher levels of literacy and a lower proportion of scheduled castes in the population have registered a low crude workers' rate. The relative importance of the primary sector, a major source of employment in Tamil Nadu, followed by the tertiary sector, has increased over the last decade. The dependence on this sector has been accompanied understandably by an increase in the net area sown and the net area irrigated and of inputs of other factors of production.

Next to agriculture, household industry has offered most employment opportunities in almost all the districts. Its importance has declined during the last decade but servicing and repairs, as distinct from household industry, has come to occupy an important place during the same period. The contribution of other industries, especially construction, trade and commerce, transport, storage and communication has more than doubled over the last decade.

Certain occupations, such as farming, fishing, crafts production, mining and quarrying are based in the villages and understandably form part of the rural economy while others, such as clerical trades, transport and communication normally predominate as urban activity. Though the concentration of occupation is in favour of males in certain occupations like crafts production, mining and quarrying, etc., females participate markedly to a larger extent than before.

Unlettered male workers are to be found for the most part in agriculture and allied activities while female workers are distributed to a greater extent over the whole spectrum of industrial activity. Thus, trade and commerce, transport, and storage and communication are the only two groups of activities which offer relatively better prospects of employment for educated males.

Unemployment in Tamil Nadu

The 1961 Census classifies those in Tamil Nadu who are not workers into eight categories of which the first six are full-time students, household workers, beggars and vagrants, inmates of penal, mental and charitable institutions, the retired, the rentiers and dependents, infants and the disabled. These can be treated as voluntarily unemployed and they constitute 99.66 per cent of the total non-workers. The last two categories—persons seeking employment for the first time and persons entering the employment market for the second or third time and so on after a spell of work—are treated as involuntarily unemployed but they constitute only 0.34 per cent of the total non-workers, or 0.17 per cent of the total rural population of Tamil Nadu. Of this proportion, 0.15 per cent are males and 0.02 per cent, females. These figures would show that the problem was less acute in the rural areas as compared to the urban parts of Tamil Nadu. The problem peculiar to the rural areas is thus not so much that there are many job-seekers without work altogether, as that a remarkably large number of people do not have enough to do the year round.

A districtwise analysis of unemployment as estimated by this method shows not only that the unemployment is incidental to a greater degree among males than among females, but also that, in certain districts, there is no problem as such among females as shown in Table 34. This latter feature of employment in the Tamil Nadu countryside is all to the good and must be retained. It is a social situation that is unique in many respects and

TABLE 34—Unemployed as Percentage of Population and of Labour Force in Rural Areas of Tamil Nadu : 1961.

District	As percentage of population			As percentage of labour force		
	Persons	Males	Females	Persons	Males	Females
Chingleput	0.27	0.26 (0.51)	0.01 (0.01)	0.58	0.57 (0.82)	0.01 (0.04)
North Arcot	0.11	0.11 (0.22)	N (N)	0.23	0.23 (0.36)	N (N)
South Arcot	0.07	0.07 (0.13)	N (N)	0.14	0.14 (0.21)	N (N)
Salem	0.08	0.08 (0.15)	N (N)	0.15	0.15 (0.24)	N (N)
Coimbatore	0.14	0.14 (0.28)	N (N)	0.27	0.27 (0.43)	N (N)
Nilgiris	0.38	0.36 (0.71)	0.02 (0.02)	0.76	0.73 (1.23)	0.03 (N)
Madurai	0.12	0.11 (0.24)	0.01 (0.01)	0.24	0.23 (0.38)	0.01 (0.03)
Tiruchirapalli	0.13	0.12 (0.25)	0.01 (0.01)	0.23	0.23 (0.38)	N (0.02)
Thanjavur	0.19	0.18 (0.38)	0.01 (0.01)	0.43	0.42 (0.62)	0.01 (0.02)
Ramanathapuram	0.15	0.14 (0.30)	0.01 (0.02)	0.30	0.28 (0.49)	0.02 (0.05)
Tirunelveli	0.32	0.30 (0.62)	0.02 (0.04)	0.65	0.61 (1.03)	0.04 (0.01)
Kanyakumari	0.63	0.49 (0.97)	0.14 (0.29)	1.73	1.35 (1.80)	0.38 (1.55)
STATE	0.17	0.15 (0.32)	0.02 (0.02)	0.34	0.32 (0.50)	0.02 (0.05)

(Figures in brackets indicate the percentage to their respective totals.)

N = Negligible

Source: Census of India, 1961; Vol IX, Part II (B) (ii).

deserves study while efforts are directed towards relieving the problem of involuntary unemployment among males.

The table shows that the predominantly agrarian districts register a low incidence of unemployment among males and all but full employment among females. (Full employment here connotes an absence of involuntarily unemployed in the labour force.) While the districts, where a large percentage of workers depend for their livelihood on industrial occupations, such as mining and quarrying, household industries and related services record a very high incidence of unemployment both among males and females. For example, in the districts of South Arcot, North Arcot and Salem, where nearly 60 per cent of the workers depend upon agriculture for a living, unemployment figures for males are 0.13 per cent, 0.22 per cent and 0.15 per cent respectively, and the involuntary unemployment rate among females is almost nil. On the other hand, in Kanyakumari and Nilgiris districts, where the distribution of workers among mining and quarrying, and other services exceeds 50 per cent of all workers engaged in all the industries taken together, the unemployment incidence is very high. In Kanyakumari, the unemployment among males is 0.97 per cent and 0.29 per cent among females. Likewise, in Nilgiris, it is 0.71 per cent among males and 0.02 per cent among females. This could, of course, be due to a wider prevalence of disguised employment and under-employment in the agrarian districts. The organisation of industry precludes these phenomena and they are not met with in the more industrialized districts.

The incidence of unemployment seems to have a close connection with the proportion of the scheduled castes among the population. For example, Kanyakumari, which has got a low proportion of scheduled castes among the population, registers a high incidence of unemployment while, on the other hand, South and North Arcot districts where unemployment incidence is low, the proportion of scheduled castes to the total population is very high. (See

Appendix III.) In the planned era of rising expectations, this could well be due to a social phenomenon noted *en passant* in another chapter. If this is due to a predilection in favour of skilled occupations and a growing distaste for labour and direct manual energy inputs in agriculture by the higher castes so called, this mood should be availed of by the State Agriculture Department to foster skill formation in cultivators rather than concentrate on generating durable assets whether labour saving or not. By skills are here meant not only science and technology inputs but ability to diversify crop regimens and respond intelligently to market trends and objectives of State policy.

These figures evidence another paradoxical correlation. A high percentage of literacy has resulted in high incidence of unemployment while the districts with a high percentage of illiterates have registered a low incidence of unemployment. For example, Kanyakumari, where literacy is highest, has also the highest incidence of unemployment. On the other hand, in Salem and North Arcot districts, where the illiterates predominate, the incidence of unemployment is lowest. (See Appendix IV.) This is the white collar distaste for manual work.

Among other characteristics peculiar to the districts with a low incidence of unemployment, the following may be noted :

They are characterised by a relatively low percentage of the population in the 15-59 age-group, Salem 55.07 per cent (9th rank) and North Arcot 54.59 per cent (10th rank).

A large number of scheduled tribals reckoned as a proportion both of the total population and of the work force : thus, Salem 3.1 per cent and North Arcot 2.32 per cent of the population. Salem 3.6 per cent and North Arcot 2.6 per cent of the total workers (see Appendix V).

A relatively higher percentage of the voluntarily unemployed population in the form of dependents, infants and disabled, housewives, and full-time students. (In South

Arcot, dependents, infants and disabled males constitute 64.57 per cent of the total male non-workers, and 40.40 per cent of total female non-workers. The corresponding figures for Salem are 68.36 per cent and 48.58 per cent respectively and for North Arcot, 66.07 per cent and 46.00 per cent respectively. Furthermore, the aggregate voluntarily unemployed population forms 99.87 per cent of the total workers in South Arcot, 99.82 per cent in Salem and 99.77 per cent in North Arcot.)¹

¹These sets of figures are the most significant to emerge from the statistical analyses of employment patterns in the districts. The proportion of voluntarily unemployed to the total work force is very high in South Arcot, Salem and North Arcot. From the point of view of policy, these figures would surely admit of further analysis. From an economic standpoint, the statistical category "voluntarily unemployed" appears unsatisfactory. Elsewhere, the work of housewives is included in the district product for which support can be mustered, if not very pertinently, from the computation of income practices adopted by some near-full employment economies of the west. One cannot help being a dependent—dependence being often a grim fact of social necessity—no more than one can help being an infant or a disabled person when one finds oneself in that condition not by an exercise of free will but through a genuine accident or illness. Urban economics began to treat of unemployment as a social 'necessity' as given as the biological necessity of illness; it gained greatly as a viable and useful category, apart from social reasons for the amelioration of vagrancy. Vagrancy was morally evil in the puritan ethic and also legally culpable in those times. A victim of circumstance was in an earlier period, confined, ambivalently to the workhouse. For, to the word evil, attached a measure of individual moral responsibility. Nevertheless the argument from steadfastly held opinion which seemed axiomatic in a particular socio-religious climate, (it is a pity he is in the workhouse but he ought to do something about it) made for a watchful, and vigorous work force, and the circumstances resulting in the "disequilibrium" could be taken care of through doles and management of the state of unemployment through State action without the need for "propagating an applied" unemployment morality for the individual where the evil, undoubtedly social, was categorically transformed into an area of individual responsibility to enable him to put forth cognitive effort. The housewife and the student in our census are voluntarily unemployed; in fact it is only that they have actively refrained from seeking a job either because they want to be useful elsewhere or because they want to invest their working time in education.

That is a brief note on the historical antecedents of the voluntariness of economic misfortune. By its nature, the 'science of economics' had to treat it as a social evil without imputation of responsibility and as efficacious

Finally, a large endowment of forests in the district, and a large cropped area, and extensive areas sown more than once all of which tend to make up a commodious primary sector act as a deterrent to the high incidence of

usly subject to State action through the manipulation of macro-economic categories. Under-development has further augmented the conception of widespread unemployment as an objective circumstance as also the element of involuntariness or helplessness attendant on the misfortune of a workless individual. Under-development has, in any extended survey of rural unemployment which seeks to offer research support to action by the relevant authorities, to be disaggregated into its elements. For instance, the amount of cultivable and irrigated area in relation to other districts, its soil, the number of people in the 15-59 age group, the number of exchange and market towns and the opportunities for employment in the secondary and tertiary sectors that it provides.

In conclusion, "voluntary unemployment" cannot be extended to cover full-time students. There should be a separate sub-group of males and females in the age group 5-30 for those who receive education of training or are prosecuting higher studies. For them, it is a period of waiting for the formation of human capital. Their numbers should be denoted separately in the respective age group in the population schedule so that primary data in the census enumeration could be put to more numerous and refined uses. For instance, such figures would be incidentally also useful in the determination of the scope for and extent of freeships, scholarships, the social costs of education and the effectiveness of such expenditure. In the alternative full-time students should be treated as currently unemployable, being in the wrong age group or as overtly unemployed which they are. Such a procedure would also bring to the fore an emergent class of students who earn while they learn. The District Employment Exchanges, which have been proposed for Tamil Nadu, in companion volumes of this series, should supplement census enumerations and qualifications by verifying the number of people who want work and who do not have it irrespective of geographical, locational or contractual features and irrespective of sex, age, social prejudice and family status, subject of course to physical fitness and active provisions of factory and other work laws in force. Such a figure would be the objective test and paradigm of all estimates which have been made in the course of the foregoing analyses of the unemployed labour force. Likewise, it is repugnant to commonsense and etymology to classify the disabled as voluntarily unemployed, both for the sake of accuracy and evolving a basis for social action. If they are unemployed during a reasonable period of time, the next step should be to find out as how best they can be enabled to make their contribution to the social product and how they should be made a charge on resources available according to a fair priority. If they are unemployable, expenditure on them should be chargeable to accident or

Annex I essays elements of under-development as a first hypothetical exercise.

unemployment. However, they make for the more insidious kind of concealed unemployment and under-employment. For these reasons and because of the wide prevalence of the institution of family farming, it is generally difficult in the rural areas to treat the individual as the unit of employment. In most of the districts minimum wage legislation is not enforced. Even where it exists there is no conclusive evidence that it has been enforceable. This has an important result; policies which provide direct employment opportunities according to a project with employment as its principal non-economic objective are likely to be less effective than overall planned programmes which aim to increase production and levels of living and promote economic prosperity generally.

Some of these features work as causes also. The problem of disguised unemployment has already been noted. Again, a high rate of illiteracy forces the worker to accept any situation that comes along on terms that are offered to him; the lack of education has weakened this bargaining power. In the same way a high percentage of scheduled caste and tribe population in the district is an indication of the existence of a large number of illiterates who are willing to take up any work. (The percentage of literacy in the State among scheduled castes is only 14.66.) Hence the presence of any one of these factors can cause a low incidence of unemployment and *vice versa*.

Kanyakumari presents a pattern of employment peculiar to itself. It has neither a large area under forests, groves or crops nor much cultivated land, nor any permanent pasture and grazing lands which can conceivably provide employment for some.

sickness benefit legislation which, if not immediately feasible, should be capable of planned realization in the foreseeable future. Infants, housewives, those on strike for better working conditions, children under legal obligation to go to school and those above the age of consent, during a period of waiting, for human resources formation, vagrants and beggars, etc, should be treated as voluntarily unemployed.

However, the census figures of unemployment (which consist of the seekers of employment for the first time as well as others who seek work for a second and subsequent times) need further analysis and examination.

A more realistic definition of unemployment would include all the employable but unemployed persons. That is, it would include all the non-workers minus full-time students as well as those who are engaged in household work. Full-time students ought not really to be included in the labour force by virtue of the definition itself. Similarly those who are engaged in household work are rightly excluded from the labour force as in the 1971 Census.

The other categories which have been grouped together and included among the unemployed are :

All the disabled and the dependants. Not all the disabled have means of their own. In a country like India, the chances are that they may be in need of employment. In fact, there must be much overlapping between beggars and the disabled. There is the further question if it is proper to treat these as voluntarily unemployed which has been discussed in the footnote above. The fact is that the 1971 Census treats them as voluntarily unemployed and no great violence has been done to the main argument in this monograph as long as their numbers are separately specified. This is essential because in practice, their institutional care often represents a charge with a higher priority on public funds than the amelioration of the status of the involuntarily unemployed. The crucial figure for our purposes would be the employable disabled.

The retired and rentier classes are unemployed either because they do not need any employment or because they cannot find any. But if employment opportunities are available, the rentiers at any rate would take them up but the retired people within the 59-year age limit are really anomalous. They should be left out of reckoning from the employable labour force.

And the seekers of work for the first time and those who are seeking work on subsequent times. The problem of dependents is much larger than that of their classification. The economic problem extends beyond the legal and social aspects of the extended family whose collapse has not been confined to the urban areas alone. The joint family has been buttressed by a system of rights (Codified Hindu law extended inheritance rights to women but this has not meant much in a climate of opinion which does not hold the idea of property as a force in development.) rather than by a widespread sense of social responsibility and by society's ability to enjoin this duty on the *yajamanan* or the *pater familias*, particularly in relation to dependents not directly in the line of inheritance. They should be considered as eligible for the same work opportunities as any member of the unemployed work force at large. Their inclusion in the voluntarily unemployed category does detract from their right. (Dependents are what they are because they cannot be anything else. If they could find a job, they would.) Here again their employability is the crucial point but then until the State is in a position to take cognizance of their unemployment as a special category, they should be deemed as part of the unemployed labour force for purposes of social policy and not in any wise distinct from it, for better or for worse. Here again the argument for confining the work force only to the employable age-group in the reckoning of the labour force and excluding pensioners, retired persons, mendicants, incurables, vagrants and beggars, fixed income-earners who cannot be treated as without work as well as inmates of penal institutions (some States allow them to work and earn in the prison house, health and mental institution) and the disabled from that figure is reinforced. However, their freedom to secure work should not be detracted from.

On this basis, Tamil Nadu shows 2.48 per cent of its population as unemployed in the rural areas. Strictly it is 2.58 per cent of the labour force which takes into account

Also, the counting of heads is less indecisive in the urban areas.

the population in the 15-59 age group alone. On the whole, unemployment is found to be more severe among males (2.63 per cent) as compared to females (2.39 per cent). The urban areas of Tamil Nadu are more prone to unemployment than are rural areas; 5.80 per cent of the total population in the 15-59 age-group are unemployed; 7.64 per cent of the total male population and 3.84 per cent of the total female population are unemployed in the urban areas.

A possible explanation of this high incidence of unemployment in the urban areas is their relatively greater dependence for employment on industries which are vulnerable to cyclical and periodical outbursts of unemployment. The laying off of workers is a more decisive termination of a worker's services than a lean season in agriculture when income and not employment is affected.

The districtwise figures serve to fill in the picture further as shown in Table 35.

No fundamental change has taken place as a result of the new definition except that the unemployment among females had become more acute compared to males in all the three districts (South Arcot, North Arcot and Salem) where, relatively speaking, a state of near full employment can be said to obtain. Kanyakumari has registered a high incidence both among males and females.

As a result of the adoption of the new definition, certain districts show greater incidence of unemployment among females than among males. North Arcot, South Arcot, Salem, Tiruchirapalli registered full or near full employment when the unemployed were defined as those seeking a job for the first time as well as on succeeding occasions. (For the incidence of unemployment among different age groups, see Appendix VI.)

Nature of Unemployment

The nature of unemployment has reference to the new entrants to the labour market and others who re-enter the labour market for the second or third time following the

TABLE 35—Unemployment Incidence in Rural and Urban Areas of Tamil Nadu : 1961.

District	Rural			Urban		
	Persons	Males	Females	Persons	Males	Females
Chingleput	2.76	1.50	1.26	5.49	3.78	1.71
		(2.94)	(2.56)		(7.29)	(3.56)
North Arcot	2.02	0.99	1.03	6.54	4.54	2.00
		(1.99)	(2.05)		(9.00)	(4.04)
South Arcot	2.26	1.03	1.23	5.22	3.26	1.96
		(2.05)	(2.46)		(6.41)	(3.99)
Salem	1.65	0.77	0.88	4.14	2.97	1.17
		(1.05)	(1.76)		(5.80)	(2.40)
Coimbatore	1.96	1.09	0.87	4.45	3.24	1.21
		(2.16)	(1.76)		(6.13)	(2.56)
Nilgiris	2.30	1.52	0.78	5.01	3.37	1.64
		(2.86)	(1.67)		(6.19)	(3.61)
Madurai	2.36	1.21	1.15	4.86	3.69	1.17
		(2.46)	(2.25)		(7.23)	(2.38)
Tiruchirapalli	2.70	1.14	1.56	5.32	3.63	1.69
		(2.32)	(3.06)		(7.13)	(3.44)
Thanjavur	3.06	1.68	1.38	6.04	4.23	1.81
		(3.42)	(2.71)		(8.50)	(3.61)
Ramanathapuram	2.65	1.49	1.16	4.97	3.27	1.70
		(3.11)	(2.23)		(6.80)	(3.28)
Tirunelveli	2.91	1.72	1.19	4.32	3.04	1.28
		(3.68)	(2.21)		(6.53)	(2.45)
Kanyakumari	5.22	2.61	2.61	6.02	3.89	2.13
		(5.18)	(5.22)		(7.74)	(4.28)
Madras	—	—	—	8.70	5.43	3.27
					(10.97)	(7.09)
STATE	2.48	1.27	1.21	5.80	3.93	1.87
		(2.63)	(2.39)		(7.64)	(3.48)

(Figures within brackets indicate percentages to the respective totals.)

Source : *Ibid.*

conclusion of one or more spells of work. The first-time job-seekers and others who are looking for work for a second time constitute a new category quite unlike the faceless *schema* which seeks to distribute the unemployed as between the districts and vocations ; the twin category affords a fresh look at the problem from another point of vantage.

Those who are seeking employment for the first time form 0.62 per cent of the total male non-workers and only 0.02 per cent of the female non-workers. Those who were once employed but retrenched or quit their jobs and re-enter the employment market for a second or a third time constitute 0.21 per cent of the total for males (among non-workers) and 0.006 per cent of the total for females. The percentage is negligible among females because the bulk of them is engaged in household activity. All these propor-

TABLE 36—New and Subsequent Entrants in Labour Market—Rural and Urban Areas of Tamil Nadu : 1961.

Category	As a percentage of non-workers.			
	Rural		Urban	
	Males	Females	Males	Females
New entrants in the labour market	0.62	0.02	3.10	0.13
Re-entrants in the labour market	0.21	0.006	1.36	0.04

Source : *Ibid.*

tions are in respect of the rural areas. The corresponding figures for the urban areas of Tamil Nadu are given in Table 36 above.

The distribution of non-workers between these categories in urban and rural areas needs explanation. In urban areas literacy is more widespread and the openings for employment accordingly greater. Hidden unemployment is unknown in the form in which it is met with in the

rural areas. Thus the unemployment prevalent in the urban areas is open. However, both in urban and rural areas, the new entrants form the bulk of the unemployed as compared to their counterparts seeking employment for a second or a subsequent time. The status of the different districts in this regard is summarised in Table 37 below. Here the unemployed refers only to those who are seeking jobs for the first time and others re-entering the market for a second or a subsequent time.

The table shows that Kanyakumari has the highest proportion of males and females seeking employment for the first time (89.75 per cent of the males and 95.10 per cent of the females). Among the other districts, the numbers of males who seek employment for the first time are higher in Salem, Madurai, Tiruchirapalli and Thanjavur. Similarly, North and South Arcot, Coimbatore and Madurai have the largest proportion of females seeking employment for the first time. Among males once employed and now out of work and seeking a situation again, the proportions in Nilgiris, Chingleput, North Arcot, Tiruchirapalli and Coimbatore are higher than in other districts. The proportion of females once employed but now out of employment and seeking work afresh is high in the Nilgiris (70.97 per cent) followed by Ramanathapuram (59.60 per cent) and Salem (43.94 per cent).

The situation would appear to have improved in Tamil Nadu if the National Sample Survey conducted during 1969-70 was accepted. The results of the survey are based on an analysis of 3,956 sample households consisting approximately of 19,500 sample persons. The survey does not provide districtwise break-up figures and hence the discussion will be confined to the situation in the State as a whole. According to the survey only 1.3 per cent of the Tamil Nadu population is unemployed. 2.4 per cent of all males in the work force and 0.1 per cent of the females are unemployed in the rural areas. The survey pointed out that the problem of unemployment was more acute in the urban areas than in the rural areas.

TABLE 37—New and Subsequent Entrants in Rural Unemployment Market of Tamil Nadu : 1961.

District	New Entrants			Subsequent Entrants		
	Persons	Males	Females	Persons	Males	Females
Chingleput	70.47	68.97 (70.68)	1.50 (61.94)	29.53	28.61 (29.31)	0.92 (38.06)
North Arcot	70.97	68.85 (70.84)	2.12 (75.60)	29.03	28.34 (29.10)	0.69 (24.40)
South Arcot	75.78	74.90 (75.57)	0.88 (88.46)	24.22	24.21 (24.43)	0.01 (11.54)
Salem	75.48	74.04 (76.04)	1.44 (56.06)	24.52	23.38 (23.96)	1.14 (43.94)
Coimbatore	71.36	69.67 (71.34)	1.69 (72.09)	28.64	27.98 (28.66)	0.66 (27.91)
Nilgiris	46.53	45.51 (47.17)	1.02 (29.03)	63.47	50.97 (52.83)	12.50 (70.97)
Madurai	78.58	75.19 (79.00)	3.39 (70.45)	21.42	19.99 (21.00)	1.43 (29.55)
Tiruchi- rapalli	75.18	73.04 (75.35)	2.14 (69.69)	24.82	23.88 (24.65)	0.94 (30.31)
Thanjavur	77.05	75.89 (77.21)	1.16 (67.44)	22.95	22.39 (22.79)	0.56 (32.56)
Ramana- thapuram	69.22	66.41 (71.31)	2.81 (70.89)	30.78	26.63 (21.08)	4.15 (59.60)
Tirunelveli	71.28	66.85 —	4.43 —	28.72	26.90 (28.69)	1.82 (29.11)
Kanya- kumari	90.95	69.57 (89.75)	21.38 (95.10)	9.05	7.94 (10.25)	1.11 (4.90)
STATE	74.96	70.22 (74.70)	4.74 (79.03)	25.04	23.78 (25.30)	1.26 (20.97)

(Figures in brackets indicate percentages to their respective totals.)

Source : *Ibid.*

TABLE 38—Labour Force and Non-Workers in Total Population—Rural and Urban Areas of Tamil Nadu: 1969-70.
(As percentage)

Status in relation to labour force	State (Rural and Urban)		Rural		Urban	
	Persons	Males Females	Persons	Males Females	Persons	Males Females
Employed	39.9	53.3 23.9	45.4	57.5 32.7	29.1	47.0 10.5
Unemployed	1.7	2.7 0.7	1.3	2.4 0.1	2.3	3.0 1.5
Total	40.6	56.0 24.6	46.7	59.9 32.8	31.4	50.0 12.0
Outside the Labour Force	59.4	44.0 75.4	53.3	40.1 67.2	68.6	50.0 88.0
Total	100.0	100.0 100.0	100.0	100.0 100.0	100.0	100.0 100.0
Sample persons	19,476	9,962 9,514	11,775	6,032 5,743	7,701	3,930 3,771

Source: Tamil Nadu Economic Appraisal : 1971.

It classifies 59.4 per cent of the total population as outside the labour force—44.0 per cent of the total male population and 75.4 per cent of the total female population.

The survey classifies 40.6 per cent of the State population as constituting the labour force and the rest outside it. In the rural areas, 46.7 per cent of the population has been classified as making up the labour force whereas, in the urban areas, it is only 31.4 per cent. In the classification “Outside the Labour Force”, the proportion of females is understandably greater than that of males.

The employment potential of the rural areas taken as a whole has remained at high levels compared to the urban areas, while the problem of unemployment itself has remained more acute in the urban areas—more particularly among males than among females. This is for the first time that unemployment is met with as an economic problem in the course of this monograph and not as due to structural factors.

The survey has given three reasons as to why a large chunk of the population has been treated as lying outside the labour force and this is set forth in Table 39 below :

TABLE 39—Distribution of Persons “Outside the Labour Force” in Tamil Nadu: 1969-70.

	MALES				FEMALES			
	Too Young	Too Old	Others	TOTAL	Too Young	Too Old	Others	TOTAL
Rural	87.1	4.5	8.4	100.0	52.6	5.6	41.8	100.0
Urban	74.2	5.7	20.1	100.0	40.1	6.6	53.3	100.0
STATE	81.23	5.0	13.7	100.0	46.8	6.1	47.1	100.0

Source : *Ibid.*

Of the total population classified as "outside the labour force" in the rural areas, 87.1 per cent of the males are excluded, because they are too young being below 15 years and 4.5 per cent of the males are excluded because they are too old being above 60 years. In other words, of the total 40.1 per cent of males (Table 38) who are classified as outside the labour force, 36.73 per cent have been excluded on the basis of age and the remaining 3.38 per cent because they are rentiers, pensioners or they have retired from an active working life on a gratuity.

Similarly, for females, 39.10 per cent have been excluded on the basis of age and 28.10 per cent on other bases.

In urban areas we find the same situation but the population excluded from the labour force for "other reasons" is apparently much larger. In urban areas, 50.0 per cent of the males and 88.0 per cent of the females were classified as lying "outside the labour force". (Table 38) Of the males 39.95 per cent were excluded on the basis of age and 10.05 per cent were excluded for "other reasons". The corresponding figures for females are 23.35 per cent and 64.65 per cent respectively.

In calculating unemployment for 1961, we have excluded only full-time students and household workers. Similarly, those who are treated as "outside the labour force" by the survey for "other reasons" should be included in the labour force and should be treated as unemployed. From among the females we must exclude those who are engaged in household work, i.e., housewives, but no separate figures are available for this category. Extra-statistical evidence suggests that the situation has actually worsened rather than improved during the 1970s—the Second Development Decade.

To sum up, a few important points may be noted. The incidence of unemployment, according to methods of computation currently employed, is less acute in the rural areas. A method of computation more purposively adapted to the

characteristically rural problem of disguised unemployment and underemployment should be designed to deal with fractional quantities. The counting of heads particularly in relation to the measure of these two categories is not sensitive to the underemployment endemic in the countryside. The urban areas, however, feel the pressure of overt unemployment more and this has increased over the last decade.

The proportion of the unemployed population has been undoubtedly swelled by the new entrants to the labour force. In discussing low percentage categories in rural areas, such as pensioners or the disabled, one must still retain the long view in order to encompass the problem in its perspective. In other words, population has added most substantially to the unemployment problem in the rural areas as indeed it has in the urban areas—all due to the relative exclusion of “other reasons” or factors. The development efforts of the last two decades and four five year plans have underscored the problem rather than solved it. It must be admitted that the unemployment figures do not facilitate any exercise aimed at a solution.

Greater dependence on agriculture, a larger than usual proportion of scheduled caste or tribes population, high percentages of literacy, a lower proportion of population in the 15-59 age group than in the below-15-years bracket have acted as deterrents to the high incidence of unemployment in the districts.

Though the unemployment is not visible, effective steps should be taken to solve the problem in all the agrarian districts on a special footing, especially in South Arcot, Salem, North Arcot and Kanyakumari. In addition such “dry” districts as Coimbatore and Ramanathapuram, should also receive the intensive impact of “re-plannification” with a view to a special and selective treatment of the employment problem. This is primarily an exercise in the extension of the green revolution to marginal and small-scale agriculture.

APPENDIX I

TABLE 40—Cultivated Area, Forests, Pasture, Net Irrigated Area, Sources of Irrigation, etc., in Tamil Nadu : 1961.

District	Total Cropped Area	(1)	(2)	Net Area Sown	(3)	(4)	Sources of Irrigation					(6)	(7)	(8)
							Gardens Groves not Included in Net Area Sown	Cannals	Tube Wells	Other Wells	Reservoirs				Tanks
Chingleput	1142445	809515	332930	124492	63	5	55689	1	3253	243801	123411	83371		
South Arcot	1795443	1361760	433683	126306	500	446	65423	3	2708	274905	23156	158583		
North Arcot	1645232	1280255	364977	24198	748	7	131332	1	3189	199877	53941	787987		
Salem	2334016	2060175	273841	20038	681	27	199740	2	2590	144600	67951	1182016		

TABLE 40—(Continued)

Coimbatore	2193634	1739999	453635	10053	62	2	10897	3	113	257803	52653	973785
Tiruchirappalli	1966836	1730221	236615	56318	484	34	112665	—	6200	194249	122070	173597
Thanjavur	1902777	1448929	453848	85829	431	76	33698	—	492	500114	15693	31766
Madurai	1646471	1391464	255007	62079	75	—	790611	—	2877	200078	294546	383089
Ramanathapuram	1557542	1440071	117471	51289	9	—	30865	—	3824	260072	43255	62743
Tirunelveli	1497771	1234069	263702	30862	396	1088	56088	2	2407	157768	81264	312576
Nilgiris	125216	120203	5013	10495	—	—	—	—	—	—	19430	341952
Kanyakumari	28 832	201075	80757	201	33	4	385	2	2250	28347	1	119147
STATE	18089215	14817736	3271479	608160	3503	1639	874061	15	29303	2462251	897371	6610612

*The reference period is the second plan (1956-61).

Sources: (1) *Census of India, 1961*; General Report, Part II (A) (i).

(2) *Development of Irrigation and Rural Water Supply*, Paper presented by Prof. S. Pamanathan, at MIDS Seminar, June, 1972.

APPENDIX II

TABLE 41—Occupational Classification of Rural Workers in Tamil Nadu : 1961

District	(as percentage of the appropriate total)												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		Persons	Professional, Technical & Related Workers	Administrative, Executive & Managerial Workers	Clerical & Related Workers	Sales Workers	Farmers, Fishermen, Hunters, Loggers and Related Workers	Miners & Quarrymen	Workers in Transport and Communication	Craftsmen, Production Process Workers & Labourers not elsewhere classified	Service, Sports & Recreation Workers	Workers Unclassified	All Divisions
Chingleput	Persons	4.13	3.51	6.32	2.54	6.77	9.25	0.81	1.85	60.75	8.07	0.13	100.00
	Males	3.68	3.68	8.11	3.27	6.75	10.50	0.81	2.40	56.50	7.85	0.13	100.00
North Arcot	Persons	4.13	3.71	3.71	1.41	7.04	9.01	0.86	1.34	65.72	6.76	0.02	100.00
	Males	5.10	5.11	5.11	2.03	8.39	10.73	0.97	1.81	58.91	6.82	0.13	100.00
	Females	2.00	0.58	0.58	0.04	4.10	5.17	0.62	0.01	80.86	6.62	—	100.00

TABLE 41—(Continued)

South Arcot	Persons	5.79	4.68	2.35	8.46	10.57	1.68	1.85	54.61	10.00	0.01	100.00
	Males	6.83	5.95	3.15	8.71	12.19	1.87	2.51	48.73	10.03	0.03	100.00
	Females	2.84	1.12	0.08	7.75	5.99	1.14	0.01	71.16	9.88	0.03	100.00
Salem	Persons	2.74	1.94	0.73	7.12	4.93	2.06	1.25	73.52	5.68	0.03	100.00
	Males	3.64	2.75	1.11	8.56	5.28	2.20	1.94	68.35	6.14	0.03	100.00
	Females	1.12	0.48	0.03	4.52	4.29	1.80	N	82.88	4.86	0.02	100.00
Coimbatore	Persons	2.54	1.70	0.83	6.42	6.00	0.56	0.88	74.94	5.97	0.16	100.00
	Males	3.57	2.43	1.34	8.04	6.90	0.58	1.42	68.37	7.13	0.17	100.00
	Females	0.92	0.47	0.03	3.87	4.58	0.53	0.01	85.32	4.14	0.13	100.00
Nilgiris	Persons	3.86	2.91	3.25	2.15	48.73	0.73	1.26	30.06	7.03	0.02	100.00
	Males	4.48	4.42	5.07	3.23	39.31	0.76	1.98	30.24	10.48	0.03	100.00
	Females	2.76	0.27	0.04	0.25	65.29	0.67	N	29.74	0.96	0.02	100.00
Madurai	Persons	3.57	2.55	1.13	7.76	12.32	0.82	1.04	61.50	9.26	0.05	100.00
	Males	4.13	3.60	1.74	10.31	13.11	0.89	1.64	54.60	9.96	0.02	100.00
	Females	2.55	0.63	0.02	3.13	10.88	0.70	N	74.05	8.00	0.04	100.00
Tiru-chirapalli	Persons	4.73	3.38	1.46	7.30	7.13	1.93	1.37	63.87	8.77	0.06	100.00
	Males	5.99	4.70	2.02	9.43	7.34	1.97	2.02	57.10	9.37	0.06	100.00
	Females	2.12	0.65	0.31	2.91	6.71	1.85	0.02	77.89	7.52	0.02	100.00

TABLE 41—(Continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Thanjavur	Persons	6.96	5.93	2.00	13.56	11.50	0.30	2.48	48.10	9.11	0.06	100.00
	Males	7.87	7.08	2.51	13.53	12.69	0.25	3.12	44.11	8.76	0.08	100.00
	Females	3.47	1.52	0.05	13.67	6.93	0.49	0.02	63.37	10.46	0.02	100.00
Paranathapuram	Persons	5.55	2.87	1.52	8.40	11.67	0.27	1.28	58.32	10.09	0.03	100.00
	Males	6.52	4.24	2.35	11.21	15.34	0.33	1.98	46.95	11.03	0.05	100.00
	Females	3.81	0.42	0.01	3.34	5.06	0.16	N	78.80	8.38	0.02	100.00
Tirunelveli	Persons	4.53	2.12	1.14	8.15	13.39	0.45	1.03	61.49	7.69	0.01	100.00
	Males	5.44	3.41	1.80	11.72	18.68	0.56	1.68	48.34	8.36	0.01	100.00
	Females	3.15	0.15	0.12	2.68	5.28	0.28	0.04	81.63	6.67	—	100.00
Kanyakumari	Persons	4.15	1.23	1.47	6.86	17.06	1.06	0.94	63.14	4.06	0.03	100.00
	Males	4.39	1.73	3.08	7.77	17.45	1.49	1.37	59.36	4.34	0.02	100.00
	Females	3.63	0.16	0.12	4.89	16.22	0.12	0.01	71.37	3.46	0.02	100.00

N = Negligible

Source : Census of India, 1961; Vol. IX; Part II (B) (ii).

APPENDIX III
TABLE 42.—Scheduled Caste/Tribe Population as a Proportion of Total Rural Population in
Tamil Nadu: 1961 and 1971

Districts	Percentage of Scheduled Caste Po- pulation to Total Population			Percentage of Scheduled Tribe Po- pulation to Total Population		
	1961			1971		
	Persons	Males	Females	Persons	Males	Females
Chingleput	31.83	31.89	31.77	32.27	32.28	32.25
North Arcot	21.55	21.47	21.63	21.14	21.04	21.25
South Arcot	28.47	28.31	28.64	28.34	28.31	28.37
Salem	15.75	15.80	15.71	18.45	18.42	18.47
Coinbatore	15.92	15.95	15.90	17.65	17.60	17.71
Nilgiris	17.26	16.77	17.78	18.19	17.88	18.51
Madurai	18.86	18.90	18.76	19.11	19.17	19.05
Thanjavur	27.06	27.31	26.81	25.97	26.09	25.85
Tiruchirappalli	20.13	20.17	20.09	20.65	20.64	20.66
Ramanathapuram	18.26	18.55	17.99	19.22	19.50	18.95
Tirunelveli	19.02	19.20	18.86	18.78	18.85	18.71
Kanyakumari	4.12	4.02	4.23	4.01	3.96	4.05
Dharmapuri	—	—	—	14.13	14.14	14.11
STATE	20.82	20.87	20.76	21.05	21.08	21.02
				0.96	0.98	0.93
				1.02	1.04	1.00

Sources: Census of India, 1961; Vol. IX; Part V and (2) Provisional Report: 1971, Directorate of Census Operations, Madras.

APPENDIX IV

TABLE 43—Percentage of Literates and Illiterates in the Rural Areas of Tamil Nadu: 1961 and 1971

District	Percentage of Literates						Percentage of Illiterates					
	1961			1971			1961			1971		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Chingleput	23.00	35.03	10.54	31.38	43.85	18.44	77.00	64.97	89.46	68.62	56.15	81.56
North Arcot	20.24	32.52	7.84	29.88	43.26	16.11	79.76	67.48	92.16	70.12	56.74	83.89
South Arcot	23.87	37.71	8.84	27.32	40.58	13.67	76.13	62.29	90.10	72.68	59.42	86.38
Salem	15.74	24.81	6.49	23.22	33.52	12.58	84.26	75.18	93.50	76.78	66.48	87.42
Coimbatore	23.34	36.31	10.12	30.66	42.62	17.34	76.60	63.69	89.88	69.34	56.38	82.66
Nilgiris	21.73	42.44	13.89	41.27	54.03	27.98	71.26	57.55	86.11	58.73	45.97	72.02
Madurai	25.96	40.96	11.12	33.47	48.19	18.71	74.04	59.04	88.88	66.53	51.81	81.29
Thanjavur	28.84	44.23	13.73	35.75	49.85	21.57	71.16	55.76	86.26	64.25	50.15	78.43
Tiruchirapalli	24.06	39.04	9.30	31.10	45.73	16.48	75.93	60.96	90.64	68.90	54.27	83.52
Pamanathapuram	26.86	43.35	11.38	34.16	49.97	19.14	73.14	56.65	88.61	65.84	50.03	80.86
Tirunelveli	31.13	44.72	18.29	40.12	52.94	27.93	68.86	55.27	81.71	59.88	47.00	72.07
Kanyakumari	46.97	54.60	39.16	56.62	62.62	50.43	53.03	45.39	60.86	43.38	37.38	49.57
Dharamapuri	—	—	—	—	—	—	—	—	—	—	—	—
STATE	24.67	37.81	11.57	32.13	45.14	18.98	75.32	62.19	88.43	67.87	54.86	81.01

Source: (1) Census of India 1961; Vol. IX; Part II (B) (i); and, (2) Provisional Report; Census of Tamil Nadu 1971; Directorate of Census Operations, Madras

APPENDIX V

TABLE 44—Crude Workers' Rate among Scheduled Caste/Tribe and Non-Scheduled Population in Rural Tamil Nadu : 1961.

District	Crude Workers' Rate among							
	Scheduled Castes				Non-Scheduled Population			
	Persons	Males	Females	Persons	Males	Females	Persons	Females
Chingleput	50.55	62.58	38.04	51.89	63.73	39.18	43.18	23.75
North Arcot	53.88	60.54	47.21	56.44	65.72	46.64	48.79	35.82
South Arcot	55.16	64.11	46.18	55.11	64.66	45.31	44.89	27.42
Salem	55.37	63.26	47.28	62.14	66.27	57.84	53.04	41.81
Coimbatore	55.71	66.16	45.03	47.21	57.14	36.84	51.68	38.23
Nilgiris	53.88	56.51	51.13	55.19	58.86	51.33	48.80	39.90
Madurai	56.05	63.97	48.12	60.47	64.14	56.59	49.30	36.28
Thanjavur	57.32	65.30	49.34	51.79	67.44	35.24	40.21	21.02
Tiruchirappalli	57.55	64.01	51.15	51.39	61.44	40.69	52.64	40.99
Ramanathapuram	56.49	63.12	50.08	40.09	55.20	23.21	50.67	42.38
Tirunelveli	57.54	62.73	52.55	68.08	68.18	67.97	47.06	36.05
Kanyakumari	48.05	56.43	39.92	48.36	61.11	32.97	35.28	17.24
STATE	55.39	63.52	47.23	57.41	64.56	49.91	48.01	34.28

Source : Census of India 1961 ; Vol. IX ; Part II (B) (i) and Part V.

APPENDIX VI

TABLE 45—Incidence of Unemployment in Different Age-groups in Rural Tamil Nadu: 1961.

District	Incidence of Unemployment by Age-groups					
	0—14		15—59		60 & above	
	Males	Females	Males	Females	Males	Females
Chingleput	0.78	0.11	0.89	0.04	0.11	0.02
North Arcot	0.23	—	0.41	0.02	0.02	—
South Arcot	0.17	—	0.23	—	0.02	—
Salem	0.13	0.02	0.27	—	—	—
Coimbatore	0.54	—	0.45	0.02	0.06	0.02
Nilgiris	—	—	1.33	—	0.02	—
Madurai	0.24	0.02	0.41	0.03	0.05	0.02
Tiruchirappalli	0.23	0.01	0.42	0.02	0.03	0.01
Thanjavur	0.24	0.01	0.69	0.02	0.04	—
Ramanathapuram	0.48	0.02	0.53	0.04	0.06	0.23
Tiruvallur	1.77	0.18	1.08	0.10	0.11	—
Kanyakumari	1.58	0.88	1.96	1.69	0.07	—
STATE	0.41	0.04	0.55	0.06	0.05	0.03

— means nil or negligible.

Source: Census of India, 1961; Vol. IX; Part II (B (ii)).

CHAPTER 4

AGRICULTURAL LABOUR IN TAMIL NADU

Despite the changes that have taken place from time to time, which have been analysed in the previous chapters, the Primary Sector has remained the major employer in the rural areas of Tamil Nadu, accounting as it did in 1961 for 71.50 per cent of all males employed and 77.33 per cent of all the female workers. What is more, the importance of this sector as a major employer has increased rather than decreased over the last decade and the employment potential of this sector now (1971) stands at 79.10 per cent and 87.13 per cent of all the State's total male and female workers respectively.

The labour force engaged in the primary sector which covers cultivation, agricultural labour, forestry, fishing, hunting, orchardry and associated activities can be further divided into three categories: owners, tenants, and labourers. The other sectors do not admit of such elaborate sub-division. Again, characteristically, disguised and seasonal unemployment and underemployment are exclusive characteristics of this sector. Both the tenants and the owners are subject to the seasonality of income and employment in agriculture. To express the primary sector's employment potential as a proportion of the State's population, 42 per cent are engaged in cultivation. They form 60 per cent of the total working force of the State, and are responsible for 42 per cent of its total production. It is noteworthy that the rentier and the absentee landlord do not figure much in census reckonings or in the foregoing discussion although their share in income from agriculture is by no means negligible; yet their relationship to the land has not been deemed important.

The cultivator may be either an absentee landlord or an owner cultivator. Normally, a landlord of one of the superior castes in the Hindu hierarchy does not engage in cultivation but employs labourers to cultivate his holding. In the alternative, he leases out his land to persons or tenants who cultivate the land either themselves or employ in turn labourers on a daily wage. The tenants share the crop with the absentee landlord at rates varying from 60 per cent for the landlord, with or without the hay (in Thanjavur) to 50 per cent in Chingleput. Their share of the crop is irrespective of the actual output and is presumably, therefore, a fixed amount.

The rentiers, too, lease out land for a fixed rent, and the lessee may invest either his own labour in it or employ workers. The rent payable by him is fixed and he bears the risks of cultivating the land. In Tamil Nadu this arrangement is termed *kuthakai*. This practice, which was in vogue only among a particular caste in Tamil Nadu, has, however, now become common practice among a wider class of recently affluent farmers. The tenant cultivates the land either by himself or with the help of his family and relatives. The harvest is divided between him and his landlord either equally or otherwise, his share being 35 per cent or 40 per cent of the crop in Thanjavur where the landlord even retains his claim to a share of the hay. But in Chingleput and a few other districts, the share-cropper fares rather better with 50 per cent of the produce. The variations in proportion are no doubt accounted for by the labour that he has to invest under different conditions of climate and soil. It would appear, however, that his share varies in inverse proportion to the ready accessibility of water for irrigation, but other factors may also have a bearing on the labour inputs necessary. Recently laws have been enacted in the State for registering the number of tenants that a landlord engages and to define and establish their right as share-croppers. When the landlord decides to sell the land, he has to effect a customary payment in the nature of a compensation to a longstanding tenant. This practice, known as *kudivara badyam* is widely prevalent in Thanjavur.

An agricultural labourer derives a large portion of his income from selling his labour to the landlord or lessee or tenant for purposes of cultivating the land. The term includes both casual labourers and also those who sell their labour to the landlord. While the tenant's income is not fixed because, when the produce is large, he gets a larger share than usual and if the crop fails, he loses out; the agricultural labourer does not bear any risk except that of being out of work. That is serious enough because it is the crux of the problem of unemployment in a lean year. He sells his labour for the day and is paid wages for that day, irrespective of whether the crop fails in the sequel or turns out to be a good one. His income is fixed in the sense that he will not gain if the produce is enormous, and he will not lose if the crop fails. Small farmers, owning one half of an acre of land, work as agricultural labourers in order to supplement their insufficient income. In fact the line of separation between tenant, labourer, and lessee is tenuous and becomes obscure when one or more of these categories become combined in one person as they often are. A large number of owner-cultivators join the ranks of agricultural labour during the busy season.

In certain districts the agricultural labourer is employed permanently for a fixed wage by the landlord but has no right to the crop. The casual labourers are employed for transplanting, weeding, harvesting, etc. and paid either in cash or in kind. In some districts they are given free meals while at work.

Yet another variation is the quasi-permanent form of employment of agricultural labourers. These labourers are engaged for a whole season and are paid wages which would normally be lower than those of the casual labourers and after the harvest, they are paid a bonus—in the form of paddy or *ragi* or whatever the crop grown.

Emergence of Agricultural Labourers

The origin of landless agricultural labour goes back to the displacement in the villages of cottage and village

industries, and the self-employed artisans. Every circumstance which has weakened the position of the small holders and the artisan classes has resulted ultimately, if not simultaneously, in the swelling of the ranks of agricultural labourers. The alienation of common law rights especially in the rural areas, like the right to pasture, grazing lands, the falling into disuse of the system of collective tribal or *pangali* enterprise, the sub-division of holdings as a result of the splitting up of joint families, the multiplication of rent receivers, free mortgaging and transfer of land and the decline of cottage industries constitute both the complex of cause and effect that gave rise to a class of landless labourers. It has also swelled their ranks from time to time. In addition to this, the denial of rightful and easily established rights to tenancy, their inability to carry on cultivation due to the failure of monsoon or due to floods and their excessive indebtedness have all aggravated the growth of the numbers of agricultural labourers. This causal chain worked itself out usually by depriving the small farmer of his stake in the land. The repatriates from Burma and Ceylon, have also added to the number of landless, although the circumstances and the mode of and responsibility for their resettlement are different from beneficial government policies available for the amelioration of the conditions of other landless labour. The rapid increase of agricultural labourers has resulted in increased competition and the lowering of rural wages, "disguised employment," urban migration and the lowering of industrial wages.

The census has divided the agriculturists into two classes, namely cultivators and agricultural labourers, ignoring further important sub-divisions of these two categories which may throw more light on the problem of unemployment in agriculture. It has defined a cultivator as one who is engaged as an employer or single worker or a family worker, in the cultivation or supervision or direction of the cultivation of land either owned or held from Government or from private persons or institutions in return for payment in money, kind, or a share in the

produce, or is held on lease or under a variety of tenures. It excludes the persons engaged in plantations and orchards.

Thus the cultivators include—to repeat—(1) the owner-cultivator; (2) the share-cropper (who directs cultivation); (3) the lessee; and (4) the tenant.

On the other hand, an agricultural labourer has been defined as one who works on another's land for wages in cash or kind without supervising or directing the cultivation. In economic terms, there is no risk-bearing involved.

This definition of an agricultural labourer includes all types of labourers. It is difficult to differentiate between the casual labourer employed for a particular activity and the semi-permanent agricultural labourer, employed for an entire but specified season.

These two classes together accounted for 72.78 per cent of all the employment reported for the rural areas in 1961. Males constituted 44.34 per cent of the figure and females, 28.44 per cent. The significance of the above statement must be construed in the light of the fact that there is customarily a concentration of males in the labour employed in the above manner.

Cultivators

The cultivators—those who are risk-bearers in the agricultural enterprise—formed 50.97 per cent of the total engaged in agricultural work. The 1961 Census classifies 52.98 per cent of the total male workers and 47.80 per cent of the total female workers as cultivators. This percentage has varied widely as between districts ranging from 63.31 per cent in Ramanathapuram to 23.11 per cent in Kanyakumari. Tiruchirapalli, Salem as well as Ramanathapuram districts, have registered a high percentage of cultivators both among males and females as shown in Table 46.

**TABLE 46—Workers Engaged as Cultivators in
Rural Areas of Tamil Nadu : 1961.**

(as a percentage of total workers)

District	Persons	Males	Females
Chingleput	40.61	43.97 (30.50)	32.85 (10.11)
North Arcot	58.80	62.04 (38.29)	53.61 (20.52)
South Arcot	53.38	58.24 (38.37)	44.00 (15.01)
Salem	61.21	61.71 (37.15)	60.44 (24.06)
Coimbatore	37.97	40.78 (25.60)	33.22 (12.37)
Nilgiris	27.12	24.30 (14.40)	31.22 (12.72)
Madurai	48.41	51.29 (31.65)	43.80 (16.76)
Tiruchirapalli	62.16	63.39 (37.74)	60.32 (24.42)
Thanjavur	41.29	44.28 (30.01)	35.03 (11.28)
Ramanathapuram	63.36	64.14 (36.15)	62.32 (27.21)
Tirunelveli	43.38	47.50 (28.01)	38.64 (15.87)
Kanyakumari	23.11	28.72 (21.49)	6.45 (1.62)
STATE	50.97	52.98 (33.24)	47.80 (17.37)

(Figures in brackets indicate the relative concentration of workers between the sexes.)

Source : *Census of India, Vol. IX, Part II (B) (i).*

The table shows that the percentage of workers engaged in cultivation is by comparison abnormally low in Kanyakumari because the total cropped area is very low in that district. The district ranks first in literacy and hence a large number of its workers are engaged in other industries in functions which make a call upon and utilise their literacy. Industrial processing establishments and household units offer relatively a larger quantum of employment to female workers. As for the Nilgiris district, not only is the total cropped area in it low, but a large number of plantations are included in the "Hunting, Forestry, Fishing, Plantations and Orchards" group.

Another feature of employment in the rural areas is the concentration of male workers in this occupation. In almost all the districts, cultivation has been monopolised by the males and the females accounted only for a minor proportion. For the State as a whole, 33.24 per cent of the males are engaged as workers whereas the corresponding figure for females is only 17.37 per cent. This is 47 per cent less than the participation rate of the male workers. The concentration has varied from 60 to 70 per cent in the districts with the exceptions of Ramanathapuram and Nilgiris, where the concentrations are substantially lower at 57 and 53 per cent respectively. In Kanyakumari male concentration, in cultivation as an occupation, has reached the extraordinarily high figure of 93 per cent. This may probably be due to the reluctance of literate female workers (nearly 39 per cent) to take to the unskilled occupation of cultivation or because of the easier accessibility of less strenuous jobs in the household sector (which indeed provides employment for more than 55 per cent of the female workers) or because of the non-availability of land.

The total number of cultivators has declined during the last decade. This decline may be partly accounted for. As noted earlier, a stricter definition of the word 'cultivator' was adopted in the 1971 Census, whereas a looser definition had been adopted in 1961 and the term

cultivator came to include workers as well. The later census classifies 40.27 per cent of the workers as cultivators. 45.61 per cent of the male workers and 22.30 per cent of the female workers have been classified as cultivators in the State. Thus there has been a 29.2 per cent decline in the figure for cultivators. The districtwise figures along with the percentage of decline or increase in between the census years of 1961 and 1971 are set forth in Table 47.

In 1971 Dharmapuri, a newly formed district, reported a high percentage of cultivators and it is followed by Tiruchirapalli with a large number of male and female cultivators. In Nilgiris only 6.14 per cent of the total workers are engaged in cultivation. This may be attributed to a more representative classification of workers in the 1971 Census.

The last decade witnessed a greater concentration of activity among males in relation to females. Agricultural cultivation, which offered limited participation opportunities for females in 1961, more or less closed its door on them in 1971. Even though a part of this may be attributed to the content of the category as changed by the definition, the decline in the participation rate of female workers, (from 17.37 in 1961 to 5.11 per cent in 1971, which is a 70 per cent decline) is too marked to be explained by this alone. This decline is more pronounced in Nilgiris, Thanjavur and Kanyakumari where the fall is by more than 80 per cent. The increased concentration of males in this category can be attributed to the following two factors : the growth of the male population in the last decade was 17 per cent as against the 15 per cent for the female population: the absorption of a large number of female workers by other industries as a result of the rapid growth of literacy among them. (The literates among females in the last decade rose from 8.85 per cent to 18.98 per cent as against the literacy rate for males which increased from 29.08 per cent to 45.14 per cent over the same period.)

Finally, the decline in the number of cultivators has been phenomenal in the Nilgiris district. This is true of both males and females. Though the decline has taken

TABLE 47—Workers Engaged in Cultivation in Rural Areas of Tamil Nadu : 1961-'71.

District	(as percentage)					
	Cultivators			Increase in percentage ↑ or decrease in percentage ↓		
	Persons	Males	Females	Persons	Males	Females
Chingleput	32.62	30.10	2.52	30.16 ↓	14.9 ↓	78.3 ↓
		(37.47)	(12.87)			
North Arcot	45.04	40.84	4.20	32.7 ↓	6.2 ↓	82.0 ↓
		(52.27)	(19.19)			
South Arcot	46.05	42.91	3.14	24.3 ↓	1.9 ↓	81.7 ↓
		(51.96)	(18.01)			
Salem	43.16	36.08	7.13	29.6 ↓	1.2 ↓	73.3 ↓
		(47.65)	(29.23)			
Dharmapuri*	56.62	49.27	7.35	—	—	—
		(65.48)	(40.40)			
Coimbatore	31.54	26.49	5.05	21.4 ↓	2.1 ↓	61.3 ↓
		(36.28)	(18.72)			
Nilgiris	6.14	4.96	1.18	79.6 ↓	69.0 ↓	91.7 ↓
		(7.82)	(3.22)			
Madurai	37.57	31.35	6.16	26.2 ↓	5.7 ↓	65.0 ↓
		(42.90)	(22.88)			
Tiruchi- rapalli	52.04	44.12	7.92	26.8 ↓	2.2 ↓	71.7 ↓
		(57.51)	(34.02)			
Thanjavur	33.50	31.08	2.42	25.0 ↓	4.3 ↓	80.2 ↓
		(37.92)	(13.39)			
Tirunelveli	31.29	26.28	5.01	34.4 ↓	13.7 ↓	70.9 ↓
		(37.36)	(16.89)			
Rama- nathapuram	45.58	37.71	7.87	40.0 ↓	13.0 ↓	75.9 ↓
		(51.22)	(29.83)			
Kanya- kumari	18.69	18.44	0.25	21.3 ↓	10.5 ↓	84.9 ↓
		(20.49)	(2.51)			
STATE	40.27	35.16	5.11	29.2 ↓	53.2 ↓	74.1 ↓
		(45.61)	(22.30)			

Note : 1 * Dharmapuri was formed in 1971.

2 ↑ Indicates increase and ↓ decrease.

3 Figures in brackets indicate the percentages to their respective totals.

Source : (1) *Census of Tamil Nadu 1971, A Provisional Report, Directorate of Census Operations, Madras* and (2) *Census of India, 1961, Vol. IX, Part II (B) (i).*

place more or less uniformly throughout the State, in Nilgiris, the decline has been acute while, in Tiruchirappalli, there was only a 2.2 per cent increase. The decline is quite rapid in the case of females in almost all the districts.

Agricultural Labourers

The 1961 Census had classified 21.81 per cent of the total rural work force as agricultural labour; 17.70 per cent of the male workers and 28.86 per cent of the female workers are so employed. This classification excludes those who own a small amount of land but work as agricultural labourers during the peak season. Concurrently, while interpreting the figures, allowance must be made for the fact that they are enumerated elsewhere as cultivators. Agricultural labour is normally provided by females, but males have also come to play a major role, being deprived of their small holdings due to inability to cultivate, or due to heavy indebtedness, or simply due to the failure of the monsoon.

In all the districts, the percentage of female workers engaged in this occupation is higher than that of male workers. As the wages of female agricultural labourers are lower than that of the male opposite numbers, the landlords prefer to employ females rather than males. Most of the activities in agriculture, such as transplanting and weeding, can be carried out by women exclusively. During the peak season, when female labourers are employed in harvesting, male labourers are engaged in other work (which fetches them higher wages) and hence are not available for work as agricultural labourers. Insufficient income which agricultural labourers get forces the rest of their family to seek some employment to supplement the meagre income. The income that an agricultural labourer receives is quite low in absolute terms. In June 1970 the male field labourer received an average of only Rs. 2.59 for a day's work. The corresponding figures for women and non-adults were Rs. 1.66 and Rs. 1.64 respectively. This figure

varied from district to district. In Madurai, for example, about the same time, the male field labourers were paid Rs. 1.83 and the females, just a rupee. In 1961, the rate of wages was even lower. The males were paid Rs. 1.38 a day, females at the rate of Re. 0.93, and non-adults at Re. 0.75.

This is the reason for a roughly equal concentration of high cultivation activity in males and females or, to put the same thing differently, for a rising female participation rate over the decade. It should be noted that, in all those districts where the concentration of females in this occupation has been relatively high, their wages in money terms and as compared to male wages were quite low. In North Arcot, for example, the difference was 29 paise and in Tiruchirapalli, it was Re. 1.02 and so on.

Thanjavur, Chingleput and South Arcot have a high proportion of workers employed as agricultural labourers compared to other districts. These districts are classified as paddy districts, contributing as much as 50 per cent of the total paddy produced in the State. They have a high density of rural population, at 716.549 and 648 respectively. Furthermore, the population living in the rural areas of these districts is large. But in these districts, the land is owned only by a few and the holdings are uneconomical. A high density of population on the one hand and the concentration of ownership in land on the other, taken together, can explain the high percentage of agricultural labourers in these districts. The cultivation of paddy is labour intensive and any shortage of agricultural labourers in the paddy districts during the peak period is made up by the inter-district migration of agricultural labourers. For example, agricultural labourers from Ramanathapuram migrate to Thanjavur during the peak season. The districtwise distribution of agricultural labourers and the concentration as proportions of participation in cultivation as between the sexes is set forth below.

There has been a phenomenal growth in the number of agricultural labourers over the last decade. Kanyakumari district has surpassed (by 0.60 per cent) Thanjavur

TABLE 48—Districtwise Distribution of Agricultural Labour in Tamil Nadu : 1961.

District	Persons	Males	Females
Chingleput	29.30	15.68 (22.41)	13.62 (44.35)
North Arcot	18.99	8.12 (13.16)	10.87 (28.38)
South Arcot	30.49	15.61 (23.70)	14.88 (43.60)
Salem	14.25	7.25 (12.05)	7.00 (17.59)
Coimbatore	18.91	10.79 (17.18)	8.12 (21.82)
Nilgiris	14.47	7.63 (12.87)	6.84 (16.80)
Madurai	24.23	12.43 (20.14)	11.80 (30.82)
Tiruchirapalli	18.15	8.50 (14.29)	9.65 (23.82)
Thanjavur	37.02	20.58 (30.37)	16.44 (51.00)
Ramanathapuram	16.41	7.19 (42.76)	9.22 (21.12)
Tirunelveli	19.12	8.50 (14.52)	10.56 (25.72)
Kanyakumari	9.79	7.37 (9.85)	2.42 (9.63)
STATE	21.81	11.10 (17.70)	10.71 (28.86)

(Figures in brackets indicate percentages to their respective totals.)

Source : *Census of India, 1961, Vol IX, Part II (B) (i).*

district by employing a larger percentage of male workers as agricultural labourers. The figures are 42.34 per cent for Kanyakumari, as compared to 31.74 per cent for Thanjavur. No other district in the State has reported such a high figure for male participation in agricultural labour. Districts, such as North Arcot, Nilgiris, Tiruchirapalli, which do not fall either under the category of paddy districts or under the diversified districts, record less than 30 per cent of their male work force as engaged in agricultural labour. Thanjavur, South Arcot, Chingleput and North Arcot have more than 70 per cent of their female workers engaged in this industry. No other district, except Kanyakumari and Nilgiris, has less than 50 per cent of its female workers engaged in this occupation. The districtwise figures in 1971 which are found in Table 49 indicate that, even in 1971, paddy districts had reported a high percentage of agricultural labourers compared to other districts.

District or Sex

The table shows that, in the last decade, this occupation has passed more into the hands of males than females. Moreover, the number of agricultural labourers in the State has increased by 56.4 per cent during 1961-71. The increase was more pronounced in the case of males (92.0 per cent) than among females (19.5 per cent). The table also shows that the spurt in the number of agricultural labourers was more significant in such dry districts as Coimbatore, Salem, Tirunelveli than in the wet districts. One hypothesis that would fit these figures is that small cultivators and tenants are selling out and progressively becoming agricultural labourers due to unforeseen setbacks, such as drought, floods or indebtedness. During the same period, the total number of cultivators decreased by 29.2 per cent (by 53.2 per cent among males and by 74.1 per cent among females; see Table 47). Meanwhile the rural population increased only by 16.35 per cent. (17.08 per cent in the case of males and 15.61 per cent in the case of females.) Taking these two figures together, the sudden

TABLE 49—District and Sexwise Distribution of Agricultural Workers in Rural Tamil Nadu and Variation : (1961-'71)

District	Percentage of Workers Classified as Agricultural Labourers			Percentage of Increase ¹ or Decrease ¹ during Decade		
	Persons	Males	Females	Persons	Males	Females
Chingleput	44.15	29.48 (30.89)	14.67 (62.18)	30.0 ↑	61.9 ↑	6.8 ↓
North Arcot	36.20	20.54 (26.28)	15.66 (71.50)	67.5 ↑	122.2 ↑	26.7 ↑
South Arcot	40.04	26.99 (32.67)	13.05 (74.99)	15.2 ↑	51.6 ↑	23.0 ↑
Salem	34.04	20.57 (27.29)	13.47 (55.18)	91.5 ↑	13.15 ↑	50.1 ↑
Dharmapuri*	25.89	16.47 (21.89)	9.42 (51.80)	—	—	—
Coimbatore	41.69	24.44 (33.47)	17.25 (63.92)	10.86 ↑	114.3 ↑	101.0 ↑

(Continued)

TABLE 49—(Continued)

Nilgiris	9.37	5.54 (8.74)	3.83 (10.47)	41.80 ↓	34.7 ↓	49.7 ↓
Madurai	44.34	26.62 (36.43)	17.72 (65.82)	74.2 ↑	103.9 ↑	42.9 ↑
Tiruchirappalli	29.76	10.81 (21.91)	12.95 (55.63)	43.3 ↑	72.8 ↑	17.3 ↑
Thanjavur	48.29	34.21 (41.74)	14.01 (77.83)	20.5 ↑	53.6 ↑	20.9 ↓
Tirunelveli	38.00	21.48 (30.55)	13.52 (55.66)	82.6 ↑	130.5 ↑	43.8 ↑
Pamanathapuram	32.16	18.33 (24.89)	13.83 (52.43)	63.3 ↑	112.4 ↑	25.1 ↑
Kanyakumari	41.22	38.10 (42.34)	3.12 (3.11)	309.4 ↑	402.9 ↑	25.0 ↑
	38.08	73.81 (30.89)	14.27 (62.18)	56.4 ↑	92.0 ↑	19.5 ↑

Note: 1. ↑ denotes increase and ↓ denotes decrease

2. *Dharmapuri district was formed only after 1961.

3. Figures in brackets indicate percentages to their respective totals.

Source: (1) Census of India 1961, Vol. IX, Part II (B) (i) and (2) Census of Tamil Nadu; Provisional Report; Directorate of Census; Maaras.

access of numbers to this sector becomes more plausible. Apart from natural growth and the progressive ingress into it of indigent tenants impoverished by circumstance, workers from other industries have also taken to this occupation in the course of the last decade. The fall in the percentage figures for workers in the secondary and tertiary sectors would support this hypothesis. (See Tables 27 and 28.)

Influx to this "industry" has also been caused by the considerable increase in agricultural wages during this period. This wage increase has been higher in the dry districts than in the wet districts. Wages increased by more than 100 per cent in some of the dry districts: for example, North Arcot (160 per cent), Coimbatore (100 per cent), Madurai 112.2 (per cent) and Tirunelveli (157 per cent). That all districts, wet and dry alike, should press forward with agricultural specialization and maximization of output has been clear enough in the context of a food shortage and food zones charged with the objective of progressive self-sufficiency. Higher wages in dry areas for landless labour (which in itself is paradoxical) shows that this is already happening passing the point of highest returns that market price would bear; but there has been no corresponding awareness among authorities in thinking about influential State-fixed procurement prices which should take cognizance of the increased costs both of which currently disfavour wet districts like Thanjavur being sweated for cheap food. However, the increases in the wet districts like Thanjavur (68 per cent) and South Arcot (66 per cent) were in the main less considerable with the exception of Chingleput. As a major number of villages lie in the vicinity of Chingleput's urban-industrial areas, the landlords have had to pay higher wages in order to attract labourers from casual work in factories. The spurt in agricultural labourers was phenomenal in Kanyakumari district among males in particular—the increase being of the order of 400 per cent. The rise in the wages was one of main reasons contributing to the swelling of the figures.

Industrial unrest resulting in factories declaring lock-outs have also served to augment the numbers of landless labour in the districts. For example, in Coimbatore, Madurai and Salem, where a large number of textile industries operating powerlooms and handlooms and ancillary industries making hosiery products are located, lock-outs appear to have been frequent. In 1970, 86 strikes and lock-outs were reported in the textile industry in these districts involving 41,824 workers. The corresponding figures for 1971 were 143 and 67,854. The corresponding figures for all the industries in Tamil Nadu during both these years were 585 strikes and lock-outs affecting 278,980, workers.

Furthermore, the dry districts employ more agricultural labourers than wet districts and this combined with the other two factors can account for the phenomenal spurt in the participation figures for agricultural labour during 1961-'71.

However, there has been a fall in the number of agricultural labourers in Thanjavur district. It may be partly due to the migration of agricultural labourers to the dry districts which offer scope for employment. A fundamental change has taken place in the last decade, viz., the dry districts have come to employ more agricultural labourers than even the paddy districts. This could be due to the adoption of mechanized agriculture in the dry districts which, contrary to much popular supposition, requires more labour in absolute terms at any rate.

A large extent of land under millets, owned and cultivated by small and marginal farmers, was the order of the day in 1961. But during the last decade, the area under millets and the production thereof have both registered a decline. During the same period, the area under groundnut, maize and sugar-cane went up. Reading the two sets of facts together, it could be argued that a switch-over took place from millets to groundnuts in these dry areas,

because groundnut is as a rule more profitable than any of the principal millets. This decline of acreage under millets and the increase of the acreage under paddy and groundnut were significant in Salem, North Arcot and Tirunelveli. This also suggests a possible shift of land from marginal and sub-marginal farmers to big landlords, because of the enlarged enterprise that would be necessary in the latter cases. Thus the increase in the number of agricultural labourers, apart from natural growth and variations arising from the classification of workers, could also have been due to a discernible influx of marginal and sub-marginal farmers and workers from the other sectors.

Tenants

It was only recently that statistics pertaining to tenants began to be collected and included in the census along with the figures bearing on cultivators. The Tamil Nadu Government enacted "The Tamil Nadu Agricultural Lands Record of Tenancy Rights Act of 1969" with a view to preparing a comprehensive record of tenants in the State. This Act is being implemented in Thanjavur, Tiruchirapalli and Madurai in the first instance and has been extended to other districts with effect from September 8, 1972.

The figures for tenants are not exhaustive because in each district, a few villages still remain uncovered by the Act. The total number of villages in each district, the number of districts in which the Act has been implemented and the total number of tenants covered in each district are set forth in Table 50.

However, the tenants (located in these districts which were covered by the survey where the enquiries had also been completed) constitute only three to nine per cent of the total cultivators. In Kanyakumari, the tenants form 6.1 per cent of the total cultivators. In Madurai, the corresponding figures were 9.0 per cent and in Coimbatore 3.1 per cent. The actual percentage would be higher if all

TABLE 50—Number of Tenants and Villages Covered by the 1972 Act in Tamil Nadu.

District	Number of Villages	Villages Covered by Act	Total Number of Tenants
Chingleput	2,371	2,369	5,015
North Arcot	1,915	1,915	24,696
South Arcot	2,286	2,286	7,695
Salem	845	841	5,410
Coimbatore	991	991	12,506
Dharmapuri	850	844	3,452
Nilgiris	54	54	232
Madurai	1,102	1,102	35,871
Tiruchirapalli	1,408	1,359	57,827
Thanjavur	2,576	2,544	1,22,177
Ramanathapuram	1,576	1,576	7,894
Tirunelveli	1,057	1,057	31,333
Kanyakumari	64	64	3,374

Source : *Department of Land Reforms, Chempauk, Madras-5.*

the lessees and the unregistered tenants were taken into account.

Under - and Disguised Employment

Disguised employment has been defined as the excess of the labour force over and above that which is required to produce the same output. This category is accordingly defined in terms of the utilisation of labour. On the other hand, under-employment has been defined as under-utilisation of labour for any given demand, if not for any given level of output. Both these types of unemployment are widely prevalent in the rural areas.

The disguised kind of employment is caused by the non-availability of work outside agriculture and the reluctance to move out of agriculture on the part of the people. The degree of disguised employment has been calculated

on the basis of the methodology adopted by Tarlok Singh in his book *Poverty and Social Change**.

In estimating disguised employment in agriculture, the central concept used is the "Work Unit"—the area of cultivated land which is sufficient under a given set of conditions to absorb the labour of the family of average size. The work unit is identified with a plough unit—an area that can be normally cultivated with one plough and one pair of animals. The work unit varies with soil, rainfall, irrigation, and the degree or intensity of cultivation that is either necessary or actually practised.

The cultivated area is the net area sown plus current fallow. In calculating the total work animals—cows, bullocks, buffaloes, male and female—which have been used for farm work, are reckoned in. The cultivated area per work animal is obtained by dividing the former by the latter. Twice this figure gives the average cultivated area per pair of plough animals. Likewise cultivated area per plough is obtained by dividing the total cultivated area by the number of ploughs. Normally, two work units will employ three workers. The aggregate number of work units will furnish the potential employment. By deducting this from the actual employment, (cultivators plus agricultural labourers) we obtain the extent of disguised employment. An estimate for Tamil Nadu for 1961 has been attempted below :

NUMBER OF AGRICULTURAL WORKERS IN 1961

(a) Cultivators	...	...	6,247,978
(b) Agricultural Labourers	...	...	2,673,243
Total	...	...	8,921,221

* Tarlok Singh: *Poverty and Social Change with A Reappraisal*, Orient Longman, 1969; pp. 115-145.

AREA 1961		<i>in acres</i>
Net area sown (It is the gross cropped area that is being considered here.)		
Current fallow	...	1,80,89,215
	...	24,06,127
Total	...	2,04,95,342

N.B. The figures here are exclusive of plantations and orchards.

WORK ANIMALS 1961		
Cows and Bullocks		
Working bullocks	...	4,143,000
Cattle used for draft and farm work only	...	656,000
Buffaloes		
Working buffaloes	...	283,000
Cows and buffaloes used for farm work only	...	92,000
Total working animals	...	5,174,000

PLOUGHS 1961		
Wooden ploughs	...	3,223,000
Iron ploughs	...	207,000
Total	...	3,430,000

EMPLOYMENT POTENTIAL THROUGH WORK UNIT STUDIES

The cultivated area per work animal		
	...	3.96 acres
	...	7.92 acres
The cultivated area per plough	...	5.97 acres
Average plough unit	...	6.94 acres
The total number of work units	...	20495342
		----- = 2,953,219
		6.94

On the basis that two work units will engage three full-time workers, potential employment in agriculture ...	... = 4,429,828
The actual employment in agriculture ...	... = 8,921,221
Disguised employment in agriculture ...	... = 4,491,392

If this is taken as the true measure, certainly more than 50 per cent of the agriculturists are underemployed. However, even the author of this methodology confesses that the requirement of 1000 acres at 15 men is a conservative estimate. This figure ignores the fact that a proportion of the surplus can be easily absorbed in scientific agriculture, or market gardening, such as vegetable farming, the cultivation of cash crops and High Yielding Varieties. If, then, we assume that one work unit can engage two full-time workers, the disguised unemployment will be around 33.7 per cent. But other studies have come to the conclusion that only 20 per cent of the labour force are "disguisedly employed" in this manner. But in calculating disguised employment, the cropping pattern, as well as frequency of cropping which determines the frequency, timings and duration of the peak and slack seasons should also be taken into account. It should also be noted that the potential employment in the agricultural sector herein referred to pertains only to able-bodied persons. But the actual employment includes women and children also. If we apply the conversion rate according to which one man's work equals 0.5 of that of a child or 0.75 of that of a female in order to arrive at a standard labour unit *as adopted by Sanghvi, then, the disguised unemployment will be even less. By adopting this conversion method, the total population that was dependent on agriculture in 1961 was 7,805,615. The potential employment in agriculture being 5,906,438, the disguised employment is equal to 1,899,177 or 24.3 per cent of the actual employment.

* "Labour Economics" edited by Pravin Visaria ; mimeographed.

The concepts of under-employment and disguised employment cannot be separated one from the other because the line of demarcation is thin. Even after the disguisedly employed persons have been accounted for, it has been pointed out that under-employment will persist. Wherever large numbers of people are dependent on agriculture, under-employment will be inescapable. The agriculturist cannot work the year round, because agriculture is a seasonal occupation. But a peasant on the other hand cannot be taken off his land during the off-season if he is unemployed because the crop requires watering, pest control, manuring, etc. That is why this type of unemployment is called under-employment and prevails to a greater extent in all the regions where people depend preponderantly on agriculture for a livelihood. All that can be done to reduce its magnitude is to identify and secure work for those who are "disguisedly employed" in this sector.

An agriculturist is employed normally for 180 to 200 days in a year (*Jobs for Our millions* by V.V Giri) ; for the rest of the year he is idle. If we define employment as employment throughout the year, then agriculturists (either as cultivators or as labourers) are employed over only one half of the year. So the extent of underemployment of one worker in a year is 160 days. In other words, 160 man-days are the quantitative measure of general unemployment in the agricultural sector of rural Tamil Nadu. The total workers engaged in this sector in our State is 8,921,221. The total duration of unemployment in man-days therefore is equal to $8,921,221 \times 160 = 1,427,395,360$ man-days from which the difference between the actual labour and standard labour should be deducted by applying the conversion table. The net figure thus arrived at is 1,248,904,160 man-days (i.e., $7,805,651 \times 160$).

But, as has been pointed out earlier, if the disguisedly employed persons are allowed for, and the underemployment in this rural sector duly weighed in, it works out to $5,906,438 \times 160 = 945,030,080$ man-days, which falls short of

the figure for under-employment noted above. This under-employment can be dealt with only when employment opportunities are made available in the rural areas, as most of the studies conducted on a small scale at the district level point to a significant degree of preference among agriculturists for work on the family type of farm.

A recent study ¹ in "Labour Economics" points out that the experience of the rural works programme suggests that the employment opportunities are availed of only by the landless labourers and those belonging to the backward classes. Generally speaking, farm labourers working in the countryside, after earning a little extra income for a few days' work, give up these jobs and the supply of labour tapers off. They do not report for duty for a few days until the new-found affluence wears thin and the need of a livelihood becomes more compelling. It is also reported that the supply of labour in the second half of the slack season tapers off because of marriages, festivals, illness and other concerns of life that distract from work. Hence the high degree of under-employment is not only caused by the seasonal nature of agriculture but also through the reluctance of labourers to work.

Finally, if employment is defined in terms of income, a person cannot be treated as employed if his income is not sufficient as a means of subsistence. In this respect, the agricultural labourers and small farmers deserve special mention. They form 60 per cent of the total of poor workers, *i.e.* those who spend less than Rs. 33 per month which does not allow them to consume 2,200 calories per day, (see, "Framework of a Plan to Abolish Poverty" by Dr. C.T. Kurien, paper read at the MIDS Seminar, January 1972) 65,70,000 workers fall within this poverty sector. Their jobs are not continuous, not secure, and do not fetch a sufficient wage. Hence any attempt to solve the problem should aim at establishing a reasonable wage for this class.

¹ The reference is to Prof. Guha's Study on Labour Economics, ed. Fravin Visaria, *op. cit.*

This section calls attention to the conditions of small farmers and agricultural labourers in Thanjavur, South Arcot and Chin gleput districts and small farmers in dry districts who are forced to sell their land and become agricultural labourers within a decade.

EDUCATED UNEMPLOYMENT

Educated unemployment is not peculiar to the urban areas. It is also found to be prevalent in the rural areas. In this State the unemployment among illiterates seems to be less severe than among literates as noted before. Persons who have successfully completed their primary or junior basic education are found to be unemployed in the urban areas, whereas, in the rural areas, it is really among the matriculates that unemployment is acute. This is shown in Table 51.

The table shows that 50 per cent of the males unemployed both in the rural and urban areas are matriculates and only seven per cent of the unemployed females are illiterate. One tenth of the males unemployed in the urban areas are illiterates. While 25 per cent of the unemployed are literates without any formal education, 34 per cent of them have completed their primary or junior basic education. Three-tenths of the unemployed are matriculates. The rural areas follow more or less the same pattern as far as educated unemployment is concerned. Among the reasons that account for educated unemployment, the extension of free education up to the matriculation, which has raised the educational level of the unemployed, "the educational inflation" compared to the job opportunities and the thirst for employment caused by education can be cited. Furthermore, many of the students who fail to get a job as soon as they finish the primary or junior basic pursue their education till the matriculation stage and remain unemployed after their success in that examination. The slow rate at which Tamil Nadu industries absorb the educated persons in contrast to the speed at which the schools turn out matriculates is also a causal

TABLE 51—Educated Unemployment in Rural and Urban Areas of Tamil Nadu : 1961.

Educational level	Rural		Urban			
	Persons	Males	Females	Persons	Males	Females
Illiterates	11.66	11.06 (11.77)	0.60 (9.98)	11.56	11.07 (11.82)	0.49 (7.69)
Literates without formal education	25.34	24.94 (26.52)	0.40 (6.65)	23.60	23.21 (24.77)	0.39 (6.25)
Primary or Junior Basic	25.24	23.89 (25.40)	1.35 (22.44)	33.80	31.91 (34.05)	1.89 (30.22)
Matriculates and above	37.76	34.14 (36.31)	3.62 (60.93)	31.04	27.53 (29.36)	3.51 (55.84)
Total	100.00	94.03 (100.00)	5.97 (100.00)	100.00	93.72 (100.00)	6.28 (100.00)

Note : Figures in brackets indicate the percentage of the educated unemployed among the male female and labour force.

Source : Census of India, 1961, Vol. IX, Part II (B), ii.

factor in the wide prevalence of educated unemployment. The districtwise study of unemployment among illiterates brings out clearly the inter-district variations as shown in Table 52.

TABLE 52—Unemployed Illiterates in Rural Areas of Tamil Nadu : 1961.
(in percentage)

District	Total	Males	Females
Chingleput	22.37	22.60	11.70
North Arcot	13.27	13.22	14.81
South Arcot	10.82	10.07	21.73
Salem	15.86	15.74	21.15
Coimbatore	20.07	20.48	28.04
Nilgiris	14.33	13.80	19.03
Madurai	8.34	8.31	8.94
Thanjavur	5.67	5.59	10.81
Tiruchirappalli	10.04	9.69	21.28
Ramanathapuram	11.64	9.58	38.34
Tirunelveli	11.17	11.30	9.11
Kanyakumari	2.75	3.07	1.63
STATE	11.66	11.77	9.98

Note : Col. 1 represents the percentage of the unlettered unemployed in the district to the total in the State as a whole. Col. 2 represents the percentage of unemployed and unlettered males in the district to the corresponding number in the State. Col. 3 is a similar percentage in the case of females.

Source : *Census of India 1961*, Vol. IX, Part II (B) (ii).

A large number of illiterates among the unemployed have been reported in Chingleput and Coimbatore. These two districts together account for more than a third of the total unemployed illiterates in the State. (Chingleput for 22.37 per cent illiterates in the State and Coimbatore for 20.07 per cent.) Coimbatore and Chingleput districts have proportions which exceed the State average by about 90 per cent in the case of the unemployed illiterates. Kanyakumari district has the lowest percentage of its unemployed with no education followed by Thanjavur and Madurai.

A large number of illiterates among unemployed females has been recorded at Ramanathapuram, and this district accounts for more than a third of the total unemployed illiterate females in the entire State. This is nearly four times the State average. The districts of Nilgiris, Coimbatore, South Arcot, Tiruchirapalli and Salem have registered 100 per cent more female unemployment than the State average. Kanyakumari is the only district where unemployed illiterates are noticeably fewer in number than in other districts (Table 52).

Among reasons for the high percentage of unemployment among illiterates are the following. A working correlation may be hypothesized between the high percentage of the scheduled caste population and a wider than average prevalence of literate unemployment. This is because the jobs that the scheduled castes do in fact take up and the jobs that are allotted to them by society require no skills or formal education. While this is true of most farm jobs requiring neither journeyman skill nor apprenticeship, the occupations usually allotted to scheduled castes are protected neither by guild privileges nor by anything legal comparable to tenancy or share-cropping rights. In addition to this, the level of literacy among scheduled castes is relatively low. This can be seen from the position of Chingleput where the scheduled caste population forms more than a third of the total population.

A relatively high percentage of workers depend for a living on those occupations which require no formal education like farming, the rearing of livestock, forestry, fishing, etc. This statement is best exemplified in Coimbatore district where 0.90 per cent of workers depend on dairying, fishing and occupations associated with forestry. As against these, 12.44 per cent of the workers depend on marginal domestic occupations—the household industry so called, (and misleadingly for its name, quite unorganized) and 1.90 per cent of the workers on construction and piece and casual work which is a fruitful occupation and a source of employment in any progressive economy.

The existence of a large number of industries offering casual employment to the illiterate labourers can also cause a high percentage of unemployment. Casual employment varies with seasonal factors and on the intensity with which installed capacity is being worked. For example, in Coimbatore district, the textile and hosiery industries offer casual employment to labourers with no educational qualification. The case of plantations in Nilgiris is similar.

Unemployment among Literates

Unemployment among literates can be broadly sub-divided as on an earlier occasion: (1) unemployed among the literates who have some formal education; (2) unemployment

TABLE 53—Unemployment among Literates in Rural Areas of Tamil Nadu : 1961.

District	Literates without formal education		Primary or Junior Basic, Matriculation or above			
	Males	Females	Males	Females	Males	Females
Chingleput	32.16	9.57	28.75	29.77	16.49	48.96
North Arcot	25.78	7.41	27.25	30.86	33.75	46.92
South Arcot	21.52	4.34	29.26	30.43	38.55	43.50
Salem	20.19	11.54	25.24	25.00	38.83	42.31
Coimbatore	31.85	9.75	24.03	10.97	23.64	51.24
Nilgiris	17.37	6.45	30.18	32.25	38.45	32.27
Madurai	23.65	8.13	25.02	46.34	43.02	36.59
Thanjavur	21.41	10.84	31.76	27.71	41.24	50.64
Tiruchirapalli	26.16	17.02	26.40	37.23	37.75	24.47
Ramanathapuram	35.45	8.80	17.88	30.05	37.09	22.81
Tirunelveli	37.52	9.11	22.49	42.55	29.69	39.23
Kanyakumari	2.93	3.62	20.72	10.44	63.28	84.31
STATE	26.52	6.65	25.40	22.44	36.31	60.93

Source : *Census of India, 1961*; Vol. IX, Part II(B) (ii).

among those who have only passed their primary or junior basic ; and 3) unemployment among educated people who are matriculates or possess higher qualifications. In almost all the districts, unemployment is found to be more acute among matriculates than among other groups as shown in Table 53.

37.52 per cent of Tirunelveli's unemployed males are without formal education and this is the highest proportion for any district but is followed closely by those of Ramanathapuram and Chingleput. Similarly for females, the highest proportion of unemployed literates to the total unemployed is claimed by Tiruchirapalli (17.02 per cent). It is also higher than the State average (6.65 per cent). The proportion of female literates to the total figure for the unemployed in the district is contrariwise the lowest in Kanyakumari.

The proportions of literates without formal education among unemployed females is the highest in Tiruchirapalli district and is lowest in Kanyakumari district. In almost all the districts, the proportions of literates without any formal education to employed females are found to be higher than the average for the State as a whole.

Thanjavur is the only district which has the highest proportion of unemployed males with primary or junior basic level of education and the proportion obtaining in Thanjavur exceeds the State's average by 25 per cent. Among females, Madurai records the highest percentage in this respect.

The unemployed matriculates are largest in Kanyakumari but are fewer in Chingleput. No other district except Kanyakumari has a high proportion of matriculates among unemployed females. Unemployment among the educated is more pronounced in Kanyakumari than in any other district.

The situation has remained more or less unaltered during the early seventies. The National Sample Survey

rounds made during 1969-'70 notes that 23.0 per cent of the unemployed are illiterates, as against only 11.66 per cent in 1961. The survey shows a slight improvement among the educated unemployed. This is shown in Table 54.

TABLE 54—Distribution of Unemployed according to Sex, Illiteracy and Formal Qualification : 1969-'71.

	Total Distribution according to Sex			Distribution according to Educational Qualification			
	Persons	Males	Females	Illiterate	Literate ¹	Matric	Graduate & above
Rural	100.0	95.4	4.6	23.0	58.6	15.8	2.6
Urban	100.0	67.4	32.6	5.7	23.4	62.3	8.6
STATE	100.0	80.4	19.6	12.7	39.8	40.7	5.8

¹ Literate but below matric.

Source : *Tamil Nadu Economic Appraisal : 1971-'72*

The National Sample Survey further showed that unemployment among females was four times as acute in the urban areas as in the rural areas. The NS survey also came out with the finding that the proportion of illiterates among the unemployed had increased in the rural areas (from 11.60 per cent in 1961 to 23.0 per cent in 1971), while it had decreased in the urban areas from 11.50 per cent in 1961 to 5.7 per cent in 1969-'70. The proportion of literates below matriculation in the total employed had increased from 50.54 per cent in 1961 to 58.6 per cent in 1969-'70 in the rural areas whereas it had decreased from 57.40 per cent to 23.4 per cent in 1970-'71. Generally speaking, over the decade, the number of educated matriculates and graduates among the rural unemployed has tended to fall and that among the urban unemployed to rise significantly.

This can be attributed to the following causes: the setting up of industries in rural areas has absorbed the majority of the educated unemployed; the escalating qualifications required for the same skills or jobs at rates of remuneration which do not increase sufficiently with prices of which are different as between employers has caused increases in the proportion of literates among the unemployed. Decreases in the proportion of illiterates among the unemployed, and of those who are below the matriculation level in the urban areas does not necessarily mean, as it well might, that a large number of illiterates and non-matriculates are employed. It is also possible that a majority of them have pursued their education further, because an inflation has occurred in the essential or desirable qualifications required for any job; finally, there is also a possibility of difference in the definition and criteria adopted by the NSS in order to refine its categories further and or bring them in line with economic realities. This might conceivably have added to the natural disparity between the 1961 and 1971 results and figures. Hence the conclusion of this chapter is that the problem of unemployment remains more acute among the educated, and this is especially so in the Kanyakumari and the Thanjavur districts. Among the rural jobless unemployment has tended to fall and that among the urban, unemployed figures to rise significantly. That is to say, State policy has treated educated unemployment as a passing phase and as an aberration. Rather does it seem to us to be due to structural factors, the lack of an educational policy suited to development objectives and to elements in national character. Every possible step should be taken to provide work for the educated more or less commensurate with their needs and qualifications. If this is not done, the resulting discontent and economic pressures would threaten the very economy and its stakes in development.

CHAPTER 5

THE EXISTING EMPLOYMENT PROGRAMME

In the last three chapters, attempts were made to bring to light and quantify disguised employment, under-employment and open unemployment. The magnitude of open unemployment has been relatively low. Open unemployment, a characteristic of, and assumed to be specific to, urban areas is now spreading to the rural areas as well. As much as 2.48 per cent of the labour force has been reported as openly unemployed. A large percentage of this number is made up of involuntarily unemployed, and the extent of disguised unemployment well exceeds this figure and it has been calculated at 24.3 per cent of the actual employment. As noted earlier, under-employment is inescapable in a State where a disproportionately large number of the workers depend upon agriculture.

High work efficiency and per capita productivity are features of agriculture in an economy where standards of living are high and unemployment is only marginal. The prevalence of under-employment cannot be taken as indication of unemployment if those who are engaged in agriculture get an income that can be judged adequate in the circumstances. This is so only when employment is defined in terms of income.

Community Development

The Government took action to relieve under-employment and disguised employment and the resultant poverty as early as 1955. Eighty per cent or more of the people in our country are in need of more food, better housing and a social infra-structure of health, sanitation and education. It is towards the revitalization of life in the villages that the Community Development Programme was directed. The fundamental idea was to make the villager an active

principle in the programme designed for his economic rehabilitation and material well-being and the regeneration of society.

In an under-developed country like India, it is impossible to provide all the financial and technical assistance needed and desired by the communities to bring about social and economic improvement. Hence the community must depend on self-help which can at best be guided by the State. Any programme of assistance can only be marginal and can take the form of temporary relief to those in distress. The structurally disadvantaged will of course be the target of special development effort and expenditure.

The programme started with approximately 55 projects located in selected areas in the several States of India. Each community project served approximately 300 to 400 villages with a total area of 450 to 500 sq. miles, a population of about 2,00,000 and a cultivable area of about 1,50,000 acres. The project area was divided into three development blocks each consisting of about 100 villages with a population of 60,000 to 70,000. Each block was then divided into groups of five villages each. As the Planning Commission felt that a Plan cannot be successful, unless the millions of small farmers accept the objective and participate willingly and accept sacrifices for implementing it, it established the National Extension Organisation, for intensive rural work, for the total uplift of rural life, for promoting self-reliance and eliciting community participation.

The Community Development Programme was inaugurated in 1952 in Tamil Nadu with four projects covering 908 villages with a total area of about 3,000 square miles and a population of about 22 lakhs. The National Extension Service Programme was launched over 28 blocks in October, 1953. Both these projects were designed to tackle the problem of rural poverty, caused in turn by under-employment and disguised employment in agriculture. *Inter alia*, the programme included reclamation

of wasteland, the provision of fertilizers, improved seeds, inputs of modern and adapted techniques of agriculture. The programme included irrigation schemes, soil conservation, improved marketing and credit facilities to bring prosperity to poorer farmers.

This programme has provided the country and the State with an opportunity to solve the community problems through co-operative effort in the shortest possible time.

Khadi and Village Industries

In order to put the idle man-hours during the off-season in agriculture and during drought to productive use, a Board was established with the task of developing the khadi industry which included both spinning and weaving. The introduction and development of this programme has provided the means of livelihood to many agriculturists living in the rural areas.

The hand-spinning of yarn has been much favoured in this country as an auxiliary source of income for cultivators, and spinning projects employ three kinds of machines : the Kisan Charkhas, Ambar Charkhas and Textool Charkhas. Textool *charkhas* represent a significant technological advance and are designed to produce quality yarn of fine counts. The rural textool centres, where the textool *charkhas* are being operated, increased from 34 to 60 between 1967-'69. The number of persons to whom this *charkhas* provided employment increased from 1304 persons in 1968-69 to 1602 in 1969-70. The Board has decided to increase the number of these centres further.

The Board's programme is implemented through the following units : main centres for silk, sub-centres for silk, textool centres, dyeing and bleaching units, tailoring units, sales depots, sales emporia and khadi craft. (See the Board's Annual Report for 1968-69.) The Board itself undertakes the responsibility of marketing the output.

The Annual Report for 1968-69 of the Khadi and Village Industries Board records that it has been

able to provide employment opportunities to nearly a lakh of people through its spinning and weaving programmes. The average annual earnings of a spinner at Rs. 50 from a traditional *charkha* appears paltry. Earnings on Ambar *charkha* are about Rs. 71 and that of a textool spinner, Rs. 218. The average annual earning of a khadi weaver was highest at Rs. 1,200.

The Board formulated the following programmes for 1971-72 : the introduction of a new model *charkha* ; the distribution of warping sets ; the construction of warping and sizing sheds ; the construction of dyeing, bleaching and printing units ; the provision of improved looms ; and the construction of big and medium sized godowns. The Board has been sanctioned Rs. 1,64,500 as grant and Rs. 3,08,100 as loan for the year 1971-72 (*vide* the Board's Annual Report, 1970) to achieve this target. The employment provided by the khadi-making industries in each and monies generated by it are given in Appendix I.

The aim of the village industries programme is the economic uplift of the rural areas. With this object in view, village industries schemes endeavour to convert the raw materials available in the villages into finished products. This process provides adequate employment to the rural population. The village industries schemes formulated by the Board are implemented through the departmental units and through the industrial co-operatives.

The Board provides both financial and technical assistance to the industrial co-operatives for implementing the programme and revive the lost industries of village artisans. In 1970-71 the village industries scheme was implemented through 325 departmental units and 2,420 industrial co-operatives. The total value of manufactures turned out under the village industries programme was of the order of Rs. 760.32 lakhs. The total sales effected was Rs. 852.73 lakhs ; employment provided was of the order of two and a half lakhs of workers and Rs. 259.19 lakhs distributed as wages.

The State Board took up the following industries for development : palm *gur*, *gur* and *khandasari*, oil, the processing of cereals and pulses, bee- and poultry-keeping, the extraction of non-edible oils, leather work, carpentry, blacksmithy, making of hand-made paper, lime, matches at cottage level, fibre, fruit preservation, gobar gas, cane and bamboo, the manufacture of household utensils in aluminium and the collection of natural products from plants for medical and other uses. Apart from this, the Board has extended its assistance to the making of toys and fancy doll-making, pith and board units, the chalk and crayon industry, the sheet-metal industry, the phenyle industry and tailoring and embroidery units as well.

The departmental units, wherever they function, are under the administrative control of the Commissioner of the Panchayat Union concerned. However, in order to keep a closer watch on the working of these units, the Board brought them under its direct control during 1968-69. It has since bestowed special attention on the schemes for scheduled castes, the scheduled and denotified tribes; on an average, each worker engaged in this industry received Rs. 102.65 during 1970-71. The districtwide figures of total employment, wages disbursed and the number of units are set out in Appendix II.

Village industries thus continue to play an important role in the conversion of idle man-hours into productive time. The Board contemplates the following schemes for 1972-74 : the hand-pounding of paddy is to be developed through the construction of three small godowns, ten work sheds and ten drying sheds ; three new foot-wear units are to be opened to provide work for individual cobblers ; 30 palm *gur*, and 30 *neera* centres to be opened. In addition to the construction of four godowns for non-edible oils and soap, more sales centres are to be opened and 20 new sub-stations along with two circle stations are to be opened for the bee-keeping industry. A sum of Rs. 9,28,868 has been sanctioned as grant and Rs. 77,82,030

as loans to fulfil this ambitious programme during the year.

The role of the khadi and village industries in the social and economic life of the rural areas has grown considerably during recent years in particular. During the slack season spinning still remains the only occupation of several lakhs of families. The Board has thus done good work in the amelioration of the problem of under- and unemployment.

However, in all these cases, the problem of marketing needs special attention. Khadi faces severe competition from machine-made goods. By employing trained salesmen, by adopting "door-to-door canvassing" and modern methods of sales promotion, the Board should be able to sell more. In the villages, khadi should have sales depots, so that it can meet the needs of the villagers. This is part of a general policy which has been advocated by economists in the draft State Perspective Plan according to which the bulk of the needs of a district or a homogeneous economic region in the rural areas is met from its own resources in the interests of its income and employment levels and in the interests of its terms of inter-regional trade. Village industries' products have a good tourist market besides. Their sales can be improved to a great extent by setting up depots in railway stations, airports and hotels (some of the Khadi Gra nudyog Sales Depots are already in operation) where the foreigners normally stay. The quality of goods in bulk supplies, which is a problem peculiar to this mode of decentralized organisation of skills, should be maintained.

The Rural Man-power Programme

The Rural Man-power Programme was a centrally sponsored scheme till 1969-70. The basic objective of the programme is to provide employment opportunities to unskilled labourers during the slack seasons in agriculture when there exist no employment opportunities. Another object-

tive is to build up the community assets which are capable of generating employment in the future. At the end of the Third Five Year Plan, the programme was in operation in 72 blocks and the coverage had risen to 143 blocks by 1970-71. The list of blocks showing the year of the commencement of the programme and the year in which it was discontinued following the fulfilment of the programme is tabulated in Appendix III. By 1972 the number of blocks had accordingly been brought down to 72. The district-wise break-up is set forth below :

TABLE 55—Location of District Blocks under the Rural Man-power Programme : 1972.

District	No. of Blocks	District	No. of Blocks
Chingleput	4	Tiruchirapalli	4
North Arcot	6	Thanjavur	6
South Arcot	5	Madurai	6
Salem	7	Ramanathapuram	9
Dharmapuri	5	Tirunelveli	10
Coimbatore	6	Kanyakumari	2
Nilgiris	1		

Source : Directorate of Rural Development, Madras.

The blocks are selected on the basis of the density of population, the incidence of unemployment and under-employment, the proportion of agricultural labourers to the total rural labour force, employment in organized industries and non-agricultural employment opportunities, the backwardness of the area, as computed from the other parameters, the financial position of the panchayat unions, the land-man ratio, facilities for irrigation, etc. The blocks are selected by the rural development and the local administration departments on the basis of the recommendation of the Director of Rural Development in the State Government and the District Collectors.

Only such schemes as can utilise local labour during the agricultural slack season, which could generate enthusiasm for participation, without involving a high degree of technical skill; which could utilise the locally available resources and materials; and which could be finished within a short time, are selected. The final condition is that the wage component should constitute at least 50 per cent of the total cost of the project.

The following projects have been formulated taking into consideration the above requirements; digging of new community wells for irrigation purposes and the repairing of old ones; effecting of improvements to minor irrigation works like desilting, strengthening and raising of tank bunds, desilting of irrigation channels, etc.; road formation, (if the materials cost less than 50 per cent of the total cost of the project) improvement of existing roads; rock blasting and collection of surfacing materials for purposes of road-building; the fencing of panchayat union plantations (if the fencing materials are not included in the cost of the project); raising fuel forests in panchayat union lands; drainage works in cultivable areas designed to prevent water-logging, etc.

At the State level, the Government in the Rural Development and Local Administration Department and the director of rural development are personally in charge of the programme. At the district level, the collector, assisted by the district development officer, is in charge of the programme and finally, at the divisional level, the revenue divisional officer administers the programme and also acts as disbursing officer for the grant. The actual implementation of the programme at the block level is carried out under the guidance of the panchayat union councils.

The cost of these schemes is made over by the Union Government in the form of grants to the State Government which implements the programme. In 1962-63, the system of financing underwent a change as a result of which 50 per cent of the expenditure was treated as a loan and the rest as a grant. From 1963-64 onwards, the Central Government discontinued the ear-marking of grants and

disbursed monies computed on a statewide basis leaving it to the State concerned to use its own discretionary power to choose the projects. The utilisation of slack season man-days and wages distributed under these schemes, district-wise, yearwise and projectwise, are set forth separately in Appendix IV.

The scheme has been rather more efficacious as a cure for under-employment than in the case of straightforward unemployment. Yet, in relation to the magnitude of under-employment in the State, the core of the problem remains untackled. The scheme aims at creating isolated remunerative assets rather than any necessary or sustained infrastructure which, in turn, can generate additional income. In the sequel, construction has been the mainstay of the programme, plus drinking water wells, school-buildings, village link and approach roads, etc.

The programme has not, however, made any arrangement for protecting and maintaining the remunerative or fixed assets so created. Hence there is the likelihood from the start that the same projects are repeated without ensuring their full life. The lack of any proper agency to maintain the completed projects and the absence of any mandatory reporting system on the continuing benefits derived from them will necessarily result in some waste of funds.

The programme can be successful to a greater extent if it can be legitimately extended to the creation of an infrastructure needed by the village, through the establishment of an agency to maintain and assess the impact of completed projects on the district economy. The education of agriculturists in semi-skilled operations, such as poultry-keeping, bee-keeping, animal husbandry and fish-farming can serve to generate self-employment in the first remove and supplement their incomes and incidentally utilise the under-employed man-power in economic fashion.

Crash Schemes for Rural Employment

The crash programme for rural employment aims, on the other hand, at providing employment opportunities for at least 1,000 persons in each district of the State for about 250 days in a year. The scheme is designed to generate additional employment through a network of rural projects of various kinds which are productive, while retaining their labour-intensive character.

The programme was introduced in 123 blocks in May 1971 and was extended to an additional 106 blocks by October 1971. Thus the scheme has been in operation in 229 blocks from 1971-72. The Government of India have targeted the economic utilization of 59 lakh idle man-days during a single year. The entire districts of Dharmapuri, Nilgiris and Kanyakumari have been covered under the crash programme. In other districts, 20 blocks have been selected for the same purpose.

Under this programme, the Government of India sanctions Rs. 12.5 lakhs per district covering ten blocks. An additional Rs. 12.5 lakhs have been sanctioned to cover 10 more blocks in each district. So each block in the second stage receives approximately Rs. 1.25 lakhs. However, in the case of Kanyakumari and Nilgiris districts, the amount is sanctioned irrespective of the number of blocks. A condition attaching to each project, however, requires that, for every 1.25 lakhs of rupees spent, 2,50,000 man-days of employment should be generated. Steps have been taken to prevent the diversion of the funds to other uses.

For 1972-73, a sum of Rs. 295 lakhs was provided. Each district has been sanctioned a sum of Rs. 25 lakhs with the exception of Dharmapuri (Rs. 20 lakhs), Kanyakumari and Nilgiris which receive Rs. 2.5 lakhs each.

The programmes comprise the following kinds of schemes: road works, land reclamation, the building of drainage and embankments, water conservation, minor

irrigation works, soil conservation and afforestation, construction of additional class-rooms in school, the completion of incomplete work commenced under other schemes, etc. However, the programme cannot include any projects that seek to expend funds on maintenance and repair, the planting of avenue trees, or panchayat plantations. Also the maximum cost of a project should not exceed Rs. 5,000.

The scheme is implemented by the panchayat union commissioner with the technical guidance and supervisory help from highways and rural works development. At the district level, the collector is charged with the implementation of the programme. He is required to co-operate with a view to making a success of the scheme.

The scheme stresses that 80 per cent of the cost should be distributed as wages and only 20 per cent of it should go towards material components. Recently the Government stipulated these two ratios; accordingly, wage cost must account for 80 per cent of the allotment, but for the second half, it may be 60 : 40, thus allowing the district administration to spend Rs. 3.75 lakhs or 40 per cent of the total grant for the purchase of materials. However, the stress is more on creating 2,50,000 man-days of work for every Rs. 12.5 lakhs spent on the programme. According to other stipulations, a maximum of five per cent may be spent by the Government on field staff and will come from the material cost provisions.

The wages paid to the labourers will depend on the prevailing wage rate in that area, but should not exceed Rs. 100 in a month of 25 man-days. During 1971-72, 84.04 lakhs of man-days were utilised. The assets created under the programme all over Tamil Nadu are enumerated in Appendix V, and Appendix VI contains the districtwise distribution of the assets formed under the programme.

Any *critique* of the Rural Man-power Programme will apply equally to the Crash Scheme for Rural Employment. However, a salutary feature of this scheme is that it allows for the construction of school buildings, but the

wages-material cost ratio has been found to be a severe constraint on the undertaking of truly asset-creating developmental work. If any project which requires a large outlay for materials is taken up under this programme, then its main aim of creating employment will be weakened or defeated. Against the gains of short-term employment for large numbers in labour-intensive projects must be reckoned the claims of project which produce recurring employment in a self-liquidating fashion through the repetitive production of goods or services. So the Government should consider increasing the proportion of the grant for the materials either under the project concerned or from other heads of expenditure in the plan budget for the district. The maintenance of the assets so created should equally be provided for, even though that cannot be the objective of a Man-power Programme. What is far more important is the preservation of the remunerative assets created, for it is the task of maintenance to ensure that assets yield returns. The scheme can function more successfully if the rules regarding wage-materials ratio are liberalised. It should be possible to assign this responsibility to one of the pre-existing institutions of rural development.

The Intensive Rural Employment Pilot Project

The Union Government announced also the introduction of a further scheme for employment at a cost of Rs. 1.5 crores. This was to be implemented in November 1973 in 15 selected blocks, one in each State except in the Punjab and Haryana. The projects are expected to provide employment in the selected blocks for all those within the age group of 15-59 who offer their services for a wage, on work projects not requiring skills of a high order. Preliminary studies are being conducted on the prevailing pattern of employment in order to formulate guidelines on the nature of jobs to be provided according to regional features and needs. The projects are expected to throw light on the potentialities of the different regions for the provision of employment leading to the generation of

..durable assets and to pave the way for additional jobs in the future contributing incidentally to area development. A sum of Rs. 10 lakhs would accordingly be allotted for each block and if necessary, the amount raised to Rs. 15 lakhs depending on the needs of the area.

In Tamil Nadu, the Mangalur block in South Arcot district, with a population of one lakh, has been chosen for the implementation of this programme.

It is believed among planners that this scheme is on an experimental basis and will become the harbinger of full employment. A comprehensive rural employment programme for the whole country is expected to be formulated during the Fifth Plan period on the basis of this experience. This scheme was necessitated by the fact that the crash programme was governed only by the limited objective of providing employment only to a certain number. Equally, however, it has also made the new scheme possible by bringing the distant goal of full employment within the plan perspective and range. Since the programme has just started, further details on the project, which will make a fuller assessment possible, are not available. However, even tentatively, when a number of programmes are governed by the same objective and follow one another, they should be complementary rather than competitive.

These remarks apply equally to the Rural Jobs Scheme proposed by the Government of Tamil Nadu. The scheme is expected to cost Rs. 4.38 crores, which sum is inclusive of Rs. 3 crores to be spent on the rural roads programme under which all-weather communication is to be provided for every village which has a population of 1500 and above, connecting it with a main route and/or a market centre. This scheme is expected to provide employment to 15,000 unskilled men and to supervisory staff. A sum of Rs. 2 crores is expected as the Union Government's contribution to the programme.

High-Yielding Varieties

The introduction of high-yielding varieties of seeds in agriculture has also proved to be an important source of employment to the under-employed and to those agricultural labourers who are not able to engage themselves to their utmost in a gainful manner. Many studies were conducted in various parts of the country, and these studies, (*vide* "Rural Employment", *Indian Journal of Agricultural Economics*; October-December 1972) have proved that the introduction of high-yielding varieties has increased the demand for labour, because they require more frequent inputs of water, fertilizers, insecticides, etc. Hence this new farm technology is expected, contrary to popular expectation, to be labour-intensive rather than economical of the labour input. The table below shows the difference in the demand for labour (in terms of working days) between the pre- and post-HYV periods.

TABLE 56—Work-days per Hectare Necessary with HYV and Unimproved Seeds : 1968-69.

State	Number of Days in HYV	Others
Andhra Pradesh	222	101
Kerala	143	82
Tamil Nadu	133	64
West Bengal	141	82
Average	161	82

Source : G.P. Mishra, "Rural Employment; Impact of the New Farm Technology," *Economic Times*, May 31, 1972.

According to this table, the number of working days that go into the cultivation of paddy is 161 following the introduction of the high-yielding varieties in contrast to 82 man-days of labour necessary with the improved varieties even though these latter often have longer gestation periods.

In Tamil Nadu, 6.9 lakh hectares were covered by the HYV programme during 1968-69 and a target of 10.0 lakh hectares was fixed for 1969-70. In the event, the target was exceeded by 12.3 lakh hectares, 18.2 lakh hectares having been put under HYV Paddy. In 1971-72 it was proposed to bring 20.2 lakh hectares under the HYVP. Farmers were given all necessary help including technical services, credit facility in cash and kind, sprayers, etc. to grow HYV. The supervision of the HYV programme with a view to securing a plurality of Plan objectives has been entrusted to Panchayat Unions. Once the target is achieved, it seems reasonable to hope that it will generate a sufficient quantity of additional employment to deal with local unemployment of all kinds.

Undeniably then, the introduction of HYV has increased productivity and the duration of productive employment, as also the wages of the labourers. However, while HYV have increased the demand for labour, the demand is only for specified kinds of skills. So those labourers who offer only traditional services have either been replaced or thrown out of employment, or they continue to suffer from the age-old problems of under-employment or disguised employment. There is thus a shift in the demand curve, but the labourers are limited in supply in relation to the specialized demand, and proportionately, the wages payable to skilled labour have increased. In such cases, an employment policy should incorporate facilities for the training of unskilled labour in order to bring them into the new employment market.

Small Farmers' Development Agency

If proper steps are not taken by the Government to protect the small farmers, they will eventually serve only to swell the number of existing landless agricultural labourers. The small farmers have not significantly benefitted from the many generalized plan programmes to develop small areas. The report of the Study Group on the Welfare of the Village Community appointed by the Government of India observed that, as long as the present

pattern of society continues, the fruits of development are bound to be unevenly distributed, the weaker sections receiving progressively decreasing portions. So the approach from the outset should be concurrently to correct the inherent inequalities and injustices as they develop. The Small Farmers' Development Agency can also make a valuable contribution towards that end.

The rich farmers have resources to borrow from or access to the banks, co-operative societies, etc., both to invest adequate working capital for the new technology and to effect permanent improvements to their holdings, but the small farmers face many difficulties in obtaining most of their requirements. A number of them are unaware of the facilities proffered and those who do know of them are unable to avail themselves of the amenities due to their inability to offer the security, or due to their uneconomic holdings.

The scheme is expected to work with ten objectives. Under it, the marginal and sub-marginal farmers have to be identified so that their status can be improved. Assistance of specific kinds would be necessary in each case, irrigation improvements, optimum watering and drainage practices, guidance in scientific agricultural techniques; adequate credit through co-operatives or commercial banks; marketing assistance; incentives for development in needy cases. This programme is scheduled to be implemented on a wide basis. A small farmer is defined as one who owns two to three acres or less of wet land or three to five acres of dry land. A marginal farmer has been defined as one who owns one to two acres of wet land or two to four acres of dry land and a sub-marginal farmer by the same token is one who owns one acre or less of wet land or two acres or less of dry land. Though the difficulties faced by marginal and sub-marginal farmers are numerous, neither have they been identified nor any scheme drawn up to benefit them especially based on criteria that necessitate and establish the distinction. In certain districts, the scheme has been worked so as to bring to the sub-marginal farmers

a calculated measure of benefit. Such modified schemes aim at providing assistance to 50,000 small farmers or 20,000 marginal and sub-marginal farmers. The amount sanctioned for the implementation of the scheme in Madurai, Tirunelveli and South Arcot districts is Rs. 1.6 crores each and Rs. 1.0 crore each for the Salem and North Arcot districts. The total sanction is larger where the scheme benefits small farmers and it is lower where the scheme benefits marginal and sub-marginal farmers and agricultural labourers. That the extension of the scheme to the small farmers has been possible only in the case of certain blocks (the choice being based on a minimum number of viable farmers, the existence of co-operative societies to provide credit to match the grants and a minimum sum for surface irrigation in the cases of assisted cultivation) underscores the importance of the productivity criterion in welfare expenditure.

To execute this scheme as a whole, the Small Farmers' Development Agency was established which is assigned the task of identifying and helping the small farmers who are viable. It obtains seeds, credit, manure, pesticides, marketing facilities, for those entrusted to its care.

The compromise between need and productivity considerations is reflected in the choice of welfare schemes for planned treatment in the districts. From the standpoint of public interest, it is better that marginal farmers should receive less than they need than that they should be left out altogether.

In Tamil Nadu, five districts have been chosen for the implementation of this scheme. They are: Madurai, Tirunelveli, South Arcot, North Arcot and Salem. In the first three districts, the programme seeks to assist small viable farmers but in the last two districts, it is directed at marginal and sub-marginal farmers and agricultural labourers.

A preliminary survey undertaken in Madurai district revealed that there exist in it 1,40,211 potentially viable small farmers, cultivating 4,99,414 acres. Only 18 blocks have, however, been selected under the scheme in that district, thus limiting the beneficiaries to 50,000 though the 18 blocks have 72,187 small farmers owning 64,129 acres of wet land and 2,05,232 acres of dry land. By August 1972, 15,722 small farmers and 6,350 marginal farmers who qualified for assistance under the scheme had been identified in this district.

In Tirunelveli district, there are 1,02,473 small farmers of whom 84,388 are to be found in dry areas and 18,085 are located in wet areas. Of the total cultivated area of 19,61,618 acres, 3,42,730 acres of dry land and 40,080 acres of wet land are owned by the small farmers. Eleven blocks have been chosen here for action under this programme. As on August 1972, 16,135 small farmers had been identified.

In South Arcot district, the number of small farmers was estimated at 1.3 lakhs and the extent of their holdings at 3.78 lakh acres of wet and dry land. Of the beneficiaries identified, 11,977 were small farmers and 13,371, marginal farmers.

In North Arcot district, the scheme is to be extended to landless labourers, sub-marginal and marginal farmers as well. In particular, two blocks with 58,953 landless labourers, 13,376 sub-marginal farmers and 13,648 marginal farmers were selected for the implementation of this scheme. As on August 1972, 17,337 sub-marginal and marginal farmers and 6,210 agricultural labourers had been identified. However, the target for the number of beneficiaries provided for in the programme is rather less, being only 20,000.

In Salem district also, the scheme was extended to marginal, and sub-marginal farmers. Two blocks were selected in which 9,578 landless agricultural labourers, 6,418 sub-marginal farmers and 8,973 marginal farmers had been

enumerated. 14,295 marginal and sub-marginal farmers, and 6,210 agricultural labourers had been identified as on August 1972.

Before the scheme is implemented, a preliminary survey is conducted in each case to assess the natural endowments of the region. For example, in Madurai district, the technical objectives of the scheme included the exploitation of surface water and the stabilisation of tank irrigation, land levelling, reclamation, and the *de novo* development of cashew cultivation. Thus the actual needs of the area are first assessed in relation to certain practical objectives. The Agency has undertaken the distribution of seeds and fertilizers and has opened seed stores for this purpose. The supply of all inputs will be routed through the Agricultural Department and SFDA. The Agency has also recommended an increase in the number of retail shops to meet fertilizer demand.

Although the programme is a right step towards the amelioration of the lot of weaker sections of the people in the rural areas, the following suggestions, if adopted, could greatly enhance the value of the scheme.

(1) The small, marginal and sub-marginal farmers should be defined on the basis of income. An acre of land in Thanjavur district may yield more than the same area in Dharmapuri district. Furthermore, one acre of land under paddy may yield greater returns as also a larger profit than if groundnut were sown. The income from an acre should be determined first by taking into consideration the nature of the crop grown, the frequency of cropping, etc. and on the basis of income thus derived, the small marginal and sub-marginal farmers should be identified.

(2) The marginal and sub-marginal farmers should receive greater attention at the hands of the authorities than small farmers because they face greater deprivation, are in danger of becoming landless and swelling the numbers of this already over-populated segment of "discontents" in rural society.

(3) The agency which secures loans for the farmer should also help him in securing a postponement for their repayment when a crop fails or when timely remittance becomes impossible for exogenous reasons.

(4) The small marginal and sub-marginal farmers in dry districts who live in Coimbatore, Dharmapuri, and Ramanathapuram should receive priority over the small marginal and sub-marginal farmers in wet districts because at any time when the debt burden, or a protracted drought, becomes unsupportable, he might liquidate his assets and become a landless labourer. The accretion to the ranks of the landless, it has already been noted in this monograph, is greater and faster in the dry than in the wet districts. These suggestions are designed as much to relieve the problem of overt unemployment through piecemeal action as they are addressed to the specifically rural phenomena of under-employment and disguised employment.

THE LESSONS

How far have these employment schemes been successful? It is not the formulation of schemes but the implementation thereof that can provide the convincing answer. The schemes leave much to local discretion and, as already drawn attention to, the final form that the projects assume in the process of implementation. The projects must stress and elicit both employment intensity and productivity orientation. Productivity can be directly augmented through the creation of an enduring rural infra-structure (e.g. rural roads, power and irrigation projects) and through the economic exploitation of underutilized manpower in the region. Such increments in rural productivity should directly increase the marketable surplus. This in turn should enlarge rural incomes and the demand for goods of rural origin. Transportation for instance is a necessary concomitant of an exchange economy and is indispensable for rural development. It is a service industry that normally pays its way and is employment inten-

sive. And the employment of the rural sector can cumulatively increase the number and value of rural incomes. But, for this purpose, rural roads are necessary. Road-making is both labour-intensive and remunerative. Above all, roads provide recurring employment.

Quite apart from the 1500 villages in the State which have no roads at all, there is a large number which do not have link-roads. If anything is to be done meaningfully without wasting either the local resources or man-power available in the villages, the construction of rural roads is an obvious priority. These roads need to be planned more seriously rather than as relief works. They should take into account their location in the rural areas, in as the level of agricultural development in relation to other villages and market centres, although, by itself, such a programme cannot decisively solve the problem of rural unemployment in the long run. Attention should be given to warehousing, transportation and marketing, which will promote the development of the village and the productivity of the cultivators.

Secondly, the various schemes devised so far should be complementary to one another. The avoidance of duplication can prevent the waste of resources, because it should normally not be necessary to evolve three or four programmes in quick succession to solve the same problem, a sore temptation to governments which aspire to a reputation of responsiveness to public opinion. A single integrated programme, backed by sufficient resources and planned prudently, should seek to optimize outlay on a crash programme consistent with needs and resources. But an obvious defect in the programmes has hitherto been an exclusive and simplistic reliance on agricultural development projects for the mobilization of labour, but the advent of district planning should occasion resource surveys, which should lead in turn to the more employment-intensive social projects so called, and straightforward industrial or mining and extraction projects. Such programmes should endeavour to improve and upgrade the skills of the unskilled labour force. In a recent survey undertaken in Tiruchirapalli district, it was found that

the rural labour force was not very forthcoming where the work involved did not call for higher skills or lead to the acquisition of new ones. Many of them preferred to remain idle, instead of performing unskilled tasks. Tradition appears to have acted as a constraint among idle labour. Road works and the like appear *infra dig*. Tradition and the familiar seem a safe refuge when the liberals are constrained by want of funds to temporize. Thus driven back to old allegiances, the prospect of becoming *declassé* in the eyes of the community holds out new fears to the rural unemployed. In spite of the permission granted by the Government to the panchayat unions to take up road works, (and the subsidized local works are a far cry from *shramdan*) they are not able to find the labour for the work.

The scheme should simultaneously try to improve local crafts. The development of local crafts need not mean only revival. The project so devised should try to utilise the unutilised and under-utilised man-power from agriculture and the small land-holders. This opportunity should be availed of to set minimum wage standards. This remedy has been prescribed time in and time out. The clue to success, which in social projects is not aimed at all, includes: model employer practices, stress on quality, product development techniques and a captive urban market.

To repeat, the programme should take steps for regular repair and maintenance of the assets created. The assets so created should for purposes of maintenance be turned over to local panchayat authorities who should be encouraged to become self-reliant. In the much favoured transfer of responsibility to truly local authorities, two extremes should be guarded against; both "doing it on the cheap" and excessive construction of buildings.

Such a scheme as envisaged above should study the requirements of a particular village and fulfill the programme according to locally adjusted district or regional priorities utilizing local labour. For its part, the Government should not impose inflexible restrictions on the wage-

material cost ratio, which will result in the recurring of the same persons in the same project, devoted to repetitive tasks and not in the creation of a remunerative asset. Apart from such grants as are made with a view to solving the under-employment problem, some finance should be provided towards the material cost, and responsibility should, wherever possible, be entrusted to the *panchayat* or the local government of that village. Ultimately, that is the most competent authority to plan and spend for that village. Rendering it equal to its tasks in terms of skills and organisation should equally be the concern of the State Government and its department of local self-government.

The effectiveness of this programme depends on who the beneficiaries are. If the beneficiaries are those groups which are already gainfully employed, then the aim of the scheme will be defeated. This is one of the necessary hazards of placing emphasis on programmes calling for skill. But if different sets of people from different villages become its beneficiaries, then the scheme could be said to have achieved its object. This has not happened in most of the schemes implemented so far. A survey made recently has revealed that, as the local labourers are reluctant to perform unskilled tasks, the same set of people who are willing to perform such works become the beneficiaries of the scheme.

Finally, the programmes that seek to relieve unemployment among the rural population come in such quick succession that there is hardly any time to evaluate earlier schemes and ponder any lessons they may have to offer. The schemes that are formulated to meet the exigencies of a particular situation are sound but should not be withdrawn once its immediate objects are fulfilled. So programmes so far implemented should be evaluated first and a scheme incorporating the successful features of each should be drawn up so that it provides a steady source of gainful and self-sustaining employment, rather than crash programmes which compete with one another over a short period.

It would, in that sense, be also true to say that, in the view of the planning authority, crash programmes are a modest beginning—pilot projects designed to test the viability of a new policy direction. The plea that crash programmes should lead to the creation of durable assets in the rural areas and to a machinery for maintenance has been made elsewhere in this monograph. In answer to this demand often reported in Parliament, the Public Accounts Committee pointed out that such maintenance would entail annual recurring expenditures several times the multiple of the outlay on such crash programmes. The committee might have added that the wide distribution of employment benefits would moreover come to an end after the initial expenditure on them; for maintenance expenditure has much less potential for employment. This theory is usually based on the hypothesis that overall economic development is the best answer to disguised and overt unemployment; but in the sectoral programmes, this theory tends to be tautologous. Economists have noted the apparent similarities between the Keynesian public works programme designed to shore up cyclical fluctuations in effective demand and public expenditure in developing countries designed to augment low levels of private expenditure, necessary to stimulate demand and growth.

A crash programme is the result (and measure) of the financial constraints impinging on the inclusion, in mid-stream, of a new planning objective or emphasis. Crash programmes serve short-term objectives necessary even in development planning and enthusing the local community for broad-based participation in the long run. Also the durable assets prescription does not take into account the problems of marketing rural infrastructure. Such a course would furthermore entail the committing of scarce plan resources over an extended future.

As against this, the durable assets recommendation for the rural areas is sound in the context of the development of the third world where low productivity in agriculture is, *inter alia*, the result of low levels of capital investment. In the outcome, a middle view would appear to be indicated.

CHAPTER V

PROGNOSIS AND PROGRAMME RECOMMENDATION

The preceding chapters have served to establish beyond doubt that the dominant problem of the countryside in the State is disguised and under-employment rather than open unemployment. Indeed, the problem overshadows all others. The magnitude of these two have declined somewhat during the 'seventies however.

The 1971 Census classifies 86,01,371 persons as agriculturists who are employed either as cultivators or as landless labourers. The corresponding figure for 1961 was 89,21,221. Though the decline may be accounted for by the change in the definition of a worker, there has undoubtedly been a major shift in the distribution of workers in favour of industries—notably at the expense of agriculture. This shift has had its impact on disguised and under-employment in the State. By adopting the same methodology (that was used to compute disguised employment during 1961), an estimate has been arrived at of maximum employment that the agricultural sector can provide. The following calculations yield 56,53,460 standard labour units.

I. Total amount of land (gross cropped area plus current fallows)	...	20,833,001 acres
II. Total number of work animals (projected)	...	4,389,000 ,,
III. Total number of ploughs (projected)	...	3,952,000 ,,
IV. Area per work animal ($I \div II$)	...	4.74 acres
V. Area per pair of work animals ($IV \times 2$)	...	9.48 acres

VI.	Area per plough ($I \div III$)	...	5.27 acres.
	Average area per plough with a pair of work animals $\frac{1}{2} (IV + V) \div 2$	...	7.37 acres.
VII.	Total number of work units ($I \div VI$)	...	2,826,730.
VIII.	Average potential employ- ment in the agricultural sector on the basis of one work unit engaging two workers ($VII \times 2$)	...	5,653,460. standard labour
IX.	Total cultivators plus agri- cultural labourers from the 1971 Census	...	8,601,371
X.	Disguised employment ¹ (IX —VIII)	...	2,947,911 persons or 34.2 per cent

¹ This monograph has repeatedly used the concept of "disguised employment," but it appears to be necessary to the author's purpose. It is disguised unemployment, however, that is, the commoner concept. The need of this innovation arises in dealing with the discrepancy between the official Census figures for sectoral employment (for agriculture in particular) and the employment loads that a given amount of land and capital, (such as a plough, a pair of animals and a corresponding labour component of one work unit or two workers for each of the above "units" of capital) can bear. The answer to this problem is increased productivity through a more intensive utilisation of factors in given conditions of scarcity and farm product prices. This situation is, however, not so different from non-utilisation of installed capacity in urban industry due to any reason whatever, whether voluntary or involuntary. A further assumption of certain minimal disguised employment would be necessary in the circumstances and can be computed from the difference in participation between an agriculturally normal year and, say, one of excessive drought. The objective of crash employment programmes should be to identify and deal with this difference so as to eliminate it. Disguised employment, then, is low labour productivity as well as a want of seasonal opportunity. For quantification, it should be looked for among the numbers of the employed not the unemployed. Quantification of under-employment is necessarily a more strenuous exercise.

However, the aggregate of workers include women and children. So to derive the total number of standard labour units disguisedly employed in agriculture, the following conversion rates should be used : 1 man = 0.75 woman = 0.50 child. But the age classification of workers engaged in agriculture has not yet been computed for 1971. Using the 1931 Census as a base, a total number of 68,70,268 standard units were engaged in this industry in 1971. A surplus of 12,16,808 standard units of labour or 21.5 per cent of the workers over the norm were wastefully or disguisedly employed in the agricultural sector as against 24.3 per cent in 1961. There has thus been a definite decrease in disguised employment.

A slight fall in under-employment was also registered in 1971. The impact of the new form of technology was negative in the State as there had been a greater demand for skilled and efficient labourers, who were in short supply. Though all the available skilled labourers were employed throughout the season, a major portion of them remained under-employed for the same number of days as in the previous years, or perhaps for a greater number. The 86,01,371 workers engaged in agriculture were under-employed over not less than 160 days in a year. There was thus a drop in the man-days of unemployment in 1971 which could be accounted for by two facts ; the reduction in the number of workers engaged in this sector as a result of a change in the definition, and secondly, the cumulative effects of various schemes which were discussed in the last chapter and which were designed to provide employment during the agricultural off-season.

The 1971 Census registers a total number of 137,62,19,360 under-employed man-days as against 142,73,95,360 under-employed man-days in 1961. The two schemes: the rural manpower programme and the crash scheme for rural employment, together provided 101,88 172 man-days of employment thus reducing the under-employed man-days to 136,60,31,288 which was 4.3 per cent less than the figure for 1961. Apart from this, the khadi industry provided employment

to 74,669 persons in spinning, 4,615 persons in weaving and 277 workers in other sundry crafts. The conclusion can be asserted that the implementation of these ameliorative schemes and the expansion of village industries on a large scale had considerably reduced disguised employment and under-employment in rural areas.

Only 4.3 per cent of all the man-days available for employment during their pendency (and therefore represent man-days of unemployment) were utilised by the sponsored schemes. The khadi industry could have absorbed 1,59,12,200 man-days of labour at the most, at the rate of 200 days of work per labourer already engaged in this industry. Thus the reduction in under-employment effected during the last decade was certainly not more than 5.4 per cent. If past experience is a guide, the disguised and under-employment that are now prevalent in the rural areas will become over-unemployment as a result of two factors, namely :

(a) The progressive mechanization of agriculture, due to a rise in the wage of agricultural labourers and due often to the resulting tendency to replace human labour by machines ; and.

(b) The inevitably increasing realization of the operation of the law of diminishing returns.

The change may also come about through the deteriorating standards of living caused by the increasing costs of living and rigid real wages. Hence the labourers, not only from the land but also from the household sector, who were disguisedly employed, may be forced to seek employment in some other industry. Either for want of skill or due to their reluctance to move out of the village, and faced with severe competition from skilled, efficient and properly trained women workers, the hitherto disguised and under-employed will become openly and involuntarily unemployed. No reliable estimate of the size of this group can be attempted because of the changing and differing base data concerning the labour force. The problems are explained in detail below :

Three variant definitions of a worker were adopted by the last three Censuses. In 1951 the workers were classified into self-supporting persons, earning dependents and non-earning dependents. In 1961, a more elastic definition was adopted defining a worker as one who works more than one hour a day over a major part of the season. In 1971, he came to be redefined as one who works for a major part of the day over a major part of the season. As a result of the adoption of the more elastic definition in 1961, many housewives and full-time students who lent a helping hand in field operations were treated as workers. This inclusion had placed the State in a fairly good position, with only 0.34 per cent of its labour force unemployed openly, compared to many of the advanced or developed countries where unemployment has persisted at a rate of around three to five per cent. The adoption of the new definition in the latest Census has led to a 11.5 per cent decline in the population classified as workers.

Some of the many important reasons which militate against a reliable estimate of open unemployment in the State are :

The different organisations which collect the data either adopt different definitions for the labour force or do not collect data at regular intervals, or do not cover the whole State as the Census does.

The three Census operations employed not only divergent definitions of a worker but their practices for the inter-industry distribution of workers differed one from the other. Industries were classified in different ways during different periods with the result that there was no set and accepted pattern of industrial classification available. And this is vital for making projections of future employment patterns and their distribution. For example, in the 1951 Census, there was no "construction" industry and the sectoral classification consisted of eight categories, four agricultural and four non-agricultural. The 1961 Census divided the workers into nine broad industrial classes with only two agricultural classes, and the construction industry

was introduced anew. In 1971 the industrial classes increased to 10, which constituted the workers engaged in livestock, forestry, fishing, etc., into a separate class. Earlier in the 1961 Census, they had been clubbed together with mining and quarrying.

However, the Department of Statistics of the Tamil Nadu Government was attempting to estimate the total able-bodied but unemployed population towards the end of the Fourth Five Year Plan (1974) and at the end of the decade (1981). The Department works on the assumption that, by 1981, the State would have attained to the same position of development as Japan in the 1920's roughly 40 years after that date of reference. Japan began what subsequently became spectacular industrial development and has since been acknowledged widely as such.

RURAL EMPLOYMENT MODELS

Model I

The man-power resources in the State have been defined as the sum of the population in the working age from 15 to 59 and those employed beyond the working age of 60. The aggregate of all income-earners who are active beyond the working age during all the years for which the projections are being made has been compiled on the assumption that the actual participation rate for males will linearly increase to 75.3 per cent by 1981 and that for females to 28.2 per cent by the same date.

The number of active earners has been computed from a population projection attempted by an expert committee and has been distributed among six industries; agriculture, mining, quarrying, livestock, forestry, fishing, hunting, plantations, orchards and allied activities, construction, manufacturing other than household industry, trade and commerce, transport, storage and communication, and other services including household industry.

TABLE 57—Incidence of Unemployment in Tamil Nadu's Rural Areas.

(As percentage of the Employable Labour Force)

1	2	3	4	5
Districts	Employ- able Labour- force	Employed Labour- force	Unemploy- ment	4 as a percen- tage of 2
Chingleput	758763	557555	201208	26.5
North Arcot	1189080	886733	302347	25.4
South Arcot	1241890	887829	354061	28.5
Salem	1492427	1161530	330897	22.1
Coimbatore	1126774	1009122	117656	10.4
Nilgiris	100312	98240	2072	2.0
Madurai	10045601	845644	199957	19.1
Tiruchirapalli	1196723	943030	263693	21.2
	1221077	893089	327988	26.8
Tirunelveli	868407	704496	163911	44.6
Ramanathapuram	845418	639599	205819	24.3
Kanyakumari	407257	252719	154538	37.9

TABLE 58 (contd.)

Trade and Commerce	A.T.	1201	943	253	1740	1282	458	2590	1800	790
	R.T.	404	291	113	596	396	200	901	556	345
Transport, Storage and Communication	A.T.	405	390	15	580	553	27	857	809	48
	R.T.	80	77	3	114	109	5	168	160	8
Other Services including the Household Sector	A.T.	3152	1972	1183	2759	1676	1083	1913	1084	829
	R.T.	1578	1026	552	1379	872	507	952	564	388
Non-agricultural Categories Total	A.T.	7079	5164	1915	8537	6181	2350	10622	7629	2993
	R.T.	3094	2206	888	3573	2538	1035	4328	2985	1338
Agricultural	A.T.	9556	5752	3804	10419	6155	4264	11543	6669	4874
	R.T.	9033	5439	3594	9849	5820	4929	10911	6306	4605
Total Active Earners	A.T.	16635	10916	5719	18956	12336	6620	22165	114298	7867
	R.T.	12127	7645	4482	13422	8558	5063	15234	9291	5943
Population of working age but not employed	A.T.	6323	5446	877	6874	984	5890	7570	1128	6442
	R.T.	4161	674	3487	4080	609	3471	4112	687	3425

Source: Department of Statistics, Madras 6.

Notes: 1. A.T. = All Tamil Nadu

R.T. = Rural Tamil Nadu

2. Figures for rural areas are derived from the State and urban totals

Four assumptions have been made in computing the active earners in each of the above sectors.

(a) "... for the age group above 60, the actual percentage of 69.4 per cent in agriculture in 1961 is assumed to decrease uniformly to 59.7 per cent by 1981".

(b) "... for the age group 15-59, the working force constitutes 92 per cent in the case of males over all the years from 1961 to 1981, while, in the case of females, the participation rate is assumed to increase at the same rate as during the preceding decade, 1951-'61".

(c) "The male participation rate in agriculture of 55 per cent linearly decreases to 45.3 per cent and the female participation rate of 69 per cent obtaining in agriculture linearly decreases to 62 per cent".

(d) "For all the other branches listed above excluding agriculture, the prevailing employment ratio of 1961 is projected to levels that prevailed in Japan in order to arrive at a forecast for 1981".

The projection has, however, been attempted for the whole State without any break-up for rural-urban differentiation. As this study is, however, concerned only with rural employment, an attempt has been made to derive relevant figures for the rural areas from the above calculations using two assumptions.

The first posits that there is no major difference between the general population and the able-bodied population in respect of their distribution as between rural and urban areas. So what is true of the general population (regarding its rural-urban distribution) is no less true of the able-bodied population also. This assumption was found necessary because the age-wise distribution of population for 1971 has not yet been worked out.

The second assumption is that the rural-urban break-up of workers engaged in different industries as recorded in 1971 will remain unaltered from 1974 to 1981. This

assumption is necessary because the industrial classification of workers has varied widely from one Census to another thus making employment projections for any individual sector impossible.

Both these assumptions have the character of hypotheses in that they are amply borne out by the earlier Census figures. The population of the rural areas in the State for the years 1968, 1974 and 1981 have been projected on the basis of tendencies manifested by the 1951, 1961, and 1971 figures and the distribution of the population as between rural and urban areas they suggest. The able-bodied population in the State's rural areas for the years 1968, 1974, and 1981 have been derived from State Government figures by using this percentage and on the basis of the first assumption. The industrywise distribution of workers both for the rural and urban areas as given by the 1971 Census has been worked out individually with necessary arrangements so as to suit the classifications used by the Statistics Department in its extrapolations on the basis of the second hypothesis. This proportion has been used to derive the numbers of workers in the rural areas in 1968, 1974 and 1981 industry-wise. The sum total of these workers has been deducted from the total able-bodied population in order to find out the unemployed population for all the three years : 1968, 1974 and 1981 individually,

The results are set forth in Table 61. The table shows that the total able-bodied population in the State will increase by 30 per cent in 1981 and by 18 per cent in 1974 with 1961 as the base. The growth of the able-bodied population among males is expected to be larger than that among females : 19 per cent as against 17 per cent in 1974 and 32 per cent as against 29 per cent in 1981. The table also shows that 93.3 per cent of the able-bodied male population and 59.4 per cent of able-bodied female population will be employed in 1974. The corresponding figures for 1981 are 93.5 per cent and 63.5 per cent respectively.

Even after a decade, it is expected that the agricultural sector will remain the major employer. Its importance is nevertheless bound to decline as a result of the growing employment potential of other sectors like trade and commerce, transport, storage and communication which have provided limited employment to rural labour. The increasing dependence of job-seekers on these sectors is both beneficial in the sense that it reduces the pressure of population on land and so increases the productivity of agriculturists. It is disadvantageous because, in the absence of full employment prospects, this inter-sectoral migration will only result in overt unemployment which remained previously concealed. All said and done, under-employment causes less hardship than total unemployment. The manifest disadvantage of this migration is shown by the expected number of the able-bodied unemployed in 1974 and 1981. The unemployment projections, however, show a declining trend. Unemployment which was calculated at 8.1 per cent of the able-bodied male population and 43.7 per cent of the able-bodied female population is expected to fall to 6.7 per cent and 40.6 per cent of males and females respectively. In 1981, the unemployment among males is expected to remain more or less unaltered at 6.8 per cent while the percentage for females is expected to fall to 36.5. This is open unemployment. As noted earlier, disguised employment and under-employment will continue to exist in rural areas as long as a large percentage of the population depends on agriculture. The distribution of the workers in different industries and unemployment expected in 1974 and 1981 in the rural areas of our State is given below.

Model II

The number of people unemployed is the difference between the total labour force available and the number of people actually employed. The employable labour force can be defined as the number of gainfully employed plus those who are willing to work but who do not get work and therefore remain unemployed. It has been estimated

TABLE 59—Industrywise Distribution of Workers & Rural Unemployment
Percentages: Projections for 1968, 1974 & 1981

Category	1968			1974			1981		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Agriculture	55.4	65.4	45.1	56.2	64.9	47.2	56.4	62.2	49.1
Mining, Quarrying, Live-stock, Fishery, Forestry, Plantations, Orchards, etc.,	2.2	3.6	0.8	2.8	4.7	0.8	3.5	6.2	0.8
Construction & Manufacturing	4.1	6.1	1.9	5.9	8.2	3.4	8.3	10.9	5.6
Trade & Commerce	2.4	3.4	1.4	3.4	4.4	2.3	4.4	6.5	3.6
Transport, Storage & Communication	0.5	0.9	N	0.6	1.2	N	0.8	1.6	0.1
Other Services including Household Industry	9.6	12.1	6.9	7.8	9.7	5.8	4.9	5.7	4.1
Total Active Earners	74.2	91.5	56.1	76.7	93.1	59.5	78.5	93.1	63.3
Unemployed Working-age Population	25.8	8.5	43.9	23.3	6.9	40.5	21.5	6.9	36.7
Total Able-bodied Population	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Calculated from Table No: 60. N = Negligible.

that 40 per cent of the population can be termed as the employable labour force. (*vide: An Assessment of the Employment Potential of the Fifth Five Year Plan*; State Planning Commission, Tamil Nadu.) The employable labour force in the rural areas of Tamil Nadu in 1971 was 1,14,98,738.

While calculating the aggregate of the labour force employed as part of an assessment of the employment potential of the Fifth Five Year Plan, the State Planning Commission made two assumptions: the work of two children is equivalent to that of an adult and since the population engaged in agriculture is employed only for 240 days, only 80 per cent of the total labourers can be considered to be employed for the whole time in agriculture. After making due allowance for these two assumptions, the net employed labour force is established. The difference between this and the employable labour force (40 per cent of the population) is treated as the unemployed labour force. The methodology is explained in detail below.

Methodology for Computation of Unemployment

Projections have been made to find out the percentage of the State populations that would be living in the rural areas in 1974 and 1979, the years marking the end of the Fourth and Fifth Plans. This percentage has been used to derive the total population that would be living in the rural areas from the total figures (rural and urban) published and used by the State Planning Commission. (See below.)

It is assumed that the percentage of the population in the 0-15 age-group (obtained by the 1961 Census) remains unchanged for the 1971 figures. This has been necessary because the age-wise classifications for the 1971 census have not yet been completed. Using the old percentage, the population in the 0 - 15 age group has been worked out for the 1971 figures. 50 per cent of this figure is then deducted from the total employed labour force, assuming as was done on an earlier occasion that the work of two children

is equal to that of an adult. Again, another 20 per cent of the total work force engaged in agriculture (cultivators plus agricultural labourers) is deducted from the total adult labour force taken as employed for, as already pointed out, only 80 per cent of the total labour force engaged in agriculture is employed full time. The net labour force thus gainfully employed is derived after effecting these two deductions. The figure for unemployment is the difference between the net labour force gainfully employed and the net employable labour force which is taken as a percentage of the population. The actual figures for the rural areas of Tamil Nadu for 1971 are set forth below:

1. Population in 1971	...	2,87,34,331
2. Total employable labour force (40 per cent of the population)	...	1,14,93,734
3. Total workers in the 15-59 age-group	...	1,09,73,252
4. Workers in the 0-14 age-group (7.2 per cent of the population)	...	7,94,736
5. 50 per cent of the workers in the 0-14 age-group ($4 \times 1/2$)	...	3,97,363
6. Total agriculturists ($4 \times 1/2$)	...	86,01,471
7. 20 per cent of total agriculturists ($7 = 1/5 \times 6$)	...	17,20,294
8. 20 per cent of the total agriculturists plus 50 per cent of the workers in the 0-14 age-group (7 plus 5)	...	21,17,662
9. Total number of people gainfully employed (3 minus 8)	...	88,55,500
10. Total number of people unemployed (2 minus 9)	...	26,38,142

- | | |
|---|---------------------|
| 11. Percentage of unemployment (10 over 3) | 22.9 per cent. |
| 12. Percentage of total full-time jobs available to total full-time jobs required | 77.1 per cent |

(The districtwise figures are set forth in the Appendix to this chapter.)

It has been estimated that, in 1974 and 1979, 60.15 per cent and 54.79 per cent respectively of the total population would be living in the rural areas. It has been estimated by the State Planning Commission that the population of Tamil Nadu in 1973-'74 and 1978-'79 would be 440 lakhs and 489 lakhs respectively. Hence the population that would be living in the rural areas would be 264.66 lakhs and 267.92 lakhs respectively. Assuming that 40 per cent of this number would constitute the employable labour force, the number of jobs required in 1974 would be 105.86 lakhs. If we further assume that the number of full-time jobs in 1974 would constitute the same percentage of the total labour force as in 1971, their number in 1974 would be $105.86 \times 77.1 = 81.62$ lakhs, and the gap between the strength of the labour force and the number of available jobs would be 105.86 lakhs minus 81.62 lakhs or 24.24 lakhs. This represents the backlog of unemployment in the rural areas at the commencement of the Fifth Five Year Plan period.

The population is expected to increase by 3.26 lakhs between more 1974-'79, of which 1.30 lakhs would constitute the employable labour force at 40 per cent of the population, and the number of jobs to be created in this period would be 24.24 lakhs plus 1.30 lakhs or 25.54 lakhs. Thus, if full employment is to be achieved in the rural areas by the end of the Fifth Plan period, 25.54 lakhs of jobs will have to be found.

It has been estimated by the State Planning Commission in Tamil Nadu that, on an average, an investment of

Rs. 12,000 would be required per individual in order to provide him with employment. So an investment outlay of Rs. 3064.8 crores would be required if full employment is to be achieved by the end of the Fifth Plan period in rural occupations, assuming the same land-man or capital-labour ratio in the ensuing years.

Furthermore it is pointed out that 21.17 per cent of the national domestic product should be invested to achieve full employment for Tamil Nadu as a whole by using the formula $K = R(P + Y)$ where K is the required investment expressed as a ratio of the national income, R the incremental capital-output ratio, P the rate of population growth and Y is the desired rate of increase in *per capita* income. For the Fifth Plan period, the incremental capital-output ratio for the Tamil Nadu economy as a whole has been estimated at 2.9. (*An Assessment of the Employment Potential of the Fifth Five Year Plan* : State Planning Commission, Tamil Nadu.) The population growth rate in the Fifth Plan is 2.1 per cent a year and the desired *per capita* income growth rate 5.2 per cent. Using this figure, the investment required to achieve full employment works out to 21.17 per cent of the State income. Though no breakdown of these figures to cover the rural areas of the State alone can be obtained, the incremental capital-output ratio and the population growth rate vary widely in the rural areas. Yet it may serve to indicate some orders of magnitude and provide working hypotheses for policy action.

The discussion in the preceding chapters and sections suggests that the problem of unemployment, which has remained disguised so far, is becoming overt, and it also suggests that any scheme aimed at meeting the problem of unemployment should have specificity, should be tailored to the needs of a region or an area of sectoral specialization. This calls for an investigation covering the geographic, economic and social characteristics of the particular area. So each district and block should preferably be investigated separately and the problem in

the villages of the given area should be fully studied. Such a study should include the extent of cultivable and cultivated lands, water and irrigation facilities, fallow land, rivers and tanks, their state of repair, the extent of irrigation provided by them, livestock and grazing lands, other industries in that area, the attitude of the people, their skills and work, intelligence, their attitude to tradition, etc. Adaptations to a typified plan would be necessary in the light of these findings but the broad economic strategy would follow along the lines laid out in this discussion.

A few suggestions of a general nature would be in order so as to tackle the problem before we pass on to remedies for individual situations. While by no means original, they would bear repetition here. Partially utilized man-power capacity in the rural areas can be gainfully and fully utilized if processing and agro-based industries, such as milling, husking, canning and preservation, oil extraction, etc., are started in the rural areas.

If proper link roads are constructed to connect the villages with national trunk roads, water and power supply are provided in the rural areas, industries can be started in the countryside which can absorb large amounts of unemployed and of others who are only partially employed—while increasing the productivity of labour with the help of simple machines.

This will not only solve the problem of unemployment but will also bring about the growth of local industry and its displacement from congested urban areas. The idle labour in the villages which is disguisedly and only partially employed in agriculture can be mobilized with the aid of co-operative societies by starting medium and small-scale industries. This will provide employment to the educated as well as unskilled labour. The role of co-operative societies and nationalized banks can be important in this kind of programme. These co-operative societies should cater for the needs of villagers; it can be either a consumer co-operative society distributing necessities or a producer's co-operative society.

for making and marketing the products manufactured in that village. It can also distribute inputs in requisite quantities and at economic prices: fertilizers, seeds, pesticides, etc. The Government should provide all the help to buttress their authority with village members, provide credit, allocate scarce inputs and even essential commodities.

Finally, no new schemes to solve the unemployment problem are necessary. The existing schemes would quite meet the case if they sufficiently took into consideration the local situation and were well funded. The scope of the schemes should be broadened; they should not be mutually competitive one; but rather should they be complementary. There should be built-in machinery for the periodical evaluation of the working of the schemes and the extent to which they are implemented so as to provide concurrent guidelines for the improvement of the schemes and the fulfilment of objectives.

It may be recalled that the problem of unemployment is particularly acute in Kanyakumari district—both among males and females. Almost all the unemployed males and females are new entrants to the labour force and they are either matriculates or are qualified above the matriculation level. It is to be noted that the amount of cultivable land in this district being limited in extent; agriculture offers little by way of further employment prospects. As against this, a total amount of 53,805 acres of land are barren and uncultivable as per the 1961 Census, and a total acreage of 6,870 acres are classified as cultivable waste, 5483 acres of land remain fallow. The 2,449 tanks in the district are its principal source of irrigation for its 31,004 hectares of irrigated land. (*Season and Crop Reports*, Tamil Nadu Government) as on 1968-'69. The next important source of irrigation is wells—reckoned at 558 in 1968-'69. The canals, tubewells, and reservoirs have played a minor role in the irrigation of the land in this district, where paddy is the principal crop and is water-intensive. It is surprising that the net irrigated area in this district should be so

small, that it should rank twelfth among the districts. next only to Nilgiris in surveys undertaken during 1968-'69. The district has only a limited forest area and grazing land. Taking these special constraints into consideration, the unemployment problem in the district can only be solved through industrialisation. Some industries are started in rural areas, which can make calls upon and fully utilise the educational attainments of the unemployed. Neither the rural man-power projects nor the crash scheme programme for rural employment will meet the needs of the highly educated unemployed in this district. As there are large areas of fallow land and others hitherto thought uncultivable, and as the issue and end-prices payable to the cultivator for his produce of food-grains have increased modestly, it may have become worth while to reclaim waste land for cultivation, to dig wells or tube-wells or to set up pumpsets in areas not served by regular rainfall and where the new projects seek to use stored rain-water or tap ground-water potential as new sources. The industries to be started in this district may provide some of the essential services on which the viability of agricultural operations so vitally depend, such as distribution of concessional inputs and associated distribution services. Alternatively, processing industries which offer to buy local produce on the spot like milling are examples but it is really for fishing, salting, curing and canning that the district is known. As a tourist attraction, it offers scope for a large number of hotels and shops selling handicrafts and can absorb large numbers of educated unemployed in lucrative occupations. The district sports a large number of palmyrah trees which offer additional scope for palm-based industries, such as brushes, *neera*, jaggery, candy, frond-products. Because of its development potential, brick-making is another industry which can offer employment to sizeable numbers.

In Tirunelveli district, more males, their numbers expressed as a proportion of the total, are unemployed than females. The district has an extended forest area which covers 11 per cent of the district area. It has a large

acreage of land permanently assigned to grazing and pasture and also relatively large numbers of cattle and livestock, (26,81,831). In this district, agriculture is constrained by the lack of irrigational facilities. There exist in it 1,02,473 small farmers cultivating 3,82,180 acres of which 3,42,730 acres are dry land and 40,080 acres wet land. Apart from these, there are a number of marginal and sub-marginal farmers with uneconomic holdings. With these material and human resources, the district can enhance its employment potential in three or four ways. In the first place, the widespread prevalence of educated unemployment urgently calls for a programme of industrialisation. Such industry should preferably be based on local products and resources. Secondly, since the district possesses a large acreage under forests, a few processing industries (processing forest products like lac, resin, honey, etc.) can also be started.

Mixed farming and dairy projects in particular can offer employment to a whole chain of educated as well as unlettered numbers of the district's work force. The peasants, who own uneconomic holdings, should as a matter of priority be provided with credit facilities for deepening existing wells or using contemporary dry farming technology set forth in an earlier publication of this Institute, *vide Economics of Dry Farming in Tamil Nadu* by R.K. Sampath and Mrs. Jayalakshmi Ganesan. The requisite funds for these could come from the Small Farmers Development Agency. In 1961, it was estimated that 1,38,197 acres of land in this district were barren and uncultivable. Conversion of this area into arable land should be taken up as a challenge by our agricultural experts. Dry farming technology will be served by nothing less than a model farm using modern implements and techniques.

As the district has also a large number of palm trees, village industries in palm *gur*, fibres, fresh toddy tappings, etc., can be started to absorb village artisans remaining unemployed. Industries such as poultry farming, bee-keeping, are quite independent of soil and climate and are besides well served by amenities provided by the State

Government in the form of R & D and extension infrastructure. Industries making fireworks, pyrotechnics and crackers can be conveniently located in areas where there already exists a well-formed tradition of match manufacture.

Ramanathapuram district also presents a more or less similar picture with 3.11 per cent of its able-bodied male population remaining unemployed. 30 per cent of the unemployed population have held a situation at least once. The literacy among the unemployed is moreover high. This is one of the dry districts in the State; though agriculture provides employment in large measure, it is not profitable. Double cropping, let alone triple cropping, is quite out of the question over a great extent of the land sown in this district. Hence quite a proportion of the labourers are unemployed, and a large part of the land is barren and uncultivable. Here again, digging new wells, deepening old ones, or the installation of pumpsets can relieve the problem of disguised employment and under-employment, apart from increasing district income.

As per 1971 figures the district possesses 45,649 hectares of forest which supplies many important forest products like sandalwood, lac, honey, tamarind, firewood, to the district economy. The district can tap the forest resources fully through proper planning and it should be possible to extract more employment from that sector for the unskilled unemployment which is the district's principal problem. As in Tirunelveli, industries and part-time occupation based on the palmyra trees are a specific remedy for under-employment. In addition to all this, the district produces many kinds of fruit like banana, citrus fruits, mangoes and cashew-nuts. Already the district has many village industries based on skills like brick and tile-manufacturing, lime-making, pottery, leather work, and making of soap and matches. These industries can be fostered and developed deliberately so as to meet the entire local demand; such a conscious policy may well make the mobilization of the unskilled labour force possible in the district without wastage of rural man-power.

The Coimbatore and Chingleput Districts share some common characteristics. Both the rural districts manifest a distinct urban bias and agricultural production is geared to market needs and is thus commercialised and mechanised. Hence many agricultural labourers have migrated to urban areas in search of a livelihood even if they do not gain more than a pittance. Another attempt to reinduct them into agriculture may not be a great success. However, these labourers have acquired some special skills which should be exploited fully for the contribution they can make to the gross State product as well as to a solution of the employment problem. The best place to absorb them would be in agro-based industries located in the villages. As the agriculture is very modernized in these districts, factories making pesticides and fertilizers or modern equipment like threshers, seed and manure drills can be located there so that the benefits of such enterprises accrue largely in the rural areas of the districts themselves. It is regrettable, that, in spite of its proximity to the city and the State headquarters, there existed in 1971, 156 villages in the Chingleput district, which were unconnected by roads either among themselves or with the cities. This calls for the immediate attention of the Government as this is the first step towards upgrading the rural economy and thereby promoting the employment potential of the State. Development of the handloom and powerloom textile industry on a cottage scale has ever been a solution for the unemployment problem in the State. It can still serve as a solution to the problem of the marginal and sub-marginal farmers who will then be enabled to withstand the competition of the big landlords. Together with brick and tile-manufacturing, bee-keeping, *gur* and *khandasari* industries developed on a co-operative basis will answer both to the needs and preferences of the illiterate and unskilled labourers to a great extent in both the districts.

South Arcot and Thanjavur have traditionally been paddy cultivating districts and have besides a relatively higher proportion of scheduled caste populations. The

incidence of overt unemployment looks somewhat unbelievable (*vide* Table 57) for, in a predominantly agricultural district, it is under-employment that should be the principal problem, not unemployment. In these two districts, the wages of the agricultural labourers are also very low. As a result of an excessive and mutually competitive supply, the agricultural labourers migrate to Thanjavur from Ramanathapuram and refugees from Burma and Ceylon compete with the local agricultural labourers of the South Arcot district.

The road system in these two districts is sub-standard. In 1971 there were 365 villages in Thanjavur and 374 villages in South Arcot district which remained unsurfaced. For instance, the two districts could do with a few grain exchange houses. The main approach to planning in this district would consist in draining this district of its surplus agricultural labour in order to raise agricultural wages and bring them in line with economic realities. By virtue of their soil and irrigation potential, these two districts in particular have been obliged to produce food at depressed prices which have been sheltered from fluctuations in the general price level. This entails a sacrifice to the district income which is unjust. The other solution may be more difficult in the context of a longstanding food scarcity, but the need for remedial State action cannot be gainsaid in the matter of rural-urban terms of trade and better and differential prices for procured grain based on nutrient content as well as consumer preference. Rural industries are a general and an obvious solution but this must really be preceded by such inter-disciplinary studies as land use, economizing on the use of water in paddy cultivation and through a drainage technology for surplus irrigation water, the extraction of sub-soil seepage and water stores in river basins. The need of higher prices either in the form of direct transfers from consumer to producer in a low-price market or as countervailing subsidies payable by the State to the cultivator has been foreshadowed by other indicators, such as the cost of incremental capital neces-

sary for securing increased yields from land and labour through capital works. But this at best is only a partial solution for, the district economy of Thanjavur in particular is not designed to bear the load of intra-rural and expatriate re-migration adverted to earlier. For wages in the long run can only be increased by drawing surplus labour off the land. Given a growingly adverse man-resources ratio for the State and Country as a whole, and our historical situation in the world context, this is well nigh a mechanistic law. This can be done only through the installation of value-adding process industries in the district. There exist in these districts sundry industrial units for the manufacture of dolls, musical instruments, paper and strawboard, etc., but these do not meet the needs of the situation. A diversion of acreage to sugarcane was recommended by the task force on small industries of the Tamil Nadu State Planning Commission with a view to locating sugar mills in Thanjavur district. Literacy among males is well above 45 per cent in both districts but the female participation ratio would require to be increased to Kanyakumari levels through the imparting of skills and preparation for village industries which have not received much attention in a two or three-crop district economy. The means by which these can be used to augment district income would come about through a higher female participation ratio in village and agro-based industries. It is only when the employment situation in the district is taken in hand and brought under control can mechanization of agriculture be attempted.

Dharmapuri district (which was formed by bifurcation from Salem district) can be considered together with Salem as regionally homogeneous for the purposes of this study at any rate. Both the districts are agro-based but with very poor results, as water is very scarce. The terrain of the two districts extends over some afforested hilly areas which yield sundry products, such as timber, sandalwood, honey, lac, etc. There are also some stone masons, mostly dressers and polishers, to be found in the

hilly area. In both the districts mango trees, which are economical of water, abound. The table mango may not be of dessert quality, but will do for canning and pickling and the cultivation of exotic species at nursery and plantation level in dry land is to be commended for the preservation of the ecological equilibrium and balanced utilization of soil. These two districts are becoming increasingly urbanized because of the existence of some large-scale factories. The handloom and powerlooms textile units are well spread over both the districts. A specific cure for the unemployment problem in the districts would again be large agro-based industries. The credit needs of the region should be met more fully both to fulfil the minimum demands of cultivators for producer and consumer goods but also to stimulate the demand for the fertilizers, pesticides and other modern input-producing industries that have already been started. Sago-making is a flourishing industry in both the districts and will admit of both improvement and extension of scale. The construction of large-scale industries will increase the demand for bricks and this demand can be met by starting some mechanised brick kilns which will absorb the skilled labour without formal schooling. As the district is producing increasing quantities of millets like *ragi*, *cumbu*, etc., some food-processing industries using these intermediate goods could be started on a large scale. The fruit-canning and processing units can have an assured supply of raw materials and can therefore thrive.

The development in other districts can be essayed along these lines. These are only examples and the actual programme has to be worked out for each district by a body specially constituted for the purpose, such as the District Planning Authority envisaged by the State Perspective Plan. The resources and soil conditions of each district must be assessed separately, so that a plan most suited to the special conditions of a district may be drawn up, but in the last reckoning, they ought all to attempt to maximize the employment potential as an objective and a cost optimization exercise.

Last, but by no means least, is the upgrading of the quality of village life, its social as well as physical ingredients which will serve to check the desertion of the countryside by its youth in search of non-existent fleshpots, if only because it is unrewarding to them in the sequel and uneconomic. Village industries will add to disposable incomes while preserving the integrity of the village family which is a necessary institution of social security in the interim. The self-sufficient village which exports trained man-power in strength rather than in despair is still a very desirable ideal and eventually the stuff of which the prosperous State and national economy could be fashioned in the years to come.

In calculating unemployment in rural Tamil Nadu, nearly 7.95 lakhs young persons below the age of 15 were reckoned into the labour force. (*vide* p. 160 step no. 4 in the calculations.) Education is an essential input in the mental and physical growth of adolescents and young persons. The inclusion of young persons between 0 to 15 years of age in the labour force above needs a word of explanation. Article 24 of the Indian Constitution directs that no child below the age of 14 years shall be employed in a factory, mine or any hazardous employment—a law of the constitution which is echoed in regulatory, sectoral legislation of an ordinary nature, such as the Factories Act; the Plantation Labour Act; the Motor Transport Works Act; the Bidi and Cigar Works Act; Contract Labour (Abolition and Regulation Act) all enacted by the State Governments on varying dates after 1951.

Two features of the laws deserve mention here. Neither of them expressly forbids child employment in agriculture. Family farming without a marketable surplus is really for subsistence, but in countries where it is disappearing as in the USA, it has been defended as a way of life, a staple culture which can potentially resist the blandishments of the Great Society. In India, too, it lies outside the pale of the efficiency criterion of economics, and often outside of the monetary system. The second

feature is that the spirit of these laws accords with the constitutional provision regarding compulsory primary education, (the natural outside limit for this legislation being 14 or 15).

EMPLOYMENT OF CHILDREN

Child labour is well nigh the rule in all the States in India. It is most marked among the families of landless labourers, marginal and small farmers and the less developed States in the Indian Union. Even in Haryana and the Punjab, child labour figures are comparable to those of other States, but the motivation is provided by high wages and the peak-season demand for it. Other disciplines like sociology may invest policy with other values and limits, and will certainly object to the villages of India, where the bulk of its population lives, being treated as a shifting stream of would-be migrants wending its way towards the cities and towns. Without becoming committed to controversy, this, monograph, based primarily on the economic standpoint, does suggest that poverty and under-employment in the countryside must take the form of a drawing off of the population impinging on land resources and (ii) that, while poverty may or may not be the reason for low enrolment figures in schools, education, particularly the kind that does not alienate them from rural living, is an essential input for the regeneration of rural life. While carefully devised non-formal education must seek to add to the skills of landless labour to equip them for scientific agriculture in a monetized economy—especially their young—it is not on the logic of the much-vaunted returns on education that the case for gradual but progressive enforcement of the education law about children is based here. The poverty reason for low enrolment in rural schools is already being got round in two sorts of ways; first, by declaring a vacation at school during the busy agricultural season (this is a palliative not a remedy, but multi-cropping can and must be extended over wider areas if rural poverty is to be relieved, and diversification in agriculture or through ancillary means can

become an equally countervailing response to the immigration impetus); and secondly, by devising a learn-while-you-earn curriculum which, while being work based, progressively ceases to impose physical work on learners merely substituting the school for the family farm but genuinely promotes skills, such as literacy, and promotes productivity through them. In other words, such a curriculum cannot become effective before the middle or the secondary school. The assumption here, therefore, is that the first priority in the relieving of the pressure on land is the withdrawal of youth labour from it; it also acknowledges that this withdrawal must come not suddenly by fiat but naturally and gradually working through the forces and motivation that seek to make rural life culturally autonomous and economically viable. In the interim, child labour may have to be suffered as a means by which marginal and small farmers make the grade. S.M. Pandey argues that it may be necessary to legitimate child labour in agriculture before protective legislation can be undertaken to assure them fair wages and bearable hours of work.

Now for a look at some 1971 census figures about children below 15, which are contained in census volumes released after this monograph had already taken shape. Some of the figures have been cited by S.M. Pandey in his "Child Labour in Agriculture" *Economic Times*, November 16, 1975. According to the Second Agricultural Labour Enquiry, there were three million child labourers in the country in 1956-57. By 1971, their number had grown to 4.58 millions; of whom 4.47 millions were found in the villages, 3 millions were boys and 1.58 million girls. 40 per cent of the rural boys and 58 per cent of the girls in the rural areas were agricultural labourers. A conclusion that emerges from the figures, contained in the table following, (No. 64) is of concern both to those who are interested in a prognosis of the size of the rural labour force in, say, 1984, and to educational authorities who would readily see the negative correlation between the child labour force and school enrolment in the rural areas.

TABLE 64 - Statewise Children's Participation Rate in Agriculture as Landless Labourers
(As percentage)

STATE	Work participation rate to total population				Participation rate as ratio to landless population		Length of gainful employment in year		Ratio of child wage to adult wage		School enrolment ratio	
	Boys	Girls	All child-ten	Boys	Girls	All child-ten	Boys	Girls	All child-ten	(11)	Boys	Girls
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Andhra Pradesh	20.4	12		40	25			53				
Gujarat			33			31	109	99				
Orissa			23				199					
Karnataka			32				115	70		59		
Madhya Pradesh			29					81		75		
Bihar			28									
Punjab			25				80	24				
Haryana			22				65	17			50	
Rajasthan							70	56				
Maharashtra								56		65		
Kerala												
Tamil Nadu				6	4		11	15		78		35
Assam							34	16			67	50
Uttar Pradesh							41			74	41	20
Madhya Pradesh								56			51	43

Note : In most States, not specified in Col. 11., children get the same wages as female labourers. In parts of Tamil Nadu, child wage = half of male adult's wage.

Source : Reconstructed from secondary source of 1971 census figures.

ANNEX II
TABLE 65—Districtwise Distribution of Spinners in Tamil Nadu & their Earnings: 1962-'63

S.No.	District	II		III		IV		V		VI	
		Traditional Spinners		Wages earned by them (in Rs.)		Amber Spinners		Wages earned by them (in Rs.)		Aggregate of Spinners	
		a	b	c	d	e	f	g	h	i	j
		Enlis- ted	As on Rolls	Active	Enlis- ted	As on Rolls	Active	Enlis- ted	As on Rolls	Enlis- ted	As on Rolls
1.	Chingleput	761	1361	439	5088.84	295	573	65	2671.58	1056	1934
2.	North Arcot	685	1467	566	6326.92	116	622	111	5957.42	801	2089
3.	South Arcot	6547	6394	2474	60195.13	765	1391	384	11901.59	7312	7785
4.	Salem	1321	2817	443	20,333.12	125	520	137	11768.11	1446	3337
5.	Thimbatore	8385	24273	10864	829,741.16	552	2957	1477	275316.75	8937	27,130
6.	Thiruvavur	796	1950	670	12161.28	123	429	248	8597.33	919	2379
7.	Tiruchirappalli	4523	13743	8744	382,577.85	946	2055	1073	131328.17	5469	15798
8.	Ramanathapuram	2109	4256	2718	115,202.37	332	1048	340	25037.16	2441	5314
9.	Tirunelveli	2945	7334	1674	103,412.23	307	4300	784	54031.75	3252	11694
10.	Madurai	2988	4589	1877	97048.04	192	2109	487	41751.98	8180	6698
11.	Kanyakumari	7556	19948	13409	607,981.00	741	1705	1011	14910.65	8597	21653

Source: Directorate of Khadi and Village Industries, Madras-4

ANNEX III

TABLE 66—Districtwise Distribution of Spinners & their Earnings: 1963-'64.

S.No.	District	II Traditional Spinners		III Wages earned by them (in Rs.)		IV Active Spinners		V Wages earned by them (in Rs.)		VI Aggregate of All Spinners	
		a	b	Enlis- ed	Ac on Polis	c	Active	Enlis- ed	As on Ac- tive	d	f
1.	Chingleput	132	835	460	3551.49	64	28	32	1495.03	196	863
2.	Coimbatore	8021	24467	12272	1052618.72	290	2754	1360	26335.17	8311	27221
3.	Kanyakumari	4029	18499	10943	483648.67	877	1035	1119	82527.54	4906	19584
4.	Madurai	4053	6817	3846	139491.48	180	924	338	67600.18	4233	7741
5.	North Arcot	277	1401	158	5839.46	67	384	57	3587.73	344	1785
6.	Ramanathapuram	2025	4654	2830	130491.39	210	890	191	20413.63	2235	5544
7.	Salen	1196	2656	423	19013.10	15	469	51	4176.34	1211	3125
8.	South Arcot	7069	4504	3160	103520.02	163	543	153	7766.17	7532	5047
9.	Thanjavur	1017	2190	934	19269.90	1	296	111	5162.93	1018	2486
10.	Tirunelveli	2266	8227	1628	106414.80	36	4118	682	33154.93	2302	12345
11.	Tiruchirappalli	3877	14199	6348	406414.60	347	2005	857	120150.95	4224	16204
											7505

Source: *Ibid.*

TABLE 67—Districtwise Distribution of Spinners & their Earnings : 1964-65

S.No.	District	II Traditional Spinners		III Wages earned by them (in Rs.)		IV Amber Spinners d e f		V Wages earned by them (in Rs.)		VI Aggregate of Spinners g h i	
		a	b	c		Enlis- ted		Enlis- As on Ac- tive		Enlis- As on Ac- tive	
		Enlis- ted	As on Rolls	Active	by them (in Rs.)	Enlis- ted	As on Ac- tive	Enlis- As on Ac- tive	by them (in Rs.)	Enlis- As on Ac- tive	As on Ac- tive
1.	Chingleput	84	857	—	538.90	32	52	—	1164.65	116	909
2.	Coimbatore	8789	22650	10086	1313234.74	1196	3592	1268	297461.45	9985	30242
3.	Kanyakumari	9098	22763	12047	558296.83	336	1718	678	56107.93	9434	24481
4.	Madurai	3123	5367	2430	155291.00	442	765	326	85180.69	3565	6132
5.	North Arcot	162	735	314	6180.72	17	308	40	2414.84	179	1043
6.	Ramanatha- pura	1863	2274	2173	162007.43	349	149	227	15475.47	2212	2423
7.	Salem	750	2968	347	19254.02	14	363	80	2968.50	764	3331
8.	South Arcot	2221	5243	2554	77254.47	82	212	54	3285.13	2303	5455
9.	Thanjavur	1043	3214	1766	30079.29	—	241	100	2413.29	1043	3455
10.	Tirunelveli	2524	8810	4587	249566.97	58	3856	524	38267.95	2582	12666
11.	Tiruchirapalli	3146	5369	5567	489064.45	609	768	945	128475.03	4055	6737

Source: *Ibid.*

TABLE 68—Districtwise Distribution of Spinners & their Earnings : 1965-66

S.No.	District	II Traditional Spinners		III Wages earned by them (in Rs.)		IV Amber Spinners		V Wages earned by them (in Rs.)		IV Aggregate of All Spinners	
		a	b	c	Enlis- ted	d	e	f	Enlis- ted	g	h
		Enlis- ted	As on Rolls	Active		Enlis- ted	As on Rolls	tive		As on Enlis- ted	As on Rolls
1.	Chinglept	—	544	36	2225 08	—	30	—	452.87	—	574
2.	Coimbatore	10878	28357	14741	1807823.03	997	3721	1337	342167.87	11810	32078
3.	Kanyakumari	8770	31735	8614	773925.44	218	1365	535	61948.34	8988	33150
4.	Madurai	1432	6196	3483	258856.42	162	927	863	126608.80	1594	7123
5.	North Arcot	596	823	464	10316.63	8	201	21	1711.89	604	1024
6.	Ramanatha- puram	2334	5336	1359	293807.02	11	619	108	14721.19	2345	5955
7.	Salern	795	2228	992	31737.80	18	245	43	3755.95	813	2533
8.	South Arcot	3146	5417	3972	191075.46	—	308	6	1097.34	3146	5725
9.	Tirunelveli	1268	14980	2496	705818.50	187	2018	475	73214.08	10504	16898
10.	Thanjavur	10317	3843	2065	104830.03	2	257	23	929.54	1270	4100
11.	Tiruchira- palli	3237	13262	9285	561416.11	439	2365	1475	166819.86	3676	15627
											10760

Source: *Ibid.*

TABLE 69—Districtwise Distribution of Spinners & their Earnings : 1966-'67

S.No.	District	II Traditional Spinners			III		IV Amber Spinners		V		VI Aggregate of All Spinners	
		a	b	c	Wages earned by them (in Rs.)		Enlis-As on Ac- ted Rolls tive		Wages earned by them (in Rs.)		Enlis-As on Ac- ted Rolls tive	
		Enlis- ted	As on Rolls	Active								
1.	Chingleput	—	239	239	1754	—	n.a.	n.a.	915	—	239	239
2.	Coinbatore	12295	80754	13608	2655488	660	4836	2182	861510	12952	35590	15790
3.	Kanyakumari	8600	17742	9237	547462	120	1453	655	109246	8720	19195	9892
4.	Madurai	480	4556	2042	228130	160	1343	1143	265353	640	5899	3185
5.	North Arcot	130	803	154	15927	—	183	9	2539	130	986	163
6.	Ramanathapuram	2950	6132	4085	203230	120	663	212	36899	3070	6795	4298
7.	Salem	190	1679	1811	40099	—	164	46	5159	190	1843	1357
8.	South Arcot	1030	5351	2693	57594	—	4	1	392	1030	5355	2694
9.	Thanjavur	1055	3133	2104	63927	167	189	20	1742	1222	3322	2124
10.	Thirunelveli	6165	9084	4122	200824	90	1138	772	143318	6255	10222	4894
11.	Tiruchirappalli	3920	12819	7684	655174	190	2891	1564	397757	4110	15710	9248
12.	Dharmapuri	96	735	142	8779	—	59	—	—	96	794	142

Note : n.a. = not available.

Source : *Ibid.*

TABLE 70 - Districtwise Distribution of Spinners & their Earnings 1967-'68

S.No.	District	II Traditional Spinners		III		IV Amber Spinners		V		VI Aggregate of All Spinners	
		a	b	c		d	e	f	g		h
		Enlis- ted	As on Rolls	Enlis- ted	Wages earned by them (in Rs.)	Enlis- ted	As on Rolls	Wages earned by them (in Rs.)	Enlis- ted	As on Rolls	Wages earned by them (in Rs.)
1.	Chingleput	2	238	42	2483	—	8	8	1616	2	246
2.	Coimbatore	2287	23426	11279	1233373	565	5128	2880	833171	2352	28554
3.	Kanyakumari	220	15859	2270	197761	10	1268	412	124914	230	17127
4.	Madurai	316	2010	1492	87039	—	1343	776	249891	316	3353
5.	South Arcot	1305	3633	2171	101465	14	168	72	20481	1319	3801
6.	Ramanatha- puram	413	4277	2097	187253	216	475	319	26027	629	4752
7.	Salem	97	1324	644	29781	—	78	40	15774	97	1402
8.	North Arcot	99	343	178	6495	—	191	5	565	99	534
9.	Tanjavur	574	2811	710	28854	2	252	2	2070	56	3063
10.	Tirunelveli	443	10305	1384	123255	23	2004	993	253781	466	12309
11.	Tiruchirapalli	1096	10424	4630	329388	133	3213	1360	302060	1229	13637
12.	Dharmapuri	67	745	100	7848	—	59	—	—	67	804
											100

Source : *Ibid.*

TABLE 71—Districtwise Distribution of Spinners & their Earnings : 1968-'69

S.No. District	I Traditional Spinners			III		IV Amber Spinners		V Wages earned by them (in Rs.)		VI Aggregate of All Spinners	
	a		c	Wages earned by them (in Rs.)		d	e	f		g	h
	Enlis- ted	As on Rells		Active	Enlis- ted	As on Rells	As on Rells	Enlis- ted	As on Rells	Enlis- ted	As on Rells
1. Chingleput	—	33	33	33	1331	—	37	37	1560	—	70
2. Coimbatore	5162	23205	15022	15022	1780394	563	5122	3865	626286	5725	28327
3. Dharmapuri	—	581	169	169	4831	—	—	—	—	1	581
4. Kanyakumari	335	15448	5462	5462	550090	73	1229	893	76002	408	16677
5. Madurai	—	2222	1070	1070	146393	—	1113	808	136312	—	3335
6. North Arcot	88	4528	1817	1817	101716	1	169	47	10793	89	4697
7. Pamanatha- puram	19	3868	2025	2025	178330	4	887	173	39921	23	4255
8. Salem	50	1385	657	657	31025	4	151	136	16259	54	1536
9. South Arcot	55	359	359	359	3626	4	70	70	10412	59	429
10. Thanjavur	477	2573	473	473	33393	41	211	25	7829	518	2784
11. Tirunelveli	428	6480	2743	2743	165024	88	1411	893	101224	516	7891
12. Tiruchirappalli	560	9573	5170	5170	469425	327	3277	1615	224583	887	12850

Source : Ibid.

TABLE 72—Districtwise Distribution of Spinners & their Earnings: 1969-'70*

S.No.	District	II Traditional Spinners		III Wages earned by them (in Rs.)		IV Amber Spinners		V Wages earned by them (in Rs.)		VI Textured Spinners		VII Wages earned by them (in Rs.)	
		Enlis- ted	As on Rolls	Enlis- ted	As on Rolls	Enlis- ted	As on Rolls	Enlis- ted	As on Rolls	Enlis- ted	As on Rolls	Enlis- ted	As on Rolls
1.	Chingleput	19	n.a.	2956	—	n.a.	—	350	—	n.a.	—	4607	—
2.	Cumbatore	6464	30016	336075	253	4268	253	498859	325	773	325	290755	—
3.	Dharmapuri	—	527	3817	—	n.a.	—	n.a.	—	—	—	—	—
4.	Kanyakumari	631	13352	671110	256	1106	256	60622	24	208	24	58166	—
5.	Madurai	287	1820	155440	—	1143	—	107552	—	85	—	15938	—
6.	North Arcot	9	285	5622	—	5	—	179	26	61	26	16958	—
7.	Pannanuthapuram	1049	4423	234087	—	107	—	7632	27	131	27	35613	—
8.	Salem	1030	736	87761	15	n.a.	15	986	66	67	66	30894	—
9.	South Arcot	—	903	158357	—	118	—	234	—	49	—	17736	—
10.	Thanjavur	218	2213	30236	8	183	8	43	9	33	9	8114	—
11.	Tirunelveli	1573	3371	233298	131	1845	131	92761	16	100	16	36411	—
12.	Tiruchirapalli	1032	9420	605138	—	1577	—	14657	—	65	—	14657	—

Note : * The number of active spinners for 1969-'70 has not been tabulated.
Textured Charkha workers are included for the first time.

N.A. = not available

Source : *Ibid.*

ANNEX IV

TABLE 73—Total Number of Spinners, Weavers etc., & their Earnings : 1970-'71 †

S.No.	I		II		III		IV	
	Spinners, Weavers & Others		Employment		Wages Earned by Them (in Rs.)		Average Wage	
1.	Traditional Spinners		60637		3425002		57	
2.	Arber Spinners		11510		1018393		89	
3.	New Model Charkha Spinners		2522		739240		294	
4.	Cotton Khadi-weavers		3639		5240069		1717	
5.	Silk Peelers		185		182775		988	
6.	Silk Dyers		22		38887		1768	
7.	Silk Khadi-weavers		976		1074215		1102	
8.	Others		70		110000		1572	
	Total		79561		11829281			

† Districtwise figures are not available.

Source : *Ibid.*

ANNEX V
TABLE 74—Districtwise Distribution of Weavers & Artisans & their Earnings :
A Comparison for 1962-'63 & 1963-'64

S.No.	District	Total Weavers		Wages earned by them (in Rs.)	Other Artisans	Wages earned by them (in Rs.)	Aggregate of all Weavers		Wages earned by them (in Rs.)	Other Artisans	Wages earned by them (in Rs.)		
		Enlisted	As on Rols				Active	As on Rols				Active	
1.	Chingleput	656	1593	1330	1490503.92	126	39019.61	447	1502	1236	1640405.25	69	37194.71
2.	Coimbatore	23	106	32	73193.56	4	5571.93	19	93	78	71298.48	4	9390.58
3.	Madurai	4	66	4	3493.96	n.a.	425.90	—	n.a.	n.a.	1572.60	—	—
4.	North Arcot	79	263	175	96729.20	18	4158.68	93	334	171	115627.54	11	3734.78
5.	Pannanathapuram	2	129	25	69924.54	52	5846.80	8	103	25	12613.10	37	3147.87
6.	Salem	107	999	107	63268.59	24	5750.06	38	113	106	55102.05	43	8274.94
7.	South Arcot	24	94	75	40121.41	2	1629.38	54	81	52	60143.30	n.a.	667.12
8.	Thanjavur	56	428	168	162531.77	12	6676.74	6	212	129	100834.95	14	7480.85
9.	Tirunelveli	255	469	398	454139.85	7	9801.65	75	306	205	316663.54	17	10800.38
10.	Tiruchirappalli	122	791	575	521401.63	164	43851.10	119	716	381	456916.80	150	28780.38
11.	Kanyakumri												

Note : n.a. = not available

Source : Ibid.

ANNEX VII

TABLE 76—Districtwise Distribution of Weavers & Artisans & their Earnings:
A Comparison: 1966-68

S.No.	District	Total Weavers			Wages Earned by Them (in Rs.)	Total Weavers			Wages Earned by Them (in Rs.)	Other Artisans	Wages Earned by Them (in Rs.)	Wages Earned by Them (in Rs.)
		Enlisted	As on Rolls	Active		Enlisted	As on Rolls	Active				
1.	Chingleput	907	1933	1558	—	—	—	—	48720	—	—	30484
2.	Corbatoce	27	172	112	—	—	—	—	828	—	—	2107
3.	Madurai	—	—	—	—	—	—	—	—	—	—	—
4.	North Arcot	—	—	—	—	—	—	—	—	—	—	—
5.	Ramanathapuram	16	263	170	—	—	—	—	9848	—	—	1650
6.	Salem	1	71	63	—	—	—	—	540	—	—	11255
7.	South Arcot	33	141	118	—	—	—	—	7728	—	—	2956
8.	Thanjavar	—	80	74	—	—	—	—	4928	—	—	1934
9.	Tirunelveli	95	312	324	—	—	—	—	9364	—	—	8201
10.	Tiruchirappalli	87	293	270	—	—	—	—	1624	—	—	4599
11.	Kanyakumari	94	707	528	—	—	—	—	1825	—	—	1411

Source: *Ibid.*

ANNEX IX

TABLE 78 - Village Industries in Tamil Nadu : Number of Units & Measure of Employment & Wages 1960, 1961 & 1962

S.No	Industry	As on 1959-1960			As on 31-3-1961			As on 31-3-1962			Number Employed	Wages Paid
		D.U. I.C.			D.U. I.C.			D.U. I.C.				
1.	Hand-pounding of Paddy	—	92	—	90	—	106	12103	124824			
2.	Oil Extraction by Ghani	2	126	2	116	2	137	11753	743781			
3.	Leather	42	10	48	10	38	—	830	36316			
4.	Potttery (including workers on brick kilns)	6	83	4	71	10	106	31569	372705			
5.	Hand-made Paper	7	—	8	—	7	6	688	84538			
6.	Gur and Khandasari	6	—	8	3	6	—	143	89032			
7.	Bee-Keeping	9	10	25	12	3	—	1825	9444			
8.	Palm Gur	—	1422	—	1432	—	1430	141000	Self-employed			
9.	Match Industry	2	—	2	—	2	—	n.a.	26116			
10.	Non-edible Oil and Soap	23	—	22	—	25	—	165	32540			
11.	C.S. Department	28	—	—	—	10	—	48				
12.	Carpentry and Blacksmithy	1	—	—	—	—	33	493	n.a.			

Note : Employment and Wages for 1960 & 1961 are not available.

D.U. = Departmental Units

I.C. = Industrial Co-operatives

Source : Directorate of Village and Khadi Industries

ANNEX X

TABLE 79—Village Industries : Number of Units & Measures of Employment & Wages : 1962-'63

S.No.	Industry	1962-1963		Numbers Employed	Wages Paid
		D.U.	I.C.		
1.	Pamgur	—	1422	18150	n.a.
2.	Oil Extraction by Ghani	—	148	3663	763377
3.	Hand-pounding of Paddy	—	110	3632	151356
4.	Pottery	8	74	3194	541663
5.	Soap-making	26	2	69	41136
6.	Leather	88	21	378	76709
7.	Hand-made Paper	7	7	257	49709
8.	Bee-keeping	5	17	n.a.	n.a.
9.	Lime	—	18	167	5263
10.	Match Industry	4	—	48	1481
11.	Gur & Khandasari	8	9	n.a.	n.a.
12.	G. S. Department	20	34	n.a.	n.a.
13.	Fire	18	2	n.a.	n.a.
14.	Bricks & Tiles	—	76	n.a.	n.a.

Source : Ibid.

p.a. = not available; D.U = Departmental Units; I.C. = Industrial Co-operatives

ANNEX XI

TABLE 80—Village Industries: Number of Units, Measures of Employment & Wages Compared: 1963-'64 & 1964-'65

S.No.	Name of Industry	Number of Units in 1963-1964		Number Employed	Wages Paid (in lakhs of rupees)	Name of Industry	Number of Units in 1964-65		Wages Paid (in lakhs of rupees)
		D.U.	I.C.				D.U.	I.C.	
1.	Palm Gur	—	1427	185476	n.a.	Palm Gur	—	1490	19,000 n.a.
2.	Oil Extraction by Ghani	—	156	3738	7.99	Oil Extraction by Ghani	—	164	3731 8.06
3.	Pottery	7	186	6631	5.91	Pottery	8	214	6971 7.20
4.	Hand-pounding of Paddy	—	126	5393	1.68	Hand-pounding of Paddy	—	133	6681 1.46
5.	Bee-keeping	52	18	54381	n.a.	Flaying Center	65	—	82 0.43
6.	Leather Flaying	66	—	73	0.42	Model Tanneries	35	36	944 0.38
7.	Model Tanneries	35	29	270	0.42	L.M.D.	7	—	1024 0.81

TABLE 80—(continued)

8. L.M.D.	8	—	343	n.a.	Scap and Non-edible Oil	27	—	85	0.50
9. Hand-made Paper	7	8	490	0.94	Bee-keeping	42	20	n.a.	n.a.
10. Limestone	—	41	922	0.12	Hand-made Paper	7	8	519	0.62
11. Scap & Non-edible Oil	26	—	78	0.49	Cottage Match	4	—	25	0.02
12. Fibre	19	3	n.a.	n.a.	Gur & Khandsari	43	11	n.a.	n.a.
13. Cottage Match	4	—	28	0.02	G.S. Department	19	34	n.a.	n.a.
14. G.S. Department	20	34	n.a.	n.a.	Limestone	—	50	1004	0.10
					Fibre	19	3	n.a.	n.a.

Source: *Ibid.*

Note: D.U. = Departmental Units; I.C. = Industrial Co-operatives; n.a. = not available

APPENDIX II

ANNEX I

TABLE 81 - Village Industries : Number of Units, Measures of Employment & Wages : 1965-66 & 1966-67

S.No.	Name of Industry	Number of Units Employed in 1965-66 (in lakhs)		Wages paid (in lakhs of rupees)	Name of Industry in 1966-67 (in lakhs of rupees)		Number of Units Employed in 1966-67 (in lakhs of rupees)			
		D.U.	I.C.		D.U.	I.C.				
1.	Palm Gur	—	1503	210450	n.a.	Palm Gur	—	1503	2 10	269.57
2.	Oil Extraction	—	171	3755	970787	Oil Extraction	—	171	0.04	11.42
3.	Hand pounding of Paddy	—	126	5945	165004	Village Pottery	—	233	0.09	8.34
4.	Pottery	4	225	7655	822916	Leather	114	43	0.01	1.67
5.	Leather	108	41	120	103530	Hand pounding of Paddy	—	138	0.001	1.28
6.	N.E. Oil and Soap	27	—	178	76315	Match Industries	10	—	0.001	0.01
7.	Hand-made paper	8	8	389	103854	Gur & Khandsari	43	18	0.21	3.59
8.	G.S. Department	16	34	n.a.	n.a.	Fibre	12	8	0.001	0.69

9. Palm Leaf	—	16	n.a.	Spinning Wheel Workshop	6	—	0.001	0.83
10. Lime	—	57	1204	24484 Bee-keeping	41	23	0.001	0.50
11. Bee-keeping	41	23	n.a.	Lime	—	59	0.001	0.30
12. Fibre	13	6	n.a.	Hand-made Paper	9	8	0.001	0.87
13. Gur & Khandsari	43	18	n.a.	N.E. Oil & Soap	29	—	0.001	0.94
14. Match Industry	4	—	7263	Sales Department	19	34	0.001	0.50
15. Saranjam Karyalaya	6	—	161	154027				

Source : *Ibid.*

D.U. = Departmental Units; I.C. = Industrial Co-operatives; n.a. = not available.

ANNEX II

TABLE 82—Districtwise Distribution of Employment & Wages in Tamil Nadu: 1967-'68 & 1968-'69

S.No.	Name of Industry	Number of Units in 1967-1968	Numbers Employed (in lakhs)	Wages Paid (in lakhs of rupees)	Name of Industry	Unit Numbers Employed in 1968-'69		Wages Paid (in lakhs of rupees)	
						D.U.	I.C.		
1.	Palm Gur	—	1506	282.43	Palm Gur	—	1524	227.00	255.00
2.	Palm Fibre	—	3	n.a.	Palm Fibre	—	3	n.a.	n.a.
3.	Palm Leaf	—	8	0.10	Palm Leaf	—	21	n.a.	n.a.
4.	Hand-made Paper	9	48	1.35	Oil Extraction	—	176	0.04	9.04
5.	Leather	119	45	2.04	Gur & Khandari	43	20	0.13	13.29
6.	N.E. Oil & Soap	30	—	1.11	Hand-pounding of Paddy	—	142	0.01	1.84
7.	Carpentry & Blacksmithing	6	—	0.001	N.E. Oil & Soap	30	—	0.001	1.01

8. Gu. & Khandsari	43	19	0.12	9.06	Bee-keeping	37	29	0.27	10.72
9. Match industry	13	5	0.01	0.01	Pottery	127	51	0.09	9.30
10. Fibre	12	—	0.002	0.08	Leather	3	271	0.01	2.18
11. Limestone	—	64	0.01	0.18	Hand-made Paper	9	5	0.001	1.08
12. Hand-pounding of Paddy	—	139	0.08	1.75	Carpentry & Blacksmithing	6	17	0.001	0.46
13. Pottery	4	246	0.09	0.32	Match industry	15	—	0.001	0.15
14. Oil Extraction	—	175	0.05	10.27	Limestone	—	64	0.01	0.29
15. Bee-keeping	34	27	0.07	3.33	Fibre	7	6	0.001	0.10
16. G.S. Department	19	34	n.a.	n.a.	Fruit Preservation	1	1	n.a.	0.04
					G.S. Department	19	34	n.a.	n.a.

Source: *Ibid.*

D.U. = Departmental Units; L.C. = Industrial Co-operatives; n.a. = Not Available

ANNEX III

TABLE 88—Village Industrywise Distribution of Numbers Employed & Wages Paid in Tamil Nadu: 1969-70 & 1970-71

S.No.	Name of Industry	Number of Numbers Units in Employed Paid (in 1969-'70 (in lakhs)		Wages Paid (in lakhs of rupees)		Name of Industry in 1970-'71 (in lakhs)	Number Units Employed Paid (in 1970-'71 (in lakhs)		Wages Paid (in lakhs of rupees)	
		D.U.	I.C.	D.U.	I.C.		D.U.	I.C.		
1.	Palm <i>Gur</i>	—	1550	2.19	223.45	1. Palm <i>Gur</i>	—	1556	2.20	199.50
2.	Palm Fibre	—	3	n.a.	n.a.	2 Palm Fibre	—	4	n.a.	n.a.
3.	Palm Leaf	—	21	0.002	0.06	3. Village Oil	—	176	0.02	10.13
4.	<i>Gur</i> & <i>Khandasari</i>	4	20	0.15	18.51	4. <i>Gur</i> & <i>Khandasari</i>	—	20	0.09	10.71
5.	Village Oil	—	176	0.02	11.08	5. Hand-pounding of Paddy	—	145	0.03	1.89
6.	Hand-pound- ing of Paddy	—	143	0.03	1.67	6. Soap	34	—	0.002	1.29
7.	Bee-keeping	54	29	0.11	15.44	7. Bee-keeping	62	30	0.08	16.56
8.	Pottery	3	273	0.04	7.15	8. Pottery	3	275	0.04	12.60
9.	Soap	32	—	0.13	4.39	9. Leather	128	53	0.01	2.99

10. Leather	126	53	0.02	2.51	10. Carpentry and Blacksmithing	6	26	0.005	1.59
11. Carpentry & Blacksmithing	6	22	0.009	1.41	11. Hand made Paper	9	8	0.003	1.27
12. Hand-made Paper	9	8	0.003	1.13	12 Cottage Match	15	—	0.01	0.12
13. Limestone	—	64	0.012	0.06	13. Limestone	—	64	0.003	0.23
14. Cottage Match	15	—	0.004	0.11	14. Fruit Preservation	2	1	0.001	0.04
15. Fibre	7	6	0.001	0.11	15. Palm Leaf	—	21	0.002	0.04
16. Fruit Preservation	2	1	0.001	0.11	16. Fibre	7	5	0.01	0.22
17. G.S. Department	19	34	n.a.	n.a.	17. Bamboo & Cane	—	2	0.001	0.01
					18. G.S. Department	19	34	n.a.	n.a.

Source: *ibid.*

D.U. = Departmental Units I.C. = Industrial Co-operative; n.a. = not available.

ANNEX IV

TABLE 84—Districtwise Distribution of Production Units: 1970-'71

S.No.	District	Palm Gur	Palm Fibre	Palm Leaf	Hand-made Paper	Oil Extr- action	Hand-poun- ding of Paddy	Pottery	Bricks & Tiles	Lime-mak- ing	Leather Work
		D.U.	I.C.	D.U.	I.C.	D.U.	I.C.	D.U.	I.C.	D.U.	I.C.
1.	Chingleput	—	55	—	—	—	8	—	6	—	1
2.	Coimbatore	—	249	—	1	—	24	—	—	—	4
3.	Kanya- kumari	—	126	—	—	—	14	—	6	—	—
4.	Madurai	—	25	—	1	—	14	—	—	—	10
5.	South Arcot	—	61	—	1	—	8	1	4	—	3
6.	Ramanatha- puram	—	172	—	—	—	11	—	—	—	2
7.	Salem	—	146	—	1	—	11	—	27	—	7
8.	North Arcot	—	83	—	1	—	12	—	—	—	11
9.	Thanjavur	—	100	—	—	—	24	—	8	1	3
10.	Tirunelveli	—	205	2	1	—	9	—	15	—	1
11.	Tiruchira- palli	—	68	—	1	—	24	—	—	—	6
12.	Dharmapuri	—	38	—	—	—	6	—	—	—	1
	Total	—	1529	2	4	2	34	7	8	—	137
							195	—	125	—	68
											124
											51

D.U. = Departmental Unit; I.C. = Industrial Co-operatives

APPENDIX III

ANNEX I

TABLE 86 - Rural Man-power Programme: Districts, Blocks, Year of Commencement & Discontinuance

S.No.	Name of District	Name of Block	Year in which Block Programme Was	
			Begun	Ended
I	North Arcot	1. Gudiyatham	1969-'70	
		2. Alangayam	1969-'70	
		3. Natrampalli	1969-'70	
		4. Thirupathur	1967-'68	
		5. Kilpennathur	1970-'71	
		6. Polur	1970-'71	
		7. Pudupalayam	1963-'64	1969-'70
		8. Thandrampet	1963-'64	1969-'70
		9. Chengam	1963-'64	1969-'70
		10. Sholingur	1964-'65	1970-'71
II	South Arcot	11. Thellar	1964-'65	1970-'71
		12. Mogaiyur	1967-'68	
		13. Gingee	1969-'70	
		14. Melmalayanur	1969-'70	
		15. Vellam	1970-'71	
		16. Kadamangalam	1970-'71	
		17. Kallakuruchi	1963-'64	1969-'70
		18. Rishivandiam	1963-'64	1969-'70
		19. Sankarapuram	1963-'64	1969-'70
		20. Thiagadurgam	1963-'64	1969-'70
		21. Chinasalem	1964-'65	1970-'71
		22. Kurinjipadi	1965-'66	1970-'71

ANNEX I - (continued)

TABLE 86- (continued)

S.No	Name of District	Name of Block	Year in which Block Programme was	
			Begun	Ended
III	Chingleput	23. Gummidipoondi	1969-'70	
		24. Ramakrishna- rajuvet	1969-'70	
		25. Chithamur	1969-'70	
		26. Thirukazhi- kundram	1970-'71	
		27. Sholavaram	1965-'66	1967-'68
		28. Poondi	1963-'64	1969-'70
		29. Ellapuram	1963-'64	1969-'70
		30. Thiruvelan- gadu	1965-'66	1969-'70
		31. Sathur	1964-'65	1970-'71
IV	Salem	32. Veerapandi	1969-'70	
		33. Namakkal	1967-'68	
		34. Erumaipatti	1969-'70	
		35. Rasipuram	1969-'70	
		36. Sendaman- galam	1969-'70	
		37. MacDonald's Choultry	1970-'71	
		38. Puduchatram	1970-'71	
		39. Koganpuram	1964-'65	1970-'71
		40. Idappadi	1964-'65	1970-'71

ANNEX I—(continued)

TABLE 86—(continued)

S.No.	Name of District	Name of Block	Year in which Block Programme was	
			Begun	Ended
V	Dharmapuri	41. Palacode	1969-'70	
		42. Krishnagiri	1969-'70	
		43. Thalli	1969-'70	
		44. Shoolagiri	1970-'71	
		45. Nallampalli	1970-'71	
		46. Narappur	1963-'64	1969-'70
		47. Pappireddi-patti	1963-'64	1969-'70
		48. Harur	1963-'64	1969-'70
		49. Dharmapuri	1964-'65	1970-'71
		50. Pennagaram	1964-'65	1970-'71
		51. Veppanapalli	1964-'65	1970-'71
		52. Bargur	1964-'65	1970-'71
		53. Uthangarai	1964-'65	1970-'71
VI	Coimbatore	54. Chennai-malai	1969-'70	
		55. Sarcar Sanakilam	1969-'70	
		56. Sultanpet	1969-'70	
		57. Thiruppur	1970-'71	
		58. Uthukuli	1970-'71	
		59. Karamadai	1970-'71	
		60. Annur	1964-'65	1967-'68
		61. Avanashi	1964-'65	1967-'68

ANNEX I—(continued)

TABLE 86—(continued)

S.No.	Name of District	Name of Block	Year in which Block Programme Was	
			Begun	Ended
		62. Bhavani Sagar	1963-'64	1969-'70
		63. Thalavadi	1963-'64	1969-'70
		64. Nambiyur	1963-'64	1969-'70
		65. Andhiyur	1964-'65	1970-'71
		66. Kundadam	1964-'65	1970-'71
		67. Mulanur	1964-'65	1970-'71
VII The Nilgiris		68. Gudalur	1969-'70	
		69. Ootacamund	1963-'64	1969-'70
VIII Tiruchirapalli		70. Thathiangan pet	1969-'70	
		71. Uyampatti	1969-'70	
		72. Thirumayam	1970-'71	
		73. Andimadam	1970-'71	
		74. Annavasal	1963-'64	1967-'68
		75. Viralimalai	1963-'64	1969-'70
		76. Kunnandar-koil	1963-'64	1969-'70
		77. Veppur	1965-'66	1970-'71
		78. Arimalam	1964-'65	1970-'71
IX Thanjavur		79. Vedaranyam	1969-'70	
		80. Muthupet	1969-'70	
		81. Thirubuvanam	1969-'70	
		82. Kuttalam	1970-'71	
		83. Thanjavur	1970-'71	

ANNEX I—(continued)

TABLE 86—(continued)

S.No	Name of District	Name of Block	Year in which Block Programme was	
			Begun	Ended
		84. Sembanarkoil	1970-'71	
		85. Aranthangi	1963-'64	1969-'70
		86. Avadayankoil	1963-'64	1969-'70
		87. Thalanayar	1965-'66	1970-'71
		88. Pattukottai	1964-'65	1970-'71
X	Madurai	89. Chellampatti	1969-'70	
		90. Sedapatti	1969-'70	
		91. Usilampatti	1969-'70	
		92. Palayam	1969-'70	
		93. Nathan	1969-'70	
		94. Andipatti	1970-'71	
		95. Thoppampatti	1963-'64	1969-'70
		96. Oddanchatram	1963-'64	1969-'70
		97. Palani	1963-'64	1969-'70
		98. T. Kallupatti	1965-'66	1969-'70
		99. Kalligudi	1965-'66	1969-'70
		100. Veda sandur	1964-'65	1970-'71
XI	Ramanathapuram	101. Kannangudi	1969-'70	
		102. Thirupathur	1967-'68	
		103. Singampuneri	1969-'70	
		104. Sakkottai	1969-'70	
		105. Kalayarkoil	1969-'70	

ANNEX I—(Continued)

TABLE 86—(Continued)

S.No	Name of District	Name of Block	Year in which Block Programme was	
			Begun	Ended
		106. Bogalur	1969-'70	
		107. Narikudi	1967-'68	
		108. Kariapatti	1970-'71	
		109. Manamadurai	1970-'71	
		110. Paramakudi	1964-'65	1967-'68
		111. Mandapam	1963-'64	1969-'70
		112. Ramanathapuram	1963-'64	1969-'70
		113. Thirupullani	1963-'64	1969-'70
		114. Mudugalathur	1963-'64	1969-'70
		115. Kadaladi	1963-'64	1969-'70
		116. Kamudi	1963-'64	1969-'70
		117. Virudhunagar	1965-'66	1970-'71
		118. Thiruchuli	1965-'66	1970-'71
XII	Tirunelveli	119. Kovilpatti	1969-'70	
		120. Sankarankoil	1969-'70	
		121. Vasudevannallur	1969-'70	
		122. Tuticorin	1969-'70	
		123. Sattankulam	1969-'70	
		124. Manur	1969-'70	
		125. Alangulam	1969-'70	
		126. Keelapavur	1970-'71	

	127. Kadayanallur	1970-'71	
	128. Thiruchendur	1970-'71	
	129. Ottapidaram	1963-'64	
	130. Villathikulam	1993-'64	
	131. Pudur	1963-'64	1969-'70
	132. Kayathar	1963-'64	1969-'70
	133. Radhapuram	1965-'66	1969-'70
	134. Valliyoore	1965-'66	1969-'70
	135. Nanguneri	1965-'66	1969-'70
	136. Melanellidha-		
	nallur	1965-'66	1969-'70
	137. Kurivikulam	1964-'65	1970-'71
	138. Udangudi	1965-'66	1970-'71
	139. Kadayam	1965-'66	1970-'71
XIII Kanyakumari	140. Kurunthen-		
	code	1965-'66	1971-'71
	141. Thakalay	1969-'70	
	142. Rajakkaman-		
	galam	1970-'71	
	143. Munchira	1963-'64	1969-'70

Source : Directorate of Rural Development, Madras.

APPENDIX IV

ANNEX II

TABLE 87 - Rural Manpower Programme in Tamil Nadu 1965-'66 : District & Projectwise Distribution of Employment & Wages

S.No.	District	Minor Irriga- tion			Flood Protection			Community Orchards			Tanks			Communica- tion		
		Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment
1.	Chingleput	888	11100											8300	13649	
2.	Coimbatore	5000	8000											152353	238401	
3.	Kanyakumari	4225	10654											13298	24773	
4.	Dharmapuri															
5.	Madurai	15384	29796											25546	47893	
6.	Nilgiris				858	1500								5532	11791	
7.	North Arcot	17317	23431											93116	123834	
8.	Ramanatha- puram	78291	178090					698	1396					45629	105533	
9.	Salem	90474	104843					665	2501					58702	126604	
10.	South Arcot	7090	14180											23555	56212	
11.	Thanjavur	10384	45920							1040	3119			16600	34516	
12.	Tiruchirapalli	24202	86389					1171	2097					82009	58531	
13.	Tirunelveli	7162	20128											49722	143060	

(Continued on page 212)

ANNEX II

TABLE 87—(Continued)

No.	District	Construc- tion		Land Reclamation		Soil Conservation		Others	
		Man days of Em- ploy- ment	Wages Paid (in Rs.)	Man days of Em- ploy- ment	Wages Paid (in Rs.)	Man days of Em- ploy- ment	Wages Paid (in Rs.)	Man days of Em- ploy- ment	Wages Paid (in Rs.)
1.	Chingleput	1192	1625	—	—	—	—	763	1511
2.	Coimbatore	30081	64714	5751	7346	—	—	212	1309
3.	Kanyakumari	—	—	—	—	—	—	—	—
4.	Dharmapuri	—	—	—	—	—	—	2431	3988
5.	Madurai	2127	14701	—	—	—	—	—	—
6.	Nilgiris	—	—	—	—	256	401	—	—
7.	North Arcot	26528	23998	—	—	—	—	—	—
8.	Ramanathapuram	5802	13045	2692	5383	136	136	12776	25516
9.	Salem	—	—	—	—	—	—	2491	5762
10.	South Arcot	—	—	—	—	—	—	—	—
11.	Thanjavur	3270	8876	426	2082	25	30	—	—
12.	Tiruchirapalli	—	—	—	—	417	567	—	—
13.	Tirunelveli	—	—	—	—	—	—	—	—

Source: *Ibid.*

ANNEX III
TABLE No. 88 - Rural Manpower Programme : 1966 - '67:
District & Projectwise Distribution of Employment & Wages

S.No.	District	Minor Irriga- tion			Flood Protection			Community Orchards			Tanks			Communica- tion		
		Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment
1.	Chingleput	3628	4355	—	—	—	—	—	—	—	—	—	—	22802	42163	—
2.	Coimbatore	—	—	—	—	—	—	—	—	7538	36085	—	—	71228	184314	—
3.	Kanyakumari	10049	32938	—	—	—	—	—	—	449	808	—	—	19741	42904	—
4.	Dharmapuri	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5.	Madurai	28458	25898	—	n.a.	1222	2556	5074	8490	—	—	—	—	45756	83203	—
6.	Nilgiris	—	—	—	—	—	—	—	—	—	—	—	—	27131	21945	—
7.	North Arcot	11347	11569	—	—	—	—	—	—	—	—	—	—	70181	102298	—
8.	Ramanatha- puram	28789	43572	225	450	57	213	1521	27216	1521	27216	1521	27216	165123	287341	—
9.	Salem	33690	63712	—	—	—	—	—	5468	2700	5468	—	—	167936	366448	—
10.	South Arcot	32465	44548	—	—	—	—	—	—	—	—	—	—	63459	108159	—
11.	Thanjavur	42813	63695	—	—	39	48	9461	16557	9461	16557	—	—	45695	72091	—
12.	Tiruchirapalli	22554	73949	—	—	—	—	3705	6670	3705	6670	—	—	40062	63299	—
13.	Tirunelveli	10095	14632	—	—	11685	14647	20488	27320	20488	27320	—	—	202912	359919	—

n. a. = not available

(Continued on page 214)

TABLE 88—(Continued)

S.No.	District	Construc- tion		Soil Conservation		Drainage		Others	
		Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)
1.	Chingleput	656	1435	—	—	—	—	519	908
2.	Coimbatore	21728	41467	3714	12920	—	—	10461	48763
3.	Kanyakumari	—	—	1492	2697	—	—	2206	3038
4.	Dharmapuri	—	—	—	—	—	—	—	—
5.	Madurai	7289	14528	1386	2700	—	—	281	729
6.	Nilgiris	—	—	—	—	—	—	—	—
7.	North Arcot	13867	16600	—	—	—	—	7705	3555
8.	Ramanathapuram	14937	18039	—	—	1285	2569	63082	87522
9.	Salem	62734	116300	13099	32800	—	—	7518	17423
10.	South Arcot	28436	41761	—	—	2400	4485	1524	4998
11.	Thanjavur	30786	23350	—	—	182	318	—	—
12.	Tiruchirapalli	23109	40392	3985	7174	—	—	5206	8634
13.	Tirunelveli	72219	71973	—	—	—	—	5644	6586

Source: *Ibid.*

ANNEX IV
TABLE 89—Rural Manpower Programme 1967-'68: District & Projectwise
Distribution of Man Days & Wages in Tamil Nadu

S.No.	District	Minor Irriga- tion			Flood Protection			Community Orchards			Tanks			Communica- tion		
		Man days of Employ- ment	Wages Paid (in Rs.)		Man days of Employ- ment	Wages Paid (in Rs.)		Man days of Employ- ment	Wages Paid (in Rs.)		Man days of Employ- ment	Wages Paid (in Rs.)		Man days of Employ- ment	Wages Paid (in Rs.)	
1.	Chingleput	26697	50438	587	1175	—	—	—	—	—	—	—	—	39192	74818	—
2.	Coimbatore	2028	5006	880	2400	1805	602	12292	19086	81135	166324	81135	166324	16294	37520	—
3.	Kanyakumari	718	1666	—	—	—	—	—	—	—	—	—	—	53112	128908	—
4.	Dharmapuri	17069	33195	—	—	3003	1323	1442	3514	40432	108819	40432	108819	18886	19898	—
5.	Madurai	15113	32426	679	1182	—	—	—	—	—	—	—	—	87358	135989	—
6.	Nilgiris	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7.	North Arcot	40025	70002	22385	51018	608	486	2657	4183	117137	233906	117137	233906	82988	68997	—
8.	Ramanatha- pura	16781	29364	—	—	—	—	—	—	—	—	—	—	87138	165065	—
9.	Salem	202	715	—	—	—	—	—	—	—	—	—	—	36943	85382	—
10.	South Arcot	26474	52539	2741	4933	1710	950	20884	4855	2685	72919	4855	72919	4492	79535	—
11.	Thanjavur	20550	58091	1714	2999	—	—	—	—	—	—	—	—	13472	136316	—
12.	Tiruchirapalli	46064	88744	—	—	1400	700	2495	2425	8211	281275	2425	281275	—	—	—
13.	Tirunelveli	52787	90345	720	1418	—	1212	—	—	—	—	—	—	—	—	—

(Continued on page 216)

ANNEX IV

TABLE 89—(Continued)

S.No. District	Construction			Land Reclamation			Drainage			Others		
	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)
1. Chingleput	4973	8953	—	—	—	—	—	—	1544	2700	—	—
2. Coimbatore	47245	98682	1070	3600	3988	1329	17538	—	—	28579	—	—
3. Kanya- kumari	—	—	1000	1800	—	—	—	—	—	—	—	—
4. Dharmapuri	79644	166430	—	—	—	—	—	—	14324	35663	—	—
5. Madurai	4098	7179	—	—	—	975	—	1430	827	2439	—	—
6. Nilgiris	—	—	—	—	—	—	—	—	—	—	—	—
7. North Arcot	10551	18892	—	—	—	—	—	—	3952	5640	—	—
8. Ramanatha- puram	37801	71281	256	510	3063	1021	37517	—	6435	69890	—	—
9. Salem	1685	3371	1271	2545	—	—	—	—	—	12000	—	—
10. South Arcot	20910	32410	—	—	—	9635	—	17541	—	—	—	—
11. Thanjavur	13954	26308	—	—	—	9871	—	16984	—	—	—	—
12. Tiruchira- palli	22388	57820	1815	3267	—	—	—	—	5083	10151	—	—
13. Tirunelveli	35411	83657	—	—	—	2445	2995	3405	—	11324	—	—

Source : *Ibid.*

ANNEX IV
TABLE 90—Rural Manpower Programme 1968-'69 : District & Projectwise
Distribution of Employment & Wages

S.No. District	Land Reclamation			Minor Irrigation			Flood Protection			Drainage			Tanks		
	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment
1. Chingleput	1810	5222	7959	11254	—	—	—	—	—	—	7739	12693	—	—	—
2. Coimbatore	—	—	—	—	—	—	—	—	—	—	13926	17639	—	—	—
3. Dharmapuri	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4. Kanya- kumari	—	—	18159	46561	—	—	—	—	—	—	—	—	—	—	—
5. Madurai	—	—	17858	36422	—	—	—	—	—	—	—	—	—	—	—
6. North Arcot	—	—	14285	317415	—	—	—	—	—	—	—	—	—	—	—
7. Nilgiris	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. Ramanatha- puram	1480	2960	72679	128922	—	—	—	—	—	—	3741	8140	20134	39958	—
9. South Arcot	—	—	22255	57738	1489	3567	—	—	—	—	409	900	—	—	—
10. Salem	1302	2514	8450	17742	—	—	—	—	—	—	2100	n.a.	296	1565	—
11. Thanjavur	—	—	40889	72323	4321	8111	—	—	—	—	1386	2183	10329	18072	—
12. Tiruchirapalli	—	—	21003	40891	—	—	—	—	—	—	—	—	—	—	—
13. Tirunelveli	—	—	56739	90453	—	—	—	—	—	—	2100	4200	4524	7013	—

(Continued on page 218)

ANNEX IV

TABLE 90—(Continued)

S.No	District	Soil Conserva- tion		Community Orchards		Communica- tion		Construction		Others	
		Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)
1.	Chingleput	—	—	—	—	9668	149724	1722	2934	3400	5951
2.	Coimbatore	—	—	512	1384	85388	172589	18668	46367	15125	25075
3.	Dharmapuri	—	—	—	—	6304	34324	11183	36127	—	—
4.	Kanyakumari	—	—	354	472	11920	28714	—	—	—	—
5.	Madurai	2762	8223	—	—	34663	91766	6960	15299	57753	151158
6.	North Arcot	17408	38253	—	—	204290	287232	9561	13741	2845	8535
7.	Nilgiris	—	—	—	—	12310	24620	—	—	—	—
8.	Ramanathapuram	—	—	5908	11813	198959	387825	12100	25447	27724	58339
9.	South Arcot	—	—	—	—	122926	235883	14042	23372	—	—
10.	Salem	—	—	167	500	70082	187389	56206	150182	11163	35816
11.	Thanjavur	—	—	439	769	65860	98347	1905	8335	59	410
12.	Tiruchirapalli	—	—	1628	2938	86933	172407	6080	12043	2447	4016
13.	Tirunelveli	—	—	13010	36474	89629	159889	19379	39191	57881	86333

Source: *Ibid.*

ANNEX V

TABLE 91—Rural Manpower Programme 1969-'70 : District & Projectwise Distribution of Employment & Wages

S.No.	District	Land Reclamation		Minor Irrigation		Flood Protection		Drainage		Tanks	
		Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)
1.	Chingleput	—	—	16210	21846	—	—	—	—	2752	4781
2.	Coimbatore	850	1699	—	—	—	—	—	—	5159	17903
3.	Dharmapuri	—	—	1020	6268	—	—	—	—	—	—
4.	Kanyakumari	—	—	—	—	—	—	3025	8170	8332	16664
5.	Madurai	—	—	9799	23240	—	—	—	—	1471	4413
6.	North Arcot	—	—	524	1179	—	—	—	—	—	—
7.	Nilgiris	—	—	—	—	—	—	—	—	—	—
8.	Ramanathapuram	2093	4721	18394	44392	—	—	620	3500	2477	6447
9.	South Arcot	—	—	13551	27454	838	1998	4500	9000	1557	5450
10.	Salam	—	—	7910	21900	—	—	—	—	—	—
11.	Tanjavur	—	—	61394	161735	2200	3851	—	—	203	406
12.	Tiruchirappalli	—	—	10530	23245	—	—	390	878	—	—
13.	Tirunelveli	—	—	19196	48405	1893	7540	327	736	—	—

(Continued on page 220)

ANNEX VI

TABLE 91—(Continued)

S. No.	District	Community Orchards		Communication		Construction		Others	
		Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)
1.	Chingleput	—	—	85304	130224	90	210	1706	2985
2.	Coimbatore	—	—	65132	147400	2315	7356	2210	5472
3.	Dharmapuri	—	—	59069	157218	11755	26771	99	1116
4.	Kanyakumari	—	—	46205	107445	265	800	—	—
5.	Madurai	—	—	36215	114261	1809	6752	16171	44980
6.	Nilgiris	—	—	60851	118122	672	1685	1800	4600
7.	North Arcot	—	—	128277	237789	5787	9681	8980	15086
8.	Ramanathapuram	—	—	114415	231335	44	133	23611	67332
9.	South Arcot	—	—	119195	321222	6560	31105	269	526
10.	Salem	—	—	72958	215530	3861	11278	5413	12906
11.	Thanjavur	—	—	64083	146406	27741	62975	64453	115001
12.	Tiruchirappalli	—	—	50693	112171	2399	5008	11010	3874
13.	Tirunelveli	—	—	116272	251179	1438	5620	42192	100297

Source: *Ibid.*

ANNEX VI

TABLE 92 - Rural Manpower Programme 1970-71: District & Projectwise Distribution of Employment & Wages

S.No.	District	Land Reclamation		Minor Irrigation		Flood Protection		Drainage		Tanks	
		Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)	Man days Utilized	Wages Paid (in Rs.)
1.	Chingleput	-	-	156	890	3912	7997	-	-	-	-
2.	Coinbatore	-	-	-	-	-	-	-	-	-	-
3.	Dharmapuri	-	-	-	-	-	-	-	-	-	-
4.	Kanyakumari	-	-	-	-	-	-	-	-	-	-
5.	Madurai	-	-	9662	21257	6276	12553	-	-	16483	50093
6.	North Arcot	-	-	51829	11521	-	-	5905	17717	-	-
7.	Nilgiris	-	-	-	-	-	-	-	-	-	-
8.	Ramanathapuram	-	-	19946	47672	-	-	5918	16148	1417	4250
9.	South Arcot	-	-	10311	28823	-	-	-	-	-	-
10.	Salem	-	-	12293	29045	-	-	-	-	-	-
11.	Thiruvavur	-	-	37681	151254	-	-	-	-	4759	10109
12.	Tirumalparali	500	1800	15308	37148	-	-	-	-	840	2100
13.	Tirunelveli	470	1401	12269	34164	5621	15826	700	1102	-	-

ANNEX VI

TABLE 92 - (continued)

S.No.	District	Communication		Construction		Others	
		Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)	Man days of Employ- ment	Wages Paid (in Rs.)
1.	Chingleput	95155	156688	28	74	1871	3741
2.	Coimbatore	95908	221089	185	455	818	2087
3.	Dharmapuri	91501	216563	4995	8451	12275	29182
4.	Kanyakumari	46465	127955				
5.	Madurai	111952	282773	1975	5926	32273	70334
6.	Nilgiris	18112	54338			4484	13457
7.	North Arcot	103202	242768			3750	7500
8.	Ramanatha- puram	203913	558755			45752	100605
9.	Salen	125027	435023			2624	7532
10.	South Arcot	124957	294581				
11.	Thanjavar	161777	355089	3698	6871	31049	66929
12.	Tiruchirappalli	60115	131205			7921	18949
13.	Tirunelveli	110944	321965	55	166	36334	96007

Source : Ibid.

ANNEX VII
TABLE 93--Rural Manpower Programme upto December 1971: District & Projectwise Distribution of Employment & Wages

S.No.	District	Minor Irrigation			Tanks			Drainage			Communication			Others		
		Man days of	Wages Paid (in Rs.)	Employment	Man days of	Wages Paid (in Rs.)	Employment	Man days of	Wages Paid (in Rs.)	Employment	Man days of	Wages Paid (in Rs.)	Employment	Man days of	Wages Paid (in Rs.)	Employment
1.	Chingleput	11845	25062	—	—	—	—	533	1178	—	44732	68444	1337	2787	—	—
2.	Coimbatore	894	2682	—	—	—	—	—	—	—	40058	121533	10150	23379	—	—
3.	Kanyakumari	7751	17819	—	—	—	—	—	—	—	3800	14000	—	—	—	—
4.	Dharmapuri	—	—	—	—	—	—	—	—	—	20774	51932	15385	33687	—	—
5.	Madurai	20238	68589	—	3875	10626	—	—	—	—	40977	121146	8337	16675	—	—
6.	Nilgiris	—	—	—	—	—	—	—	—	—	1234	3704	—	—	—	—
7.	North Arcot	33447	78430	—	—	—	—	—	—	—	67881	142655	—	—	—	—
8.	Ramanathapuram	57046	137064	2062	—	—	—	2375	7409	—	65878	161859	7946	20379	—	—
9.	Salem	2946	8902	1359	—	—	—	620	1246	—	60187	164610	2313	6605	—	—
10.	South Arcot	10218	21547	—	—	—	—	—	—	—	58325	185806	—	—	—	—
11.	Thanjavur	3685	10029	11872	—	—	—	20502	50828	—	57293	138747	17227	36688	—	—
12.	Tiruchirapalli	23824	62751	—	—	—	—	—	—	—	13682	31730	—	—	—	—
13.	Tirunelveli	6741	18406	—	—	—	—	—	—	—	69697	99103	38963	82795	—	—

Source: *Ibid.*

APPENDIX V

TABLE 94—Crash Scheme for Rural Employment in
Tamil Nadu 1971-'72: Physical Achievements

S.No.	Details	Unit of Measure	Achievement during 1971-72
<i>Minor Irrigation</i>			
1.	Wells constructed	Number	2
2.	Tanks Constructed	Number	414
3.	Field Channels	In yards	67102
<i>Additions to Irrigation</i>			
4.	Wells	Command area in Hectares	2
5.	Tanks	Hectares	5193
6.	Field Channels	Hectares	2413
7.	Land Reclaimed	Hectares	4
8.	Benefit arising from Water for Irrigation : Conservation and Groundwater Recharging	Hectares	43
9.	Area Afforested	Hectares	131
10.	Panchayat Land Development	Hectares	52
<i>Other Agricultural Production</i>			
11.	Area Protected against Floods	Hectares	33
12.	Area Benefited by Drainage and Anti-Water-loss Measures	Hectares	4997
<i>Pisciculture Tanks</i>			
13.	Number of Pisciculture Tanks Constructed	Number	12
14.	Area of Tanks So Constructed	Hectares	8
<i>Communication</i>			
15.	Roads Constructed	Kilometres	4397
16.	Roads Improved	Kilometres	1935
17.	Culverts Constructed	Number	640
Total Expenditure		In thousand	
			Rs. 29275
On Wages		Rs. '000	24381
On Materials		Rs. '000	4894
Employment Generated		No. '000	8372

Source : *Ibid.*

ERRATA

Page	Para	No. of Line	For	Read
Page 7	para 1	3-4th line	distinctive	distinct
Page 8	para 2	7th line	"	"
Page 9	para 1	15th line	quite approaches	is closer to
Page 15	para 1	10th line	3.50 per cent	4.35 per cent
Page 24	para 2	4th line	15 million	15.1 million
Page 42	para 2	7th line	30.61 per cent	51 per cent
Page 42	para 3	last but second line	Table 26	Table 25
Page 57	para 2	9th line	3.65 per cent	1.14 per cent
Page 58	footnote	last line	Annexure II	Append x II, pp 85-8
Page 66	para 2	line 3	household workers	housewives
Page 66	para 3	3rd line	incidental	incident
Page 69	para 5	3rd line	3.1 per cent	4.28 per cent
Page 72	para 2	5th line	weakened this	weakened his
Page 72	last para	last line	—	add "See Appen- dix I."
Page 76	Table 35	last line	(3.48) per cent	(3.84) per cent
Page 78	para 2	6th line	—	add Kanyakumari
Page 78	para 2	7th line	Malurai	Kanyakumari
Page 78	para 2	12th line	—	add Kanyakumari

Page	Para	Number of Line	For	Read
Page 82	para 3	last but one line	23.35 per cent	41.10 per cent
Page 82	"	last line	64.65 per cent	46.90 per cent
Page 82	para 4	line 2	household workers	housewives
Page 94	para 1	last but one line	The sentence ends with "output" and the rest to be deemed deleted.	
Page 105	"	3rd line	31.74 per cent	41.74 per cent
Page 105	"	11th line	70 per cent	60 per cent
Page 106	para 2	last line	...of main reasons	...of the main reasons
Page 119	Note to Table 52	2nd line	to the total in the State	sons to the total unemployed in the district to the total male unemployed in the district
"	"	3rd line	to the co-res-	unemployed in the district
"	para 4	4th line	ponding number in the State	unemployed in the district
Page 122	"	1st line	Thanjavur is the only ...	Thanjavur has the highest...
Page 122	"	2nd line	...are fewer in Chingleput...	...fewest in Chin-
Page 123	Table 54	title	1969-71	glaput (maies)...
Page 124	para 1	6th line	Prices of which are...has caused	Price and which ...have caused
Page 128	para 2	last line	Appendix I	add "Annex II, page 179"

Page 129	para 2	last line	Appendix II	add "pp 196-201, pp 200-1 in particular's
Page 131	para 1	8th line	Appendix III	add "pp 204 onward 10"
Page 133	para 1	last line	Appendix IV	add "pp 211-23"
Page 135	para 4	last but one line	Appendix V & VI	Appendices IV and V pp 211-24
Page 142	para 3	2nd line	1-3 lakhs	1-13 lakhs
Page 150	—	last line of text	34.2 per cent	52.1 per cent
Page 151	para 2	line 10	There was thus...	There was never the less
Page 151	para 3	line 5	101, 88, 172	101, 88, 072
Page 155	Table 57	—	—	refers to page 114
Page 159	para 3	first line	Table 61	Table 58, pp. 156-7
Page 164	para 1	first line	Appendix	Appendix IV pp. 211-23
Page 164	2nd para	14th line	$105.86 \times 77.1 =$	$\frac{77.1}{100} =$
Page 169	1st para	5th line	81.62 lakhs	81.62 lakhs
			3,82,180 acres	3,82,810 acres

Tables 61 to 63 had to be dropped after the monograph had been set up in type.

Data contained in the following table were obtained after the manuscripts had been composed.

**CRASH PROGRAMMES FOR RURAL EMPLOYMENT
IN TAMIL NADU : PROGRESS REPORT
MARCH 1972¹.**

District	Expenditure Incurred in Thousands of Rupees		Employment Generated in Thousands of Man-days	
	Month under Report	Cumulative Expenditure from Beginning of Financial Year	During Month under Report	Cumulative Figures Beginning April I
Chingleput	1008	2495	270	702
South Arcot	1330	2541	312	691
North Arcot	1118	2029	250	530
Salem	1330	2500	376	739
Coimbatore	662	2588	195	778
Tiruchirapalli	704	2500	132	745
Thanjavur	1833	2546	476	692
Madurai	688	2500	207	761
Ramanathapuram	1013	2143	270	643
Tirunelveli	1697	2500	466	758
Dharmapuri	912	2035	270	629
Kanyakumari	240	1250	59	387
Nilgiris	447	1650	78	349
Total	12965	29280	3361	8401

Source : Directorate of Rural Development, Madras

¹ Refers to pages 134 to 148.

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