9

Demography

9.1. Introduction

he population growth rate in Tamil Nadu had started declining in eighties itself. In 1991 the decadal growth rate was 15.4 per cent for Tamil Nadu compared to the All-India rate of 25.8 per cent. This rate declined further to 11.2 per cent for Tamil Nadu in 2001 while the All-India rate declined to 21.3 per cent. This decline was much faster than many other states mainly due to a significant decline in total fertility rate accompanied by a decline in birth rate and infant mortality rate. The period also showed improvement in overall sexratio from 956 in 1991 to 986 in 2001 with some districts reaching the ideal number of 1000 and above. However, the sex-ratio for 0-6 years is far below the expected numbers and has worsened across most districts with only a few exceptions. The literacy rates and health status of the population has also shown improvements in the past decade but gaps still persist in comparison to the status attained by developed nations.

The important features of this decline have been (a) decrease in participation rates in lower age groups due to improvement in participation in school and higher education levels, (b) increase in unemployment rates in the rural sector but a decrease in the urban sector; (c) decrease in women's participation rate mainly in the subsidiary status; (d) underemployment levels at a higher rate compared to most other states; (e) decrease in casual labour proportion in rural sector for males but an increase in casualisation in rural sector among both males and females; and (f) significant increase in non-agricultural workers in the rural sector.

9.2. Human Development Index

Tamil Nadu's HDI (2001) was 0.657 as compared to 0.571 for India as a whole. Tamil Nadu is also placed well in the South Asian context. The State's per capita income

is above the national average and it occupies fifth place in the ranking of 15 major states in India. Tamil Nadu has the second lowest fertility rate next only to Kerala. Life expectancy at birth for males and females was 64.85 and 65.20 respectively. The literacy rate has been increasing over the years and reached the level of 73.47 percent in 2001, next only to Kerala and Maharashtra.

The National HDR prepared by the Planning Commission, Government of India, places Tamil Nadu at the third position with an HDI value of 0.531 among 15 major States. Specific data, on each of the indicatiors such as LEB, literacy and income suggest, however, that while Tamil Nadu is placed well above the all India average it still lags behind some States for example, Kerala is well ahead of Tamil Nadu in literacy and LEB while Maharashtra is ahead in LEB and income. Therefore, Tamil Nadu's focus in the next decade should be to reach the levels attained by Kerala in health and educational attainment, while aiming at increasing the levels of SDP to those of Punjab or Maharashtra in order to reduce poverty and inequality¹⁰.

9.3. Demographic Transition in Tamil Nadu

The demographic structure of the population determines its economic and social status. The health, education and skills possessed by the population help in shaping the development of the State and brings in economic prosperity and overall well-being to its people. Among the 15 major States in India, Tamil Nadu is the sixth most populous State and Tamil Nadu's population accounted for 6.0 per cent share of the national population of 1027.02 million. The Census 2001 results show the population of Tamil Nadu at 62. I million comprising of 31.3 million males and 30.8 million females. The rural and urban population is 34.9 million and 27.2 million, respectively. The density of population is placed at 478 per sq.km. The annual growth

rate of population in Tamil Nadu was 1.1 percent during nineties and 1.4 per cent during eighties and is lower than the growth rate registered at All-India level during nineties. One of the major changes that have come about in the demographic transition in Tamil Nadu is the fall in the total fertility rate and birth rate since the eighties and the replacement rate reaching nearly two by nineties. This is also accompanied by a decline in the death rate.

9.4. Total Fertility Rate (TFR)

The fertility rate in Tamil Nadu was lower than in many states and All-India average even in the early eighties. During nineties the State showed a significant improvement and by mid nineties (1995-97) Tamil Nadu had 3 TFR of 2.1, the lowest after Kerala (1.8). However the difference between Kerala and Tamil Nadu lies in the fact that it is uniform in Kerala across rural and urban sectors. The urban TFR for Tamil Nadu (1.8) is the same as Kerala but rural TFR

is higher at 2.2 but significantly lower than all other states (Gol, 2001a). This change has been mainly possible due to the initiatives taken by the State government with the involvement of the local community.

9.5. Birth Rate and Death Rate

According to the Tamil Nadu Human Development Report, the death rate in Tamil Nadu has declined by 40 per cent in the last four decades whereas the birth rate has declined by about 30 percent. Further, the birth rate has been falling uniformly across the districts during the eighties and nineties with the exception of one or two districts and the rural urban differences have also narrowed down. The birth rate of 19.9 for rural sector and 17.0 for the urban sector in 1999 is among the lowest in India and so is the death rate of 7.8 and 5.1 for the rural and urban sectors (Table 9.1).

Table 9.1. Demographic characteristics of Tamil Nadu and its sub-regions: 1991 and 2001

Rural						Urban				
	Coastal North Region	Coastal Region	Southern Region	Inland Region	All	Coastal North Region	Coastal Region	Southern Region	Inland Region	All
Birth Rate ^(a) (per thousand population)										
1999	19.9	19.7	19.8	19.8	19.9	17.5	16.6	16.8	16.5	17.0
Death Rate ^(a) (per thousand population)										
1999	7.7	7.9	7.8	8.3	7.8	5.0	5.8	5.2	4.6	5.1
Sex-Ratio(b) (All):	Sex-Ratio(b) (All) · (number of female per 1000 males)									
1991	9.97	9.73	9.79	954	945	971	970	968	944	937
2001	988	1010	1018	962	992	978	1016	1005	969	980
Sex-Ratio ^(b) (0-6 yrs):	Sex-Ratio ^(b) (0-6 yrs): (number of female per 1000 males)									
1991	969	965	944	906	960	938	967	952	958	952
2001	953	950	937	897	931	956	963	950	941	951
Literacy Rate ^(b) : (%)										
1991	38.6	42.8	47.9	39.0	41.8	65.7	69.5	72.6	63.3	67.2
2001	55.0	57.5	61.5	52.1	55.8	77.5	80.3	81.7	73.3	77.5
Infant Mortality Rate ^(b) : (number per thousand alive children)										
1999	42.4	45.8	47.2	57.6	49.8	19.8	20.7	23.6	26.5	22.0

Source: GoTN (2000) for (a) and Census Info. (2001) for (b).

9.6. Urbanisation Rate

The urbanisation rate marginally improved from about 33 per cent in 1981 to 34.2 per cent in 1991, but has significantly improved to about 44 per cent in 2001 (Table 9.1). Though the rate of urbanisation has been fairly uniform across districts ranging between 40 per cent and 50 per cent for a large number of districts there are still wide variations. A large numbers of coastal districts have low rates of urbanisation (below 20 per cent) with the exception of Tiruchirapalli (46 per cent). Similarly among the southern districts Kanyakumari has a very high rate of 65 per cent but Sivaganga and Ramanathapuram have rates 28 per cent and 25 per cent respectively. Among the inland districts Coimbatore has 66 per cent whereas Dharmapuri has 16 per cent.

9.7. Sex-ratio

The sex-ratio in Tamil Nadu has improved slowly in the last decade. The combined (rural and urban) sexratio was 958 in 1991 and 986 in 2001. However there are other dimensions that need special mention (Table 9.1).

- ☐ The overall sex-ratio has improved in all regions except coastal north in rural Tamil Nadu:
- ☐ Coastal and southern districts have attained the expected value of above 1000 by 2001;
- ☐ The sex-ratio for urban is worse than the rural with the exception of inland and coastal regions in 2001;
- ☐ All the regions have sex-ratio of below 1000 for the 0-6 years group;
- ☐ Further, sex-ratio in 0-6 years has declined in both rural and urban areas in 2001 compared to 1991;
- ☐ Inter-district variation in sex-ratio has also increased between the two census for overall as well as 0-6 years;
- ☐ Districts like Salem (763), Dharmapuri (869), Theni (873) and Namakkal (882) most of which are in the

inland region have very low rates in 2001 compared to many other regions in India.

9.8. Literacy and Health

The two important assets that people require for production purposes and spurring innovations are health and education. Education has all along been considered the basic tool for seeking employment with higher wages or the cause for improving labour productivity. However, evidence of the impact of health on economic growth or health status as an input into the production function is only a recent phenomenon. The literacy rate in Tamil Nadu increased substantially from 62.7 per cent to 73.5 per cent between 1991 and 2001 with improvement across all segments. However, the rural-urban gap and gender gap are still to be bridged. Female literacy improved from 51.3 per cent to 64.5 per cent and male literacy rates improved from 73.7 per cent to 82.3 per cent. Rural literacy improved from 41.8 per cent to 55.8 per cent and urban literacy improved from 69.6 per cent to 75.6 per cent and this gap between the rural and urban sectors remained even with each region (Table 9.1). These figures are among the highest compared to many large states in India.

The health status can be judged in various ways and the commonly used measures are infant mortality rates (IMR) which also reflects the overall well-being of the society. The IMR in Tamil Nadu showed a rapid decline between eighties and 2000. It was about 125 in 1970 decreasing to about 68 in 1990 and further declining to 44 in 1999 (GoTN 2002a). The regional level variation once again highlights rural urban contrast though it is homogenous across regions within a sub-sector except for the southern region in rural Tamil Nadu (Table 9.1). The National Nutrition Monitoring Bureau (NNMB) collects anthropometric information for children in various age groups as well as adults across some states in rural India as a measure of the health status and their ability to carry out

regular work. For the adult population chronic energy deficiency (CED) indicates the health status. The incidence of chronic energy deficiency for adult males in rural Tamil Nadu came down from 42 per cent in 1990-91 to about 35 per cent in 2000-01 and similarly for females it came down from 45 per cent to 38 per cent during the same period (Vaidyanathan, 2002)

9.9. Human Development

The annual growth rate of population in Tamil Nadu exceeded that of labour force between 1961 and 1981 and the trend reversed after that (GoTN, 2003). Between 1991 and 2001 the working population increased at a faster annual rate of 1.40 per cent as against the population growth rate of 1.07 per cent, however these rates were lower than those in the previous decade.

9.10. Unemployment and Underemployment

The unemployment and underemployment trends over the past two decades are analysed based on NSS data.

9.10.1. Unemployment Rate- Usual Status

- ☐ In 1999-2000 the rural rate for Tamil Nadu (AllIndia) was about 2 per cent (1.5 per cent) and above most other large states except Kerala (8.2 per cent) and West Bengal (2.8 per cent). The urban rate in Tamil Nadu was 4 per cent (4.7 per cent) and lower than many other states.
- ☐ The urban rates are usually higher than rural for All-India and most other states.
- ☐ The female unemployment rate is higher in areas but lower in rural areas compared to with 1987-88 as an exception.
- ☐ Compared to the earlier NSS rounds the rates have increased for males in rural sector with a dip in 1993-94 with the female rate showing large variations. However

the urban rate has been the lowest in the past two decades for males and females.

9.10.2. Unemployment Rate- Current Daily Status

- ☐ The rural sector for Tamil Nadu (All-India) had about 13.5 percent (7.1) and is higher than most other states except kerala and West Bengal whereas for the urban sector in Tamil Nadu (A1) it was 8.9 percent (7.7 percent) and is higher than most other south Indian states (except Kerala) and other industrialized states like Gujarat (4.2 percent).
- ☐ In 1999-2000 the urban rates are lower than rural rates across males and females.
- ☐ The female rates are higher than males in the urban sector but fluctuates for the rural sector.
- ☐ Compared to the previous NSS round the unemployment rate has increased for all except females in urban sector.

Table 9.2.Umemployment Rates According to Usual Status and Daily Status for Tamil Nadu and All-India (in brackets) (%)

	Ru	ral	Urban		
	Males	Females	Males	Females	
Usual Status					
1983	2.3 (1.4)	1.1 (0.7)	6.5 (5.0)	6.2 (5.2)	
1987-88	2.6 (1.8)	3.1 (2.4)	6.2 (5.2)	6.6 (6.2)	
1993-94	1.8 (1.4)	0.6 (0.8)	4.3 (4.0)	6.8 (6.2)	
1999-00	2.7 (1.7)	1.0 (1.0)	3.6 (4.5)	5.1 (5.7)	
Daily Status					
1987-88	8.4 (4.6)	10.7 (6.7)	12.3 (8.8)	13.2 (12.0)	
1993-94	12.8 (5.6)	11.3 (5.6)	8.6 (6.7)	12.7 (10.5)	
1999-00	14.3 (7.2)	12.3 (7.0)	9.0 (7.3)	8.6 (9.4)	

Source: NSS (1996,2001).

9.11. Poverty and Employment

Tamil Nadu has made significant progress in terms of poverty reduction over the last few decades. In the period 1973-74 to 1987-88 the percentage of people living below poverty line in Tamil Nadu was higher than the all-India average. However since then, there has been a dramatic decrease in poverty levels since that time. In 1973-74 the poverty level was 54.94 per cent, it declined to 43.39 per cent in 1987-88 and further to 21.12 per cent in 1999-2000. Moreover, the incidence of poverty was relatively higher in rural areas till 1987-88 where as it declined steadily during the nineties thanks effective implementation of various poverty alleviation programmes.

The structural changes in employment pattern as mentioned in the previous sections are bound to have also affected the poverty rates among different occupation groups and employment status. Based on the poverty lines given by the Union Planning Commission proportion of poor among different groups along with the proportion of population have been calculated based on the consumer expenditure surveys of NSSO as shown in Table 9.3 below. The following features are noted:

- ☐ The per capita consumption expenditure in Tamil Nadu grew at an annual rate of 1.9 per cent for the rural sector and 5.5 per cent for the urban sector between 1993-94 and 1999-2000.
- ☐ This has significantly reduced the overall poverty rate in Tamil Nadu (All-India) from about 35 per cent (36 per cent) in 1993-94 to 21 per cent (26 per cent) in 1999-2000 (Gol, 2001).
- ☐ The urban poverty rate in Tamil Nadu declined by about 18 percentage points to about 22 per cent

whereas the rural poverty rate declined by about 23 percentage points to about 21 per cent thus reducing the gap between rural and urban poverty rates.

- ☐ This has also reduced poverty rates across different occupations and employment status as shown in Table 9.3.
- □ The agricultural labour, which accounts for about 45 per cent of the rural population having the largest number of poor (66 per cent) has halved the poverty rates by 1999-2000.
- ☐ The interesting feature however is that the poverty rates among the self-employed in agriculture has decreased to less than 15 per cent with the proportion of poor among them also having decreased.
- ☐ The urban sector shows that the self-employed and the casual labour have reduced their share in 1999-2000 compared to 1993-94 but the poverty rates have increased marginally.

9.12. Economic Reforms and Employment

It is unclear about the impacts of economic reforms on the employment of the entire country. However, specific sector related information is slowly becoming available. According to the recently released Report by International Labour Organisation (ILO, 2003) the economic reform process initiated in the nineties may not have generated enough employment opportunities but may have reduced poverty and underemployment. Hasan, Mitra and Ramaswamy (2003) based on organised manufacturing sector data show that trade reforms may not have favoured employment growth but has definitely improved productivity. Their results further show that lesser trade protection improves labour-demand elasticties and this response is higher for states with flexible labour markets (lest tight restrictions on retrenchmets and layoffs of which

Table 9.3. Proportion of persons, poverty rates and proportion of poor among different occupational in rural areas and employment status in urban areas

(Per cent)

	Proportion of Persons		Pover	ty Rates	Proportion of Poor		
	1993-94	1999-2000	1993-94	1999-2000	1993-94	1999-2000	
Rural							
Agriculture Labour	40.7	45.0	59.8	29.1	56.9	65.5	
Self Employed (Agriculture)	23.0	18.5	34.5	10.5	18.6	9.7	
Self Employed (Non-Agric.)	13.5	14.6	28.4	13.7	9.0	10.0	
Other Labour	12.6	13.1	35.9	14.7	10.5	9.5	
Others	10.1	8.8	20.9	12.2	5.0	5.4	
Total	100.0	100.0	42.7	20.0	100.0	100.0	
Urban							
Self Employed	32.5	32.9	37.0	22.1	30.1	32.8	
Regular Wage	41.0	42.7	27.6	12.6	28.3	24.3	
Casual Labour	20.6	18.5	67.4	46.5	34.7	38.8	
Others	6.0	5.9	46.2	15.0	6.9	4.0	
Total	100.0	100.0	39.9	22.1	100.0	100.0	

Source: Based on calculation from unit recrod NSSO data using official poverty line values.

Tamil Nadu is one of the states. Burange (2002) also shows a similar result that a State like Tamil Nadu has had a high growth in both employment for the organized manufacturing sector in the pre and post liberalization period as shown in the Table 9.4.

Table 9.4. Growth Rate in Organised Manufacturing Sector Employment and Output for Tamil Nadu and All-India (in brackets) (%)

	<i>Pre-liberalisation</i> (1980-81 to 1991-92)			Post-liberalisation (1991-92 to 1997-98)			
	MFG	Agri	Non-Agri	MFG	Agri-based	Non-Agri	
Employment			2.65 (1.77)		6.80 (4.42)	4.42 (3.82)	
Output	8.48 (7.72)	8.83 (7.27)		11.53 (9.90)	11.22 (8.26)	11.69 (10.69)	

Note: (a) Employment in measured in numbers and Output is value of output in constant 1980-81 prices. (b) MFG: Manufacturing Agri: Agriculture based industries, Non-Agri Non-agriculture based Industry.

Source: Burange (2002).

The impact of economic reforms on the agriculture sector and the unorganised industrial sector including the small scale sector where most of the employment is generated is not yet available.

9.13. Policy options

Employment planning is part of an integrated social planning that involves trade-off between short-term and long-term objectives. If a substantial proportion of the children and youth is attending educational institutions then the dependency ratio in the short run increases leading to an increase in the burden on the existing earning members but at the same time improving current educational standards could have higher returns in future. The State on its part may have to subsidise education and also ensure sustained employment and higher wages. Similarly, if a sufficiently large number of the illiterate and/or semi-literate people are poor and have to depend on the State for their survival then the state burden in terms of providing social security would increase leading to reduction in the use of scarce resources for more productive purposes. This in turn would hamper future growth in both employment and incomes. In other words, the objective of the State could be to not only create sustainable employment opportunities, but also to ensure literacy rates and educational levels to improve so that the work force predominantly consists of population ie, the age group of 20 to 59 years.

Given such an objective and based on the above observations on trend and pattern of employment, the following policy options could be considered for improving worker participation and to address underemployment in Tamil Nadu. It may be noted that at the current juncture of development it would be difficult to envisage no role for planning. However, the planners increasingly will have to play the role of coordinators and regulators. The focus of employment strategies thus has to come through coordinated planning among various government ministries and departments. Besides identifying strategies that link output (value addition) and employment more firmly, the emphasis has to be on bridging the gaps that exist between different segments namely: rural-urban, male female, educateduneducated, farm-non-farm, agriculture-non-agriculture and services-non-services.

As contribution to unemployment is mainly coming from agriculture and as the elasticity of employment to agriculture GSDP for Tamil Nadu was estimated at (-)0.62 for the period 1993-94 to 1999-2000 the primary emphasis should be in identifying non-farm employment opportunities, especially in rural areas (GoTN, 2000). As observed in East and South-east Asian countries, growth of non-farm sector could absorb the surplus labour from agriculture. A high growth rate in the non-farm sector could be achieved when the resources saved from agriculture are invested in these sectors for diversification (Radhakrishna, 2001). However, this would be possible only when the agriculture sector itself grows at a higher rate than what has been observed so far. Possible strategy for agricultural growth may involve diversification into high value crops. Therefore, it would perhaps be appropriate to allow the market forces to determine the supply and demand of factors and products and the policymakers' role should only be to facilitate such transformation by providing the

right incentives and infrastructure and at the appropriate time and level.

- An important feature of the non-farm activities should be their labour intensive nature. The nonfarm activities could include, (i) *Agriculture and Allied Services:*Agro-processing and agro-services, vegetable growing and processing, horticulture and floriculture, forest produce processing and sericulture and silk handlooms, fisheries and prawn cultivation and processing; (ii) *Service Sectors:* Construction and allied work; paramedical services, childcare and paravet services, transport of goods and services and tourism related services like hotels and restaurants; and (iii) *Non-service Sectors:* Handicrafts and handlooms, tailoring and cutting, stoneware and ceramics, cement and construction materials.
- ☐ In addition to labour intensive nature the produce of the non-farm activities should be export oriented from rural to urban as well as to foreign markets. Such emphasis would not only bridge the rural-urban gap but also provide higher value addition raising wage rates and hence lower poverty.
- Non-form employment strategies could be beneficial in bridging the gender gap as many of the activities mentioned above can be taken up as household enterprises through self help groups and small cooperatives.
- ☐ To facilitate such enterprises micro finance and micro insurance schemes should be encouraged which minimise the moral hazard and adverse selection problems that commonly plague the regular finance/insurance schemes.
- The current urbanisation trends that has favoured smaller towns should be sustained so that more balanced development across geographical areas with uniform employment opportunities is possible. Such

- emphasis would also arrest migration and reduce congestion in larger towns.
- ☐ The present pattern of declining child labour participation should be ensured in future also so that literacy rate of the population would improve.
- ☐ Similarly, the observed pattern of lower labour force participation in the age-group 15 to 19 years should be sustained along with emphasis to attain similar trend in the age-group 20 to 24 years also. Focus should also be on ensuring regional balance for this objective.
- As youth in the age-group 15 to 24 years would be attending higher educational institutions, the strategy to not bring them into labour force could provide future benefits in terms of larger pool of highly skilled and entrepreneurial labour force.
- While the employment in manufacturing and service sector has shown significant increase during nineties, an important feature of such improvement is that it took place mostly in organised sector. Policy reforms oriented towards tapping the employment potential of the unorganised segments of manufacturing and service sectors should be given emphasis.
- For the educated unemployed potential employment opportunities could arise in agricultural services like extension, repair services, utility retailing like electricity, and telecom services; IT and IT enabled services, tourism related services, health care related services, business and financial services. An important focus should be on providing training in polytechnics for the auto-manufacturing sector as Tamil Nadu has gained significant comparative advantage in this sector. Similarly, while sustaining the emphasis in computer software sector, the computer hardware sector should also be given a boost as this relatively untapped sector in India not only has employment

- opportunities but also could contribute towards economic growth through its export potential.
- At a more general level policy reforms including improving market access, credit facilities, judiciary to redress labour disputes, and infrastructure should be undertaken to enable smooth functioning of factor (including labour) and product markets.
- ☐ In order to participate more effectively in the liberalised trade regime under WTO, general awareness of all stake holders should be improved so that the adverse impacts of trade liberalisation on employment could be mitigated and beneficial impacts could be enhanced.
- ☐ Similarly, health care for all should be ensured as health status is directly related to overall productivity.
- Ensuring higher women's participation in its work force could have cascading effects on the development of the State as better economic status for women helps in the improvement of human development indicators within the household and hence better standards of living. Schemes such as creches for children of working mothers and facilitating better working conditions for pregnant and nursing mothers should be made effective both in organised and unorganised segments of the work force.
- Though the objective of reservations in education and employment could be worthy in providing equal opportunities for socially disadvantaged sections of the population, it is often misplaced due to adverse selection problems. Efforts should be made to ensure that such reservations not only reach the targeted groups, but are also extended to unorganised and rural sectors.

However, given the growing emphasis on providing reservations on the basis of economic status, a gradual shift towards such a regime should also be envisaged.

9.14. References

- Anon, 2000. Tamil Nadu Economic Appraisal 1999-2000, Department of Evaluation and Applied Research, GoTN, Chennai.
- Anon, 2001. Censusinfo India 2001 version 1.0.
 Office of the Registrar General of India, New Delhi.
- Anon, 2001a. National Human Development Report, Union Planning Commission, Government of India, New Delhi.
- Anon, 2001b. Report of the Task force on employment opportunities per year, Planning Commission, GoI, New Delhi.
- Anon, 2002. Food Insecurity Atlas of Urban India, MSSRF and WFP.

- Anon, 2003. Tenth five year plan, Tamil Nadu 2002-2007, State Planning commission, GoTN, Chennai.
- Burange, L.G. 2002. Growth of employment and output of organized manufacturing sector in India: An Interstate Analysis, Wp No.3(3)/2002, Centre for Advanced Study, University of Mumbai, Mumbai.
- 8. Radhakrishna, R. 2002. Agriculture growth, employment and poverty: A Policy perspective. Economic and Political weekly.
- Vaidhyanathan, A. (2002) Food consumption and Nutrition Status. A re-examination based on Indian evidence, Mimeography, Madras Institute of Developmet Studies, Chennai.
- Anon, 2003. Tamil Nadu Human Development Report, Government of Tamil Nadu.