## Research Study Series Number 67

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# Urban Sector Profile: Tamil Nadu

Sponsored by
Asian Development Bank, Manila, Philippines
Urban Sector Profile Project
ADB TA No. 2098-IND

National Institute of Urban Affairs New Delhi, India April, 1998

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#### **PREFACE**

The Asian Development Bank (ADB) has provided a technical assistance (TA) Grant to the Ministry of Urban Affairs and Employment, Government of India, for preparation of an Urban Sector Profile. The primary objectives of the TA are to address the urgent sectoral issues and to guide ADB's future sectoral investment and technical assistance programming in India. The National Institute of Urban Affairs, New Delhi, has been entrusted with the responsibility of coordinating all the activities of the TA.

As a part of the Urban Sector Profile Project, State Urban Profiles have been prepared for five states, namely, Andhra Pradesh, Gujarat, Karnataka, Rajasthan and Tamil Nadu. Each State Profile also focuses on a city which either has significant potential for urban-economic development and/or has acute urban problems which need immediate attention.

The focus of the current urban reforms in India is on improving governance at the state and local levels. The state and city profiles would enable identification of specific needs for reforms as well as areas of strategic interventions. The state and city profiles cover analysis of urbanisation trends and patterns, the legislative and institutional framework for urban development, status of urban infrastructure and services, review of municipal finance and estimates of flow of finances for urban development in the state. These profiles also make an attempt to identify critical areas for urban sector reforms and potential sub-sectors/areas which require further investment and development as well as major strategies for urban development.

The state and city profiles have been prepared with the help of regional institutions and local resource persons. I very much appreciate the cooperation of the regional institutions and contribution made by the resource persons. At the Institute, Dr. Pushpa Pathak, Associate Professor, has coordinated the research work that was undertaken by the regional institutions and local resource persons as well as the preparation of these reports for publication by the Institute staff.

I am grateful to the Ministry of Urban Affairs and Employment, Government of India and the Asian Development Bank, Manila for their support. I hope that these studies will provide useful insights for formulating their state-level interventions for urban development.

April 1998

Vinod K. Tewari

Director

#### **FOREWORD**

Tamil Nadu was identified as one of the five states, and Coimbatore, a fast growing metropolis in the State, for preparation of the urban sector profile by the National Institute of Urban Affairs (NIUA) in consultation with the National Government. The Centre for Human Settlements, School of Architecture and Planning, Anna University, Chennai has been entrusted by NIUA with the task of preparing the Tamil Nadu Urban Sector Profile and Coimbatore City Profile.

This project on preparation of these State and City profiles was started in January, 1997, and the interim report was completed and presented to the National Institute of Urban Affairs, New Delhi in the first week of April 1997. The Director, NIUA, while appreciating the quality and contents of the Interim Report as the best among such reports for a few other states, desired, towards the end of May'97, certain additions and updation of some information. The present report has accordingly been revised updating the data and information as available, and elaboration of relevant sections. A number of illustrations add to the vivid understanding of the various aspects in the report.

At the instance of Dr. A.N. Sachithanandan, Professor In-charge, Centre for Human Settlements, Anna University, the project has been Coordinated by Prof. S. Arunachalam, Professor of Planning, and Mr. S.P. Sekar, Assistant Professor, has co-coordinated the project.

The NIUA identified Ms. S. Malathi, IAS, Secretary to the Government of Tamil Nadu in the Department of Municipal Administration and Water Supply as the Resource Person on the project. She has envinced a keen interest in the project and provided the Project Team with the latest available information relating to the finances and status of urban infrastructure and services in the urban local bodies - Municipal Corporations, Municipalities and Town Panchayats, and the latest position of the State Government efforts in building the financial and management capacities of the urban local bodies as follow up of 74th Constitution Amendment Act. We are greatly indebted to her.

The Directorate of Town and Country Planning, Government of Tamil Nadu has provided information relating to the urban development strategy and policy in the State. We are very grateful to the Director, and the Additional Director, DTCP.

The Senior Technical Director, Dr. A. Mohan of the National Informatics Centre, Rajaji Bhavan, Besant Nagar, Chennai has been extremely helpful in getting the Team the salient data on the urban demographic characteristics of the State as well as the profile of Coimbatore district. We owe our sincere thanks to him.

Mr. S.K. Prabhakar, IAS, Commissioner, Coimbatore Municipal Corporation, and his Heads of Departments, Mr. G. Manian, Deputy Director, Town & Country Planning, Coimbatore, had extended their conscious cooperation and assistance in providing the city level information and guiding us through the preparation of the city profiles. We are grateful to them.

Our Research Assistants/Investigators and field staff have done an excellent job during the preparation of the project report and we thank them all.

We are sure that this report would adequately serve the intended objectives of the project.

Prof. S. Arunachalam Prof. of Planning Project Co-ordinator Dr. A.N. Sachithanandan
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#### **ABBREVIATIONS**

AMC Assets Management Company

AP Andhra Pradesh

BOT Build, Operate and Transfer

BOOT Build, Operate, Own and Transfer BOLT Build, Operate, Lease and Transfer

BOO Build-Own-Operate
BT Bituminous Top

CMDA Chennai Metropolitan Development Authority
CIDCO City and Industrial Development Corporation

CBO Community Based Organisation
CSO Central Statistical Organisation
CMA Chennai Metropolitan Area

CG Centre of Gravity

CMWSSB Chennai Metropolitan Water Supply and Sewerage Board

DCR Development Control Rules

DMA Directorate of Municipal Administration

DTP Directorate of Town Panchayats
DRD Directorate of Rural Development

DDP Detailed Development Plan
DPC District Planning Cells

DTCP Directorate of Town and Country Planning DCB Demand, Collection and Balance Statement

EAS Employment Assurance Scheme
EWS Economically Weaker Sections
GTN Government of Tamil Nadu
GUD Guided Urban Development

HDFC Housing Development Finance Corporation HUDCO Housing and Urban Development Corporation

IDSMT Integrated Development of Small and Medium Towns

ILFS Infrastructure Leasing and Financial Services
IUDP Integrated Urban Development Programme
IDFC Infrastructure Development Finance Corporation

LIC Life Insurance Corporation LPA Local Planning Area

LB Local Body

Lpcd Litres per capita per day
LIG Low Income Group

MTDS Madras/Chennai Transmission, Distribution and Sewerage Project

MIDC Metropolitan Infrastructure Development Corporation

MUDF Madras/Chennai Urban Development Finance

MLD Million Litres Per Day

MMDA Madras Metropolitan Development Authority

MUDP Madras Urban Development Project

MMA Madras Metropolitan Area NGO Non-government Organisation

NRY Nehru Rozgar Yojana NSS National Social Service

NIPFP National Institute of Public Finance and Policy

O and M Operation and Maintenance
PMG Project Management Group
PWD Public Works Department
R & D Research and Development

SC Scheduled Caste ST Scheduled Tribe

SIP Slum Improvement Programme

TN Tamil Nadu

TNUDF Tamil Nadu Urban Development Fund

TNMUDF Tamil Nadu Municipal Urban Development Fund

TNUDP Tamil Nadu Urban Development Project

TWADB Tamil Nadu Water Supply and Drainage Board

TNHB Tamil Nadu Housing Board

TNSCB Tamil Nadu Slum Clearance Board

T & CP Town and Country Planning

TNIUS Tamil Nadu Institute of Urban Studies

TNWSSB Tamil Nadu Water Supply and Sewerage Board

UNICEF United Nations International Children's Education Fund

UGD Underground Drainage
UBS Urban Basic Services

URBIS Urban and Regional Information System

URGD Urban-Rural Growth Differential

ULB Urban Local Body
ULC Urban Land Ceiling
WBM Water Bound Maccadam

SECTION	N I - TAM	IL NADU	J <b>STATE</b>	PROFILE
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#### I. TRENDS AND PATTERNS OF URBANISATION

#### INTRODUCTION

The state as per the 1991 Census covers an area of 130,058 sq.km. The total population is 55.86 million with a growth rate of 15.39 per cent during the decade 1981-91 as against 17.50 per cent during 1971-81. The sex ratio has declined to 974 in 1991 from 992 in 1961.

Urbanisation is progressive over the decades registering 34.20 per cent in 1991 from 32.95 per cent in 1981. The participation rate as per 1991 census is 40.81 per cent against 39.31 per cent in 1981. The literacy rate in 1991 was 62.66 per cent, a great jump from 54.39 per cent in 1981. Number of towns in 1991 was 469 as against 434 in 1981, and there are 16,780 villages including 958 uninhabited villages as per 1991 census.

Urbanisation as a natural process is a determinant as well as consequence of economic development. But urbanisation can also be deliberately caused or induced by manipulating spatial mix of development programmes. The present trend of growing concentration of urban population and activities in some dominant centres can be analysed as the direct consequence of economic and political power presently prevailing there.

Spatial distribution of urban population in India presents an uneven picture with very wide variations between the high and the low level areas. The distribution of urban centres is largely influenced by location of certain economic and other activities and is dependent on a host of factors concerned with all sectors of economy. The strong correlation between per capita income and the levels of urbanisation is too well known.

Spatial aspects of distribution of urban centres are related to the space-based locational attributes of the region in relation to economic development relating to both inputs and factual achievements, and above all, to the demographic profile.

Demography is a very important character of any urban settlement, for basically they influence the urban growth. Population exercises its decisive influence on the growth, spacing and functional landscape of urban settlements. But as the urban centres are the melting pots for the crowding population, they are composed of variable demographic components.

#### Measurement of Concentration

Concentration is an index of congestion and imbalance in the distribution of urban population over space. It is found that the population tends to concentrate in bigger urban units, and impedes the balanced development. Concentration of urban population in Tamil Nadu over a period of time has been analysed by employing the "Centre of gravity method". In this method, the centres of gravity of the geographical area during the decades are arrived at by treating population of various urban centres as point loads. The method is clear from the Figures 1.1. and 1.2. Fig.1.2 shows that the centre of gravity has moved in the north-west direction, viz., in the direction of Chennai, between 1901 and 1981. This implies that the concentration and the consequent domination of Chennai had increased. But between 1981 and 1991, the centre of gravity has moved in the south-west direction towards the Coimbatore group of cities. This indicates the rise of Coimbatore, Tiruppur and Erode as cities to reckon with to counter the growth of Chennai.

#### **Urban Primacy**

While urban primacy is an index of the prominence of a national city, it also represents a distortion in the morphology of its urbanisation. If a single city tends to take away a large share of urban population, it reflects a polarised pattern of development and concomitantly shows a spatial imbalance to the pattern of urbanisation process.

Table 1.1. shows the measure of urban primacy in Tamil Nadu and a few other comparable states. Comparable states are those on par with Tamil Nadu in terms of level of urbanisation and existence of metropolitan cities.

As may be seen the Table, the concentration in the primate city of Tamil Nadu is not even half of that in West Bengal. However, while the content of the largest city in Tamil Nadu has increased slowly and steadily, in West Bengal the content of population has declined rapidly. In Karnataka it increased with leaps and bounds. The contribution of the second ranking cities to the total urban population in Tamil Nadu, Gujarat, Karnataka, and Andhra Pradesh has been considerable, while that in West Bengal and Maharashtra it is insignificant. Urban agglomerations hold the day in West Bengal, Maharashtra, Tamil Nadu and Gujarat. It is interesting to note that while the concentration of population in urban agglomerations steadily goes falling in West Bengal, in all the other 5 states, it is on the increase over the three decades, though in Andhra Pradesh and Maharashtra, it fluctuated with a slight dip in 1981.

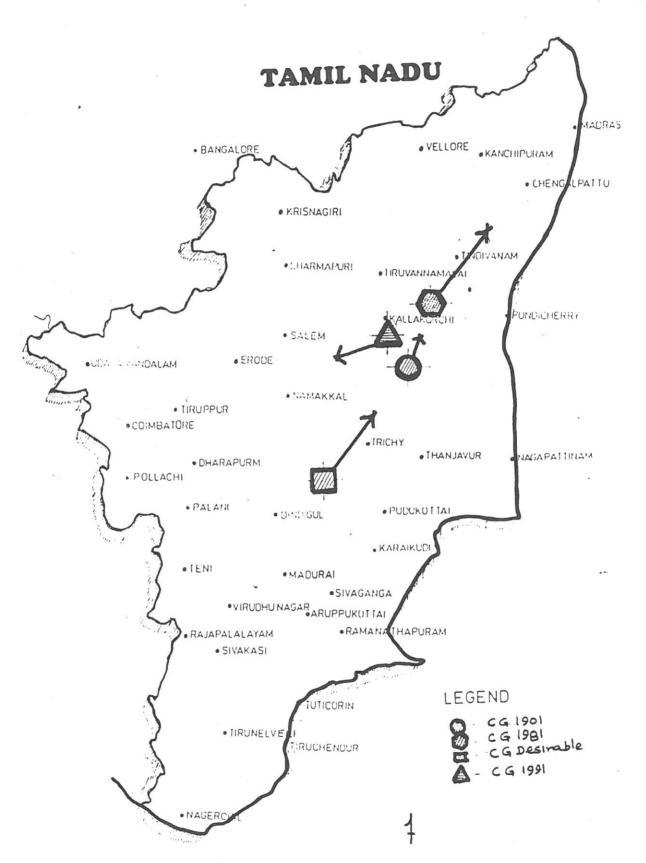
Table 1.1 Measures of Urban Primacy/Concentration - A Comparison among Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Gujarat and West Bengal, 1971, 1981 and 1991.

M	Ta	mil N	adu	K	arnata	aka	And	hra Pr	adesh	M	aharas	htra	Т	Gujara	o.t	Τ,	Vest D	
Measure of Urban Primacy		Т	Т		T	T	Aind	I	l	IVI	T	T	-	Gujara	1	+-'	Vest B	engai
Ciban Timacy	1971	1981	1991	1971	1981	1991	1971	1981	1991	1971	1981	1991	1971	1981	1991	1971	1981	1991
Percentage of population in the largest urban settlement in relation to total urban population		26.9	27.8	23.4	27.2	30.1	21.3	20.3	23.6	38.0	37.5	41.2	23.4	24.0	23.8	67.6	63.6	58.6
Percentage of population in the first five largest urban settlements in relation to total urban population		45.3	48.6	39.3	42.2	45.8	35.5	35.1	40.1	55.8	50.2	59.2	46.9	46.3	49.3	74.6	71.0	67.8
Percentage of Population in the urban agglomeration to the total urban population	62.8	64.2	65.7	38.7	40.9	55.6	35.5	31.6	49.6	65.2	64.9	69.7	58.4	60.8	74.5	80.9	79.5	77.2
Ratio between the prime city and second city in terms of population	4.3	4.7	4.7	4.4	5.5	6.3	4.9	4.2	4.1	5.3	4.9	5.1	3.5	2.8	2.2	29.1	25.1	14.3
Ratio between the population of prime city and that of next four cities	1.4	1.5	1.5	1.4	1.8	1.9	1.5	1.4	1.5	2.1	2.0	2.3	1.2	1.1	0.9	9.8	8.5	6.4

CENTRE OF GRAVITY WITH 1901
URBAN POPULATION AS POINT LOADS

CENTRE FOR HUMAN SETTLEMENTS SCHOOL OF ARCHITECTURE & PLANNING ANNA UNIVERSITY CHENNAI - 600 025.

Fig 1.2 Measure of Concentration - CG Movement



CENTRE FOR HUMAN SETTLEMENTS SCHOOL OF ARCHITECTURE & PLANNING ANNA UNIVERSITY CHENNAI - 600 025.

#### Metropolitan Dominance

The evolution of metropolitan dominance is depicted in Fig.1.1. The metropolitan dominance of Tamil Nadu had been slow and steady till 1991, when Coimbatore and Madurai attained metropolitan status, while those of West-Bengal and Maharashtra has declined and fluctuated respectively. Out of the three metropolises in Tamil Nadu, Chennai had maintained its supremacy and Coimbatore had overtaken Madurai in 1991.

#### Town-size Distribution in Tamil Nadu

Town size distribution in Tamil Nadu is depicted in Fig.1.2. It may be seen that the first rank city, namely, Chennai distorts the entire system. Otherwise, it conforms to rank-size rule. This establishes the need to decentralise and de-emphasize Chennai.

#### Stability of Towns by Improvement in their Overall Rank

Variation in ranking of towns between 1971-81 and 1961-71 has been assessed. This analysis reveals that towns/urban agglomerations in the upper classes are more stable than those in the lower classes. Among the cities above 500,000 population, only one city namely Salem moved up by one rank between 1971-81 and Tiruchi moved up by one rank between 1961-71. Among the other class I towns, Valparai was the only town which moved up by three ranks in 1971-81 while Nagercoil, Kumbakonam and Tirunelveli moved up by three ranks. Between 1961-71 the maximum ranks up for the corresponding towns was only two. Class-wise maximum ranks between the two decades are indicated below in Table 1.2.

Table 1.2 Maximum Class-wise Ranks Up, 1961-71 and 1971-81

Population Range	<b>Maximum 1961-71</b>	Rank up 1971-81
500,000 +	1	1
100,000-499,999	2	3
50,000-99,999	12	11
20,000-49,999	22	51
10,000-19,999	86	46
5,000-9,999	59	113
Below 5000	68	130

#### Stability Based on Ratio of Towns in Different Classes

The stability of the system based on the relation between urban centres of class I and II, III and IV, IV and V, and V and VI have been worked out since 1901 (Table 1.3).

Table 1.3 Stability based on Class-size Numbers, 1901-1981

Size class	1981	1971	1961	1951	1941	1931	1921	1911	1901
I & II	4.75	4.34	4.0	4.2	3.8	4.1	4.4	4.1	5.6
II & III	1.0	1.0	1.1	1.3	1.2	1.1	1.0	1.0	1.2
III & IV	1.5	1.5	1.3	1.0	1.1	0.7	1.4	1.5	1.5
IV & V	1.2	1.1	1.2	1.4	1.4	1.1	1.3	1.4	1.1
V & VI	1.6	1.9	1.4	1.3	1.1	1.1	1.2	1.1	1.2

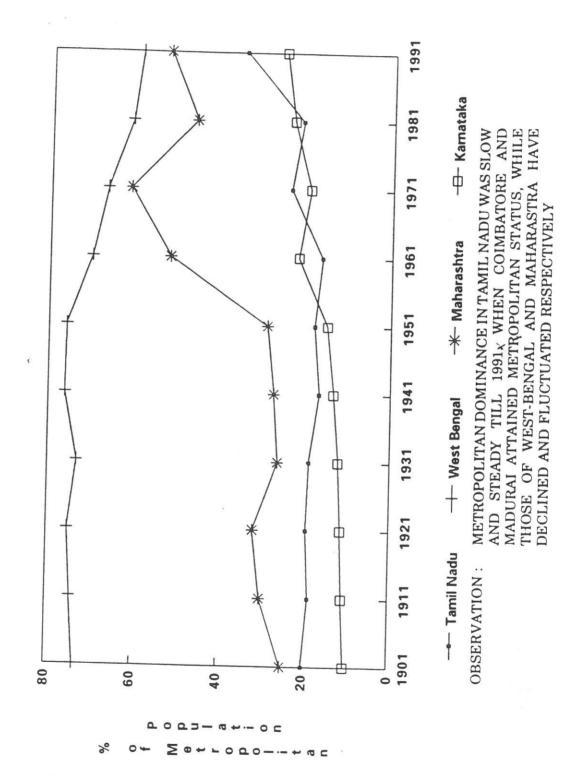
Source: Analysis based on census data, 1901-1981.

The urban system appears to be stable and fluctuates within a certain range, as seen from Table 1.3.

#### Statutory Towns

The number of statutory towns reduced in Tamil Nadu and Karnataka. Tamil Nadu has retained its second position in terms of number of towns next to Uttar Pradesh. From the composition of statutory and census towns for 1981 and 1991, it may be observed that Tamil Nadu is more stable and balanced in view of the factor that the percentage of towns remain in the same range during both the decades. The composition of census towns and statutory towns in Maharashtra and Gujarat are equally stable. Since census definition for town is uniform throughout India, the variation lies in statutory towns (Table 1.4).

FIG.1.3 EVOLUTION OF METROPOLITAN DOMINANCE: A COMPARISON BETWEEN TAMIL NADU AND OTHERS: 1990-91



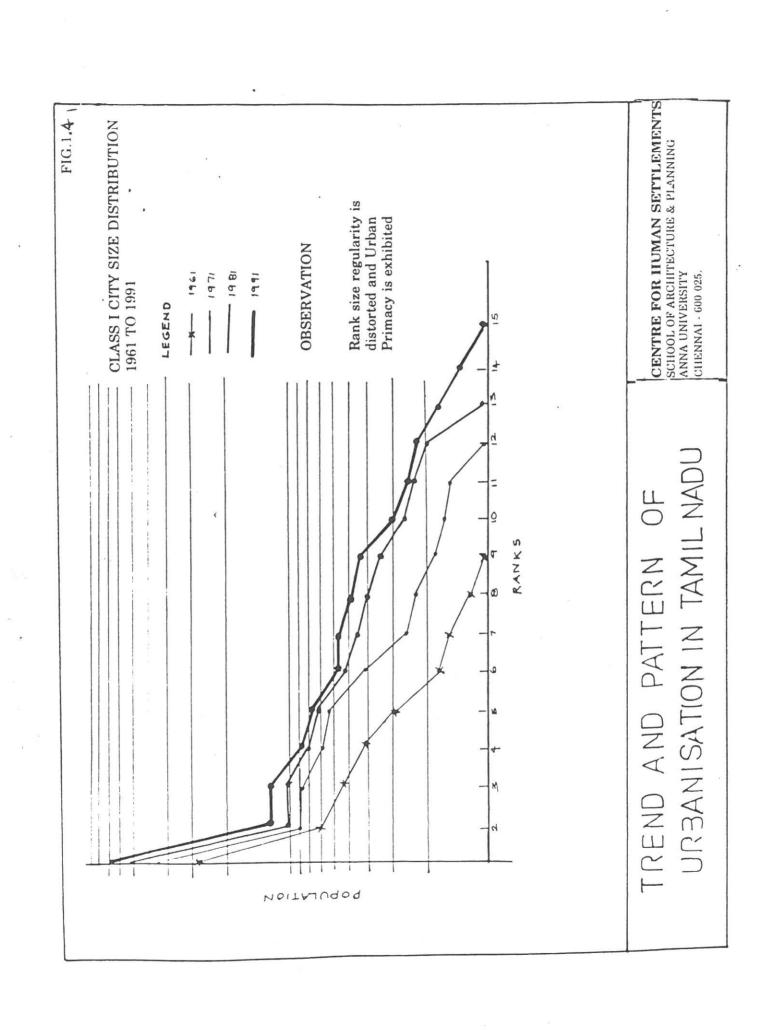


Table 1.4 New Towns and De-classified Towns in Tamil Nadu and Other Selected States, 1981 and 1991

					Numbe	er of Tow	ns in 1991			
States	No. of Towns in	De	classified		Merged	S	tatutory		Census	Total
	1981	No.	Percen- tage	No.	Percen- tage	No.	Percen- tage	No.	Percen- tage	No.
Tamil Nadu	434	3	1.2	-	0	-	-	38	14.6	469
Andhra Pradesh	252	13	5.5	12	5.6	5	2.3	32	15.0	264
Karanataka	281	19	7.6	7	2.8	6	2.4	45	1.0	306
Maharashtra	307	11	4.0	22	7.6	14	4.8	48	16.6	336
Gujarat	255	-	i#1	20	7.9	1	0.4	28	16.6	264
West Bengal	291	3	2.3	17	10.6	1	0.6	110	68.8	382

#### **Inter-class Mobility**

Inter-class mobility shows up and down movements of the urban centres in the class size scale for the period 1981-91 and 1971-81 (Tables 1.5 and 1.6).

Table 1.5 Inter-Class Mobility of Towns, 1981-91

			Numb	er of Towns	in 1991			No. ar	nd percentage o	f towns
Size	I	11	III	IV	V	VI	Total	in same class	moved upwards	moved down- wards
I	21	-	-	-	-	-	21	100.00	0	0
II	5	36	-	-	-	-	41	87.8	12.2	0
Ш		12	77	-	-	-	89	86.5	13.5	0
IV	-	-	33	88	1	1	123	71.5	26.8	1.7
V	-	-	1	28	60	1	90	66.7	32.2	1.1
VI	-	-	-	3	17	50	70	71.4	28.6	0
New Towns	-	-	1	13	19	5	38			
Declassifi-ed Towns	-	-	-	-	-	3	3			
Total	26	48	112	132	97	54	469			

Source: Census of India, 1981 and 1991.

Table 1.6 Inter-Class Mobility of Towns, 1981-91

			Numl	ber of Town	s in 1991	,		No. and percentage of towns				
Size	I	Ш	III	IV	v	VI	Total	in same class	moved upwards	moved downwards		
I	17	_	-	-	-	-	17	100.00	-	3=.		
II	4	23	-	-	-	-	27	85.2	14.8	0		
III	-	18	60	1	-	-	79	74.4	24.3	1.3		
IV	-	-	29	88	-	1	118	74.6	24.6	0		
V	-	-	1	33	51	12	97	52.6	35.1	12.3		
VI		-	1	1	22	77	101	66.3	33.7	0		
New Towns	-	-	3	10	14	3	30					
Total	21	41	89	123	90	70	434					

Source: Census of India, 1981 and 1991.

The upward movement of class-wise towns are inversely proportional to class-size, i.e. more percentage of towns in the lower classes moved upwards than that in higher classes, and more percentage of towns stagnated in the same class in the upper rather than in lower classes. It could be observed that only the class VI towns have reduced in number.

One general observation that could be made is that as the population size increased, the percentage of towns retained in the same class also increased. Hence, it may be postulated that lesser the size of the settlement, higher is the mobility. It can be observed that demotion starts only after class size IV. This supports the hypothesis that the largest class has the least possibility of experiencing decline.

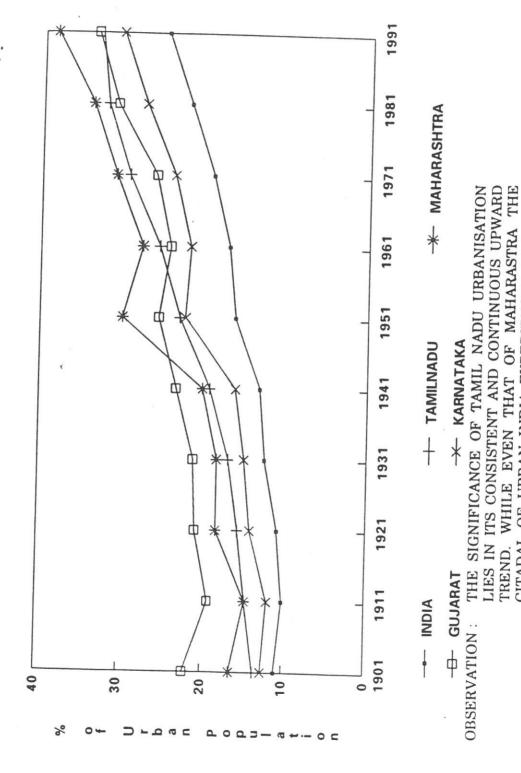
#### URBANISATION

#### Proportion of Population in Urban Areas

Urbanisation considered earlier as an incidence to economic development has become today an integral part of economic development. Urbanisation refers to the proportion of population that lives in urban areas. In the case of India and other developing countries, urbanisation is not sustained and supported by stable economic base. The increase of population in urban areas is largely due to distress migration from rural areas. But urbanism is one in which people have an urban way of life irrespective of the factor whether they live in urban or rural areas. The urban process is applicable to developed countries where most of the people have access to modern facilities.

TAMIL NADU  STATE TO THE CONTROLL OF THE CONTR		FIG.1.5	LEVEL OF URBANISATION BY STATES 1971, 1981, 1991.
LEGEND    LEGEND   1971   1981		Maharashtra MII, NADII	
Mizoram  Mizoram  Mizoram  1. Maharashtra a Tamil Nadu ar Consistently other States TN in '91  2. West Bengal s same promise initial decading in subsequent decades.  3. Karnataka gromuch impressi subsequent described of ARCHITETOR HUMAN SESCHOOL OF ARCHITECTURE & PARCHITECTURE & PARCHI		Goa	
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FIG.1.5 TREND OF URBANISATION IN TAMIL NADU VIS - A - VIS OTHER STATES 1901 - 1991



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TAMIL NADU WHICH ENJOYED THE SECOND RANK SINCE 1961 HAS BEEN RELEGATED TO THIRD PLACE WITH GUJARAT IN SECOND POSITION.

#### Level of Urbanisation in Tamil Nadu

Tamil Nadu which was the second highest urbanised state in the country next to Maharashtra as per 1981 census has been relegated to the third place as per 1991 census. The level of urbanisation of Tamil Nadu as per 1991 census is 34.20 per cent while that of Maharashtra and Gujarat is 38.73 per cent and 34.40 per cent respectively. According to 1991 census, about 19 million people in Tamil Nadu live in 469 urban settlements/260 urban agglomerations and towns. The level of urbanisation of Tamil Nadu has been consistently ahead of most of the other states. Fig.1.5 shows the level of urbanisation in Tamil Nadu during 1971, 1981 and 1991. In 1901, there were only two class I cities in Tamil Nadu, but that grow to 25 since 1991.

#### **Trend of Urbanisation**

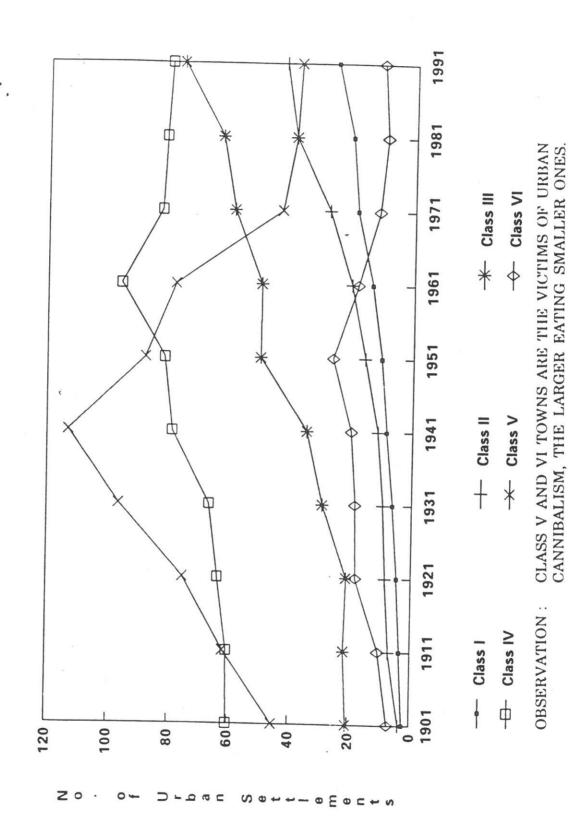
The trend of urbanisation in Tamil Nadu vis-a-vis other comparable states is indicated in Fig.1.5.1. The significance of Tamil Nadu's urbanisation lies in its consistent and continuous upward trend, while even that of Maharashtra, the citadel of urban India, experienced decrease and downfall.

The urban population increased from about 3 million in 1901 to 19 million in 1991. While the number of urban settlements increased fifteen-fold, the population increased only six fold in Tamil Nadu. But the reverse is the case at the national level, where the population increased eight-fold while the towns increased just two-fold. Thus, in Tamil Nadu, a situation of having a large number of towns with small population base cause difficulties due to lack of threshold population for employment generation and sustainable economic base creation.

Generally, both at the national level as well as at Tamil Nadu level, class IV and class V towns are seen in large numbers while class VI towns are on the decline. Fig.1.6 shows the growth of class wise urban settlements. It may be seen that class VI towns declined faster than class V in number.

At the district level, Coimbatore is the most urbanised district while Dharmapuri is the least urbanised district. Incidentally, Coimbatore is the most industrialised district while Dharmapuri is the most backward district in every aspect. There are 22 taluks in the state either without urban centres of +20,000 population or even less.

FIG. 1.6 TREND OF GROWTH OF CLASS WISE URBAN SETTLEMENTS - 1901 TO 1991



EXCEPTING CLASS I AND II ALL OTHER HAVE DOWN

#### **Growth Rate**

#### Growth Rate of Tamil Nadu vis-a-vis other States

During 1981 - 91, Tamil Nadu had the least growth rate of population among the states in India. Both urban and rural growth rates have declined due to the conscious family planning efforts. Table 1.7 gives growth rates over the period 1961 to 1991 for urban agglomerations/towns belonging to different size classes in Tamil Nadu, Andhra Pradesh, Karnataka, Gujarat, Maharashtra and West Bengal.

Unlike in the other three states where it is inconsistent, the declining trend in the growth rate of Tamil Nadu is very patently and clearly visible. Class I cities of Gujarat and Andhra Pradesh have shown higher growth rates when compared with that of other class-sizes. A correlation, though not very strong, appears to exist between class size and decadal variation, at the aggregated level. Thus, the hypothesis that larger cities grow more or less rapidly than smaller ones may be said to be correct to some extent at an aggregate macro level. Negative growth rate is observed only in class sizes IV and below except in West Bengal where a negative growth of 21.1 per cent was recorded in class II towns during 1981-91. This pattern suggests that once a town crosses a threshold size, its sustenance and growth is assured.

Table 1.7 Class-wise Urban Growth Rates in Tamil Nadu, Karnataka, Maharashtra, Gujarat Andhra Pradesh and West Bengal 1961-71, 1971-81 and 1981-91

			Decada	al Variation in Population (Per cent)										
Class Size	,	Tamil Nadı	1		Karnataka	ı	N	Aaharasht	ra					
Class Size	61-71	71-81	81-91	61-71	71-81	81-91	61-71	71-81	81-91					
I	54.0	31.9	20.7	35.6	58.5	42.1	51.2	48.8	43.4					
II	30.1	24.1	14.1	41.6	47.2	47.3	41.9	19.9	51.4					
III	33.5	25.1	14.4	34.9	39.4	28.7	35.7	39.6	31.5					
IV	34.0	20.8	15.9	27.4	32.1	-27.3	8.9	3.6	-5.3					
V	25.0	17.2	18.5	33.7	35.4	-5.9	-17.0	-23.4	-7.2					
VI	15.1	26.4	29.5	23.5	29.1	-23.4	-12.3	16.9	-39.1					

Class Size	Decadal Variation in Population (Per cent)											
		Gujarat		An	dhra Prad	esh	West Bengal					
	61-71	71-81	81-91	61-71	71-81	81-91	61-71	71-81	81-91			
I	55.8	67.1	52.9	42.0	46.0	77.5	27.4	36.0	36.7			
II	52.7	32.9	17.3	18.9	37.1	11.3	85.8	36.0	-21.1			
III	8.2	19.8	5.4	34.7	44.9	9.1	12.0	8.8	32.6			
IV	50.8	12.8	0.7	29.1	42.6	-38.0	12.7	13.8	-6.3			
V	15.3	-21.1	-13.0	31.0	42.4	47.4	-3.8	-21.9	66.7			
VI	-51.2	29.5	32.7	-	-	41.9	-49.3	184.7	-7.8			

Source: Census of India, 1971,1981 and 1991.

#### Trend of Population Growth

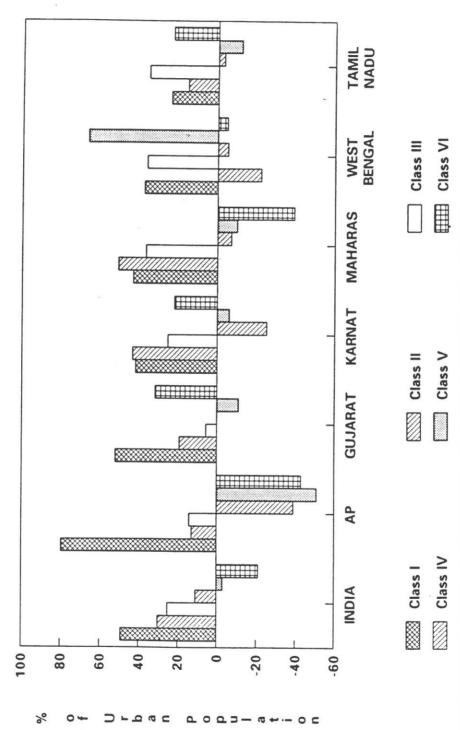
Level of urbanisation does not appear to contribute for the growth-rate. If we consider the decadal growth-rate of urban population during 1971-81 and 1981-91, Tamil Nadu has the least growth-rate in both the decades. If we consider the population trend, in the six classes of towns in India and Tamil Nadu, the general trend and the pattern is more or less similar. In both the cases, class I towns account for more than 60 per cent, the class VI towns have almost touched the nodir. In both the cases, class II towns are the only other category which either shows an upward trend or maintains its position; Class III, IV and V towns have shown a declining trend (Fig.1.7). This bears evidence for the vulnerable position of small and medium towns.

#### Growth-rate of Cities and their Fringe Areas

A further analysis of the population growth in urban agglomerations has brought out the fact that rate of growth has been higher in the fringe areas than in the city itself. Table 1.8 shows the rate of growth of population in the cities and their fringe in the urban agglomerations in Tamil Nadu during the period 1961-1971, 1971-1981 and 1981-1991.

Growth rate in the hinterland exceeds that in the heartland. However, the population of cities is larger in absolute terms in all the urban agglomerations excepting that of Coimbatore and Tirunelveli. Tiruppur urban agglomeration has the highest growth rate among all the urban agglomerations in 1981-91. Only in this case, Tiruppur has higher growth rate than its fringe. In all other cases, growth rate of fringes are higher than those of city areas. Concentration of population within city limits has been accentuated in Coimbatore, Madurai and Tiruppur. In all other urban agglomerations, dispersal has taken place.

FIG.1.7 PERCENTAGE INCREASE OF URBAN POPULATION IN EACH SIZE CLASS - 1981-1991



OBSERVATION :TAMIL NADU IS THE ONLY STATE WHERE THE GROWTH RATE OF CLASS VI TOWNS IS HIGHER THAN THAT OF CLASS I TOWNS

Table 1.8 Rate of Growth of Population in City and Fringe of Urban Agglomerations, 1961-71, 1971-81 and 1981-91

Urban	No. of Urban Settlements			Percentage of City Population			Growth Rate of City			Growth Rate of Urban Agglomeration		
Agglomerations	1991	1981	1971	1991	1981	1971	1981- 91	1971- 81	1961- 71	1981- 91	1971- 81	1961- 71
CHENNAI	57	49	50	70.8	77.9	76.4	10.8	42.8	29.4	29.5	64.3	62.1
COIMBATORE	20	17	21	75.1	48.4	76.6	21.1	24.5	24.6	23.4	64.3	25.0
MADURAI	13	10	15	87.0	77.2	90.4	15.9	29.3	29.5	20.5	44.9	27.8
TIRUCHI	13	12	9	54.4	66.2	59.3	6.8	23.0	17.8	16.7	37.1	31.2
SALEM	22	19	18	63.4	74.1	69.6	0.7	23.9	17.1	10.6	52.5	24.5
TIRUNELVELI	11	11	11	37.1	40.7	39.9	5.4	23.3	18.8	13.2	40.3	21.2
ERODE	8	7	5	44.4	62.0	51.5	11.6	42.5	35.3	29.5	64.3	62.7
TIRUPPUR	6	6	6	76.9	75.0	76.4	42.3	42.0	45.8	41.6	54.3	42.8
VELLORE	12	8	7	56.6	77.0	70.5	1.0	22.3	25.3	18.8	28.9	38.4
TUTICORIN	10	10	10	72.2	82.4	76.9	6.3	25.0	24.2	13.4	42.6	37.8

Source: Analysis based on census data of 1961, 1971, 1981 and 1991.

#### **Urban-Rural Growth Differentials (URGD)**

Urban-Rural Growth Differentials (URGD) is expressed as the difference in the rates of growth of urban areas and rural areas. URGD is a negative factor. Lesser the URGD, more is the articulation and integration of the urban settlement system. Urban - Rural Growth Differentials have been comparatively minimum and have declined over a period of time in Tamil Nadu compared to the other states (Table 1.9 and Fig.1.8) but closely followed by West Bengal and Karnataka. In other states, the difference is substantial indicating less integrating and articulation between urban and rural habitations. Urban-rural growth differentials have been comparatively minimum and have declined over a period of time in Tamil Nadu as against other states.

#### Sex-Ratio

#### Regional Grouping by Sex-ratio

Sex-ratio is the number of females per 1000 males. It is one of the basic characteristics which has a close bearing on the socio-economic and demographic aspects of the society.

Table 1.9 Urban-Rural Growth Difference in Tamil Nadu, Karnataka, Andhra Pradesh, Gujarat, Maharashtra and West Bengal, 1901 - 1991.

Decade	Tamil Nadu		Karnataka		A.Pradesh		Gujarat		Maharashtra		West Bengal	
	Urban Growth Rate	URGD										
1901-1911	15.6	8.2	-4.6	-9.4	17.7	5.7	-7.1	12.1	1.0	12.7	13.7	5.2
1911-1921	8.7	6.3	17.7	21.3	1.0	1.3	8.7	2.6	18.7	-6.8	7.2	4.4
1921-1931	23.4	17.7	21.6	14.2	23.2	11.3	14.9	12.4	15.5	14.8	15.0	7.0
1931-1941	22.3	12.7	23.0	14.1	36.1	26.2	38.4	14.3	27.1	8.5	63.7	15.6
1941-1951	41.8	33.7	61.7	51.0	47.9	39.1	20.1	13.3	62.4	7.7	32.5	8.3
1951-1961	22.6	14.2	18.3	-4.3	15.8	0.1	41.0	29.4	21.3	24.5	36.0	31.8
1961-1971	38.4	22.3	35.2	14.2	33.9	15.8	41.4	25.4	40.8	22.2	28.4	26.4
1971-1981	27.8	15.0	50.4	31.7	48.3	31.1	41.4	22.3	40.0	17.6	31.7	20.4
1981-1991	17.6	5.6	25.5	9.7	35.5	18.8	33.6	18.6	38.7	20.4	28.9	5.9

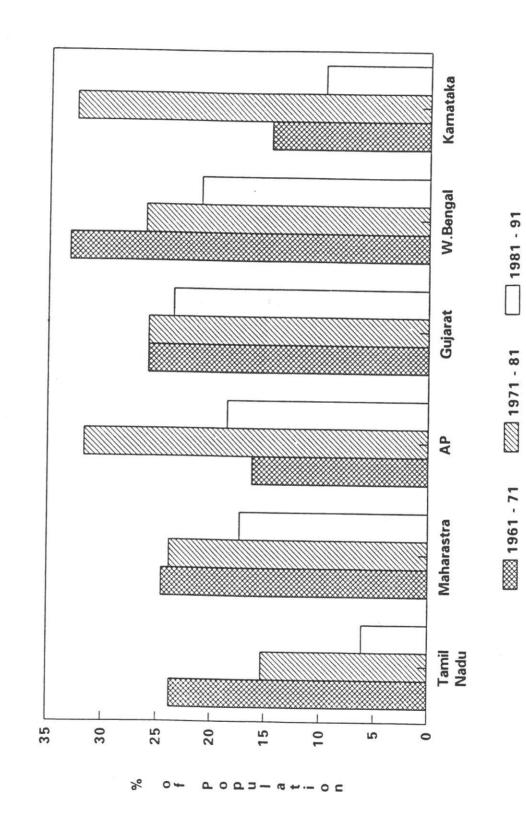
Source: Analysis based on census data 1901-1991.

Higher the sex-ratio in a settlement, bigger is the out-migration of male members. As male members predominantly migrate for employment, sex-ratio may atleast roughly indicate the employment opportunities in any settlement. In Tamil Nadu, the southern districts have a propensity for higher sex-ratio. Thanjavur, Tirunelveli, Ramnathapuram and Pudukottai districts form one block which have a sex-ratio of more than 1000. This may be attributed to the large out-migration of male members. As per 1991 census, the following districts have sex-ratios of more than 1000.

Pudukottai (1007), Pasumpon Thevar Tirumagan (1046), Ramanathapuram (1031), Kamarajar (1002), Chimdabaranar (1055) and Tirunelveli Kattabomman (1038). This bears evidence to the male brain drain.

The urban-sex ratio of Tamil Nadu (1047) was more than that of rural (1043) in 1901.In 1991,the urban sex-ratio was 951 while rural was 983. Chennai city had the least sex-ratio of 901 in 1961, since then it has been on the ascendancy. The sex ratio of Chennai city in 1991 was 930 (Table 1.10). Since sex-ratio may be considered as an index for employment potential, this may be a pointer to the fact that the employment potentials of Chennai city might have got eroded.

Fig:1-8 URBAN-RURAL GROWTH DIFFEREN -TIALS 1971- 1991



OBSERVATION: TAMIL NADU HAS A STEADY DECLINE OVER A PERIOD OF TIME

Table 1.10 Sex-Ratio by Districts, 1901 and 1991

Name of Carlo (D)	Sex-Ra	tio 1901	Sex-Ratio 1991			
Name of State/District	Urban	Rural	Urban	Rural		
Tamil Nadu	1047	1043	951	983		
Chengalpattu	1006	983	933	977		
North Arcot	1093	1017	992	984		
Salem	1068	1026	950	925		
Coimbatore	104	1029	863	966		
Chennai	983	-	930	-		
South Arcot	1040	1012	954	970		
Dharmapuri	1088	1013	948	943		
Salem	1063	1034	925	952		
Madurai	1037	1047	966	977		
Nilgiri	912	818	972	1000		
Trichi	1057	1063	969	952		
Thanjavur	1108	1105	1000	995		
Ramnad	1096	1121	992	1927		
Tirunelveli	1065	1121	992	1027		
Kanyakumari	1059	992	1000	994		

Source: Census of India, 1901 and 1991.

#### **Population Density**

The density of population of Tamil Nadu in 1981 was 372 persons per sq. km. compared to the density figure of 216 in the country as a whole. Tamil Nadu has the fifth highest density among the 22 states. Kerala has the highest density with 655 persons per sq.km. Two other states with high density are West Bengal (615) and Bihar (402). Due to over crowding consequent on inmigration, population density is found to be highest in urban areas. The density in the urban centres of Tamil Nadu is very high and stands at 2,722 persons per sq.km. according to the 1981

census. This urban density figure represents over ten times the density of 261 persons per sq.km. recorded in villages and other rural settlements. Table 1.11 gives the class-wise density of urban settlements during 1971 and 1981.

It is observed that the class-size has a direct correlation with the percentage of area as well as density. Hence it may be hypothesised that the density has a direct correlation with class size. Aggregated level of population doesn't have a direct correlation with population class size. But, however, this correlation is not valid in the case of individual cities. This irrationale may be attributed to the arbitrary extension of boundaries by the municipal authorities without any norms. Twenty two taluks in the state have no urban population.

Table 1.11 Class-wise Urban Density in Tamil Nadu, 1971 and 1981

	198	31	1971			
Class size	Percentage of area to total area	Density (persons/sq.km.)	Percentage of area to total area	Density (persons/sq.km.)		
All Classes	100.0	2722	100.0	2115		
Ι	39.6	4281	28.1	4340		
П	12.7	3413	14.9	2013		
III	22.5	1516	19.6	1628		
IV	19.3	1040	25.1	707		
V	5.2	933	8.1	707		
VI	0.7	522	4.0	173		

Source: Census of India, 1981.

#### STATE'S ECONOMIC STATUS

As per the Central Statistical Organisation's (CSO) data for 1982-85, Tamil Nadu's per capita income was clearly below the national average. But CSO's data for 1984-87 or 1985-88 showed Tamil Nadu's per capita income slightly above the national average.

Unemployment has always been high in the state, the usual status unemployment rate being consistently higher than the national average. The state is in the top among a few states in current status of unemployment also. What is more, the unemployment rate has risen more steeply than the national average.

The poverty figures are equally unflattering. Between 1961-62 and 1983, over 50 per cent of the people were below the nationally accepted poverty line in many years, and in no year was the figure less than 40 per cent. While the percentage has come down in eighties, there is no evidence of an overall declining trend in numbers, with urban poverty levels even more severe than rural poverty.

The study of outlays reveals that adjusted for prices, the proportion of outlays on capital formation in total outlays has declined from 35 per cent in the 1960s to 26 per cent in 1970s. Establishment costs have been growing, more due to increase in overall numbers, per capita plan outlays have declined relative to other states from the fourth plan onwards, and the major reason for this is that non-plan expenditures have absorbed a relatively high proportion of the total expenditure. Tamil Nadu is near the bottom of the scale in the ratio of plan expenditure to total expenditure. Though Tamil Nadu's position in terms of per capita income, employment and plan outlays have not been up to the desired level, its level of urbanisation has been most impressive.

## **Participation Rate**

Participation rate may be explained as a percentage of working force in any state or region or settlement to that of total population. In the ensuing paragraph, the participation rate of Tamil Nadu vis-a-vis other states, and the districts of Tamil Nadu is discussed.

As per 1991 census, the participation rate of Tamil Nadu has been the highest among all the comparable states excepting that of Andhra Pradesh. In Andhra Pradesh, the urban participation rate is lesser than that of Tamil Nadu. Even in Maharashtra and Gujarat, where the level of urbanisation is more than that in Tamil Nadu, the urban participation as well as rural and total is lesser. Further, the participation rate in Tamil Nadu is much higher than that of the national average. Thus it may be concluded that there is no definite relationship between participation rate and level of urbanisation. However, this has been verified through multiple linear regression at national level and Tamil Nadu level (Table 1.12).

Table 1.12 Correlation between Level of Urbanisation and Participation Rate, 1981 and 1991

	All I	ndia	Tamil	Nadu
Year	Male	Female	Male	Female
1991	+0.9035	+0.2850	+0.1327	+0.2585
1981	+0.5298	+0.3770	-0.1151	+0.1036

Source: Analysis based on census data, 1981 and 1991.

From the table it could be inferred that there is no correlation between level of urbanisation and the level of participation at Tamil Nadu level. However, at the national level, the male participation rate has a positive correlation with the level of urbanisation.

## Shift in Occupational Structure

Chennai had a predominantly secondary occupation in 1971, but had shifted its occupation from secondary which bears evidence to the fact that the economy base has been eroded. The Nilgiri district shows a high percentage of workers in non-agricultural activities, i.e., 70.05 per cent, 87.50 per cent and 90.0 per cent in 1961, 1971 and 1981 respectively. This trend may be adduced to the factor that the plantation workers are treated as non-agricultural. Chengalpattu district which is a shadow region for Chennai shows a declining trend in agricultural activity and an increasing trend in non-agricultural activity between 1961 and 1991. This is more understandable in the wake of sprawling sub-urbanism around Chennai. Ramanathapuram is one of the most backward districts and has also shown a trend towards non-agricultural activity and this is more due to the push factors than pull factors. Coimbatore district which is industrially developed (textile mills, engineering industries and household industry) has recorded nearly the same percentage of work force in agricultural and non-agricultural activities. The shift in occupation is also due to the introduction of modern technologies in agricultural sector (Table 1.13)

Table 1.13 Non-Agricultural Employment by Districts, 1901 and 1991

Name of the District	Proportion of Non-agr	icultural Employment
	1901	1991
1. Chennai	97	98
2. Chengalpattu	33	27
3. N.Arcot	26	27
4. Salem	26	25
5. Coimbatore	35	32
6. S.Arcot	20	14
7. Tanjore	35	18
8. Tirichi	26	17
9. Pudukottai	25	18
10.Madurai	26	17
11.Tirunelveli	34	35
12.Nilgiri	39	NA

Source: Census of India, 1901 and 1991.

In most of the districts excepting Chennai and Tirunelveli, the non-agricultural employment component has declined since 1901. With modernisation of agricultural operations and innovation leading to intensive use of land, with the use of fertilizer and other techniques, labour force needed for agriculture should reduce. But on the contrary, the labour force in the agricultural sector has increased. This implies that the agricultural sector is over-employed and is under-paid.

## INDUSTRIAL STRUCTURE

## **Industrial Status of Tamil Nadu**

Tamil Nadu maintained its third place in the country in terms of the level of industrialisation during 1966-67 to 1987-88. Based on fixed capital employed, industrial output and value added by factories, (the three criteria to measure the growth) Tamil Nadu had kept up its status among the states. As per the norms of fixed capital employed, the state slided down from third to fifth place in 1975-76. On the basis of industrial output, it went down from the third place in 1966-67 to the fourth in 1973-74, but regained its third position in 1977-78. Similarly, based on the "value added by factories" norm, Tamil Nadu lost its third place, and became number four in 1973-74, and got back to the third place later.

However, in terms of central investment, the state had suffered much. From the fifth place, it had held during the period 1969-70 to 1975-78, the state slipped to the ninth place in 1988-89. Central investment which was 10 per cent in 1969, came down to as low as 5.21 per cent in 1988-89. On the contrary, Andhra Pradesh and Maharashtra were benefitted as a result of higher central investments. District-wise industrial employment during 1901, 1951 and 1981 is given in Table 1.14.

In all the districts, the industrial employment base has been eroded. The employment base of Chennai city is unsteady and is oscillating. South Arcot is the district with least industrial base. Other districts with poor industrial base are Thanjavur, the rice bowl of Tamil Nadu, and Pudukottai, newly carved out backward district (Table 1.14).

#### INVESTMENT IN URBAN DEVELOPMENT

To reduce the pressure on metropolitan cities, the central government had introduced a scheme of Integrated Development of Small and Medium Towns (IDSMT) during the sixth five year plan to balance the development of urban areas and to arrest the influx of rural poor to urban areas. The scheme which continued through the seventh plan failed to make any significant and perceptible impression. In Tamil Nadu, about 20 towns are developed under the IDSMT programme during the sixth plan, and none of the towns have shown any impressive growth rate

during 1981-91. The IDSMT schemes originally envisaged the development of towns with a population of 20 thousand to 50 thousand as the prime target, but the emphasis has now shifted also to towns with population between 100,000 and 300,000.

Table 1.14 Percentage of Industrial Employment in Tamil Nadu, 1901, 1951 and 1981

District	Percenta	age of Industrial Em	ployment
District	1901	1951	1981
1. Chennai	36	26	30
2. Chengalpattu	19	21	19
3. North Arcot	15	20	14
4. Salem	16	26	21
5. Coimbatore	32	25	24
6. South Arcot	10	9	6
7. Thanjavur	19	19	8
8. Pudukkottai	10	8	7
9. Madurai	14	23	12
10.Tirunelveli	21	20	22
11.Nilgiri	24	28	25

Source: Statistical Handbook, 1986.

#### **IDSMT Scheme in Tamil Nadu**

When the scheme was introduced during the sixth five year (1978-1983) plan, the Directorate of Town and Country Planning (DTCP) of the Government of Tamil Nadu (GTN), the nodal agency in the state, had finally identified 28 towns with an approved investment outlay of Rs.185 million for implementing 183 projects in all, and all of them have since been completed. Subsequently, in the seventh plan, 14 towns with 84 projects at an outlay of Rs.153.6 million, 13 towns with 60 projects with an investment outlay of Rs.143.3 million during 1990-92, and till December 1994, 18 towns in the eighth plan for implementing 93 projects at an outlay of Rs.200 million were taken up. In all, upto the end of 1994, 420 projects were undertaken in 73 towns at a cost of Rs.683 million in Tamil Nadu. During 1995-96, 9 more towns were approved under IDSMT scheme with project costing around Rs.120 million, but the progress of implementation is not up to the mark. In 1996-97, 6 towns has been approved under IDSMT scheme but only projects for Rs.6 million were asked to be taken up.

## **Investment on Urban Services**

Table 1.15 depicts the status of investment in urban services during 1988-94.

Table 1.15 Investment for Urban Development, 1988-1994

	Investment	(in million Rs.)
Component	Chennai	Total Investment
Housing	1190	2290
Traffic and Transportation	870	1470
Municipal Services	100	260
Technical Services	30	70
Total	2190	4190

Source: Tamil Nadu Urban Development Project, May 1996.

It is observed from Table 1.15 that more than 50% of the total outlay under Tamil Nadu urban development project goes to Chennai the prime city of the system.

Table 1.16 shows the district-wise infrastructure and share of employment in Tamil Nadu. The dominance of Chennai metropolitan region is so high that its position is unchallengeable. Dharmapuri district, which is the most backward district in the system had the least value, while the position of Madurai, Tirunelveli and Kanyakumari is better. The dominance of Chennai city is very patently visible. So is the backwardness of Dharmapuri, Ramanathapuram and Pudukottai. The imbalance between Chennai and other regions are so skewed that there is no meeting point at all.

Public sector has contributed more for the over-concentration and imbalance of the urban system since one-third of the public employment is available in Chennai Metropolitan Area (CMA) when compared to less than one-fourth of the private sector employment. Next to Chennai and Chengalpattu, public sector employment is concentrated in Tiruchirapalli mainly due to the presence of Bharat Heavy Electricals Limited. Coimbatore, the Manchester of south India has more private sector employment. Thanjavur, the paddy bowl of Tamil Nadu, Ramanathapuram and Pudukottai, the drought hit regions of Tamil Nadu, have the least proportion of public and private sector employment. Regional variation is so high that nearly half of the total banking firms are located in Chennai metropolitan area, while one fourth of the total number of districts do not have even a single office. Next to Chennai, Coimbatore has more number of offices. Again, the hypothesis that the public sector has contributed for the concentration of activities and employment is confirmed.

Table 1.16 District wise Infrastructure in Tamil Nadu, 1990

District	Total road length in	Total vehicles	per thousand lation	% of En	ployment	% of total	% of housing
District	km. per sq.km.	Commercial	Non- commercial	Public	Private	commercial banks	stock added
Chennai metropolitan area	14.13	7.6	46.2	33.4	23.0	48.5	55.8
Chengalpattu	0.05	0.9	1.6	10.6	6.7		-
South Arcot	0.03	1.3	1.8	7.2	2.9	1.9	1.0
North Arcot	0.04	1.0	2.7	7.2	4.7	2.6	3.6
Salem	0.06	2.5	11.8	5.7	5.3	4.3	4.6
Dharmapuri	0.01	0.9	1.9	2.9	2.0	-	3.0
Periyar	0.03	2.9	9.7	3.2	1.6	2.9	2.5
Coimbatore	0.09	3.9	17.3	6.6	17.6	11.5	8.8
Tiruchirapalli	0.04	2.0	7.1	8.8	4.1	5.7	4.0
Thanjavur	0.07	1.2	0.9	1.1	2.8	4.7	1.8
Pudukottai	0.03	0.9	1.0	1.4	0.7	-	0.5
Madurai	0.14	1.4	5.2	6.2	7.2	7.7	9.4
Ramanathapuram	0.04	0.5	1.1	1.1	0.5	-	1.4
Tirunelveli	0.05	1.8	4.0	3.3	4.8	2.3	1.6
Kanyakumari	0.12	1.7	2.9	2.4	4.4	2.2	0.1
Nilgiris	0.08	3.0	7.4	2.3	5.4	-	0.5

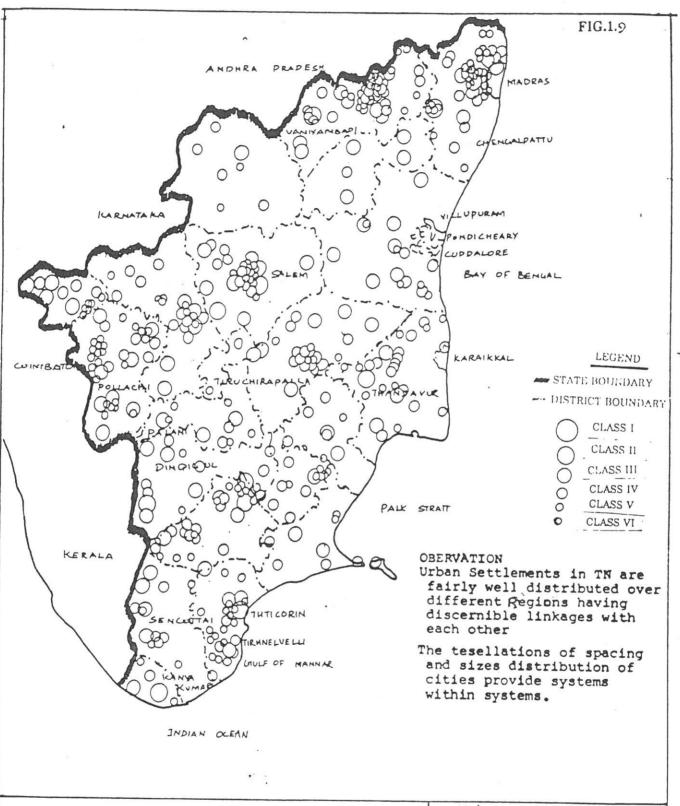
Source: Statistical Hand Book, 1990.

The investment in housing also only added on to the concentration of population in Chennai metropolitan region. The two other regions where the housing stock added is of any consequence are Madurai and Coimbatore districts where the other two metropolitan cities in the system are located.

# SPATIAL PATTERN OF URBAN SETTLEMENTS IN TAMIL NADU

## **Spatial Distribution**

The spatial distribution of all class-wise urban settlements are depicted in Fig.1.9 It may be observed that the major concentration of urban settlements are along the existing transportation corridors (Fig.1.10).

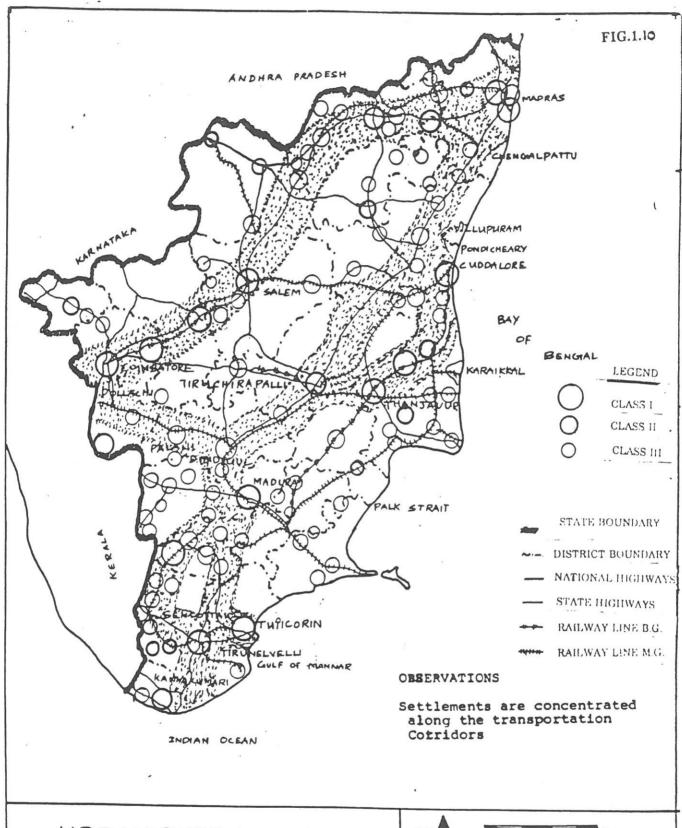


URBAN CENTRES BY CLASS SIZE - 1991 TAMIL NADU



20 80 20 40 60

CENTRE FOR HUMAN SETTLEMENTS SCHOOL OF ARCHITECTURE & PLANKING ANNA UNIVERSITY CHENNAL - 600 025.



URBANISATION ALONG TAMIL NADU ARTERIALS



CENTRE FOR HUMAN SETTLEMENTS SCHOOL OF ARCHITECTURE & PLANNING ANNA UNIVERSITY CHENNAL 600 025. The important transport corridors connecting major urban centres in the State are given below:

- 1. Chennai Vaniyambadi Salem Coimbatore.
- 2. Chennai Chengalpattu Villupuram Tiruchirapalli Madurai.
- 3. Madurai Tiruneleveli Kanyakumari.
- 4. Tiruchnirappali Thanjavur Cuddalore Villupuram.
- 5. Coimbatore Pollachi Palani Dindigul.
- 6. Madurai Shengottai.
- 7. Tirunelveli Tuticorin

Table 1.17 gives the quantum of population distributed along the above mentioned corridors.

Table 1.17 Population Distributed along Transportation Corridors, 1981 and 1991

S. No.	Name of the corridor	Populati	on (in 100)	Percentag Popu	ge to Total lation	Absolute Increase
140.		1981	1991	1981	1991	1981-91 (%)
	Chennai City	3300	5400	31.2	37.3	60.6
I	Chennai - Coimbatore corridor	2830	3246	26.7	22.4	14.7
II	Chennai - Madurai corridor	2135	2132	20.0	14.7	-0.1
III	Villupuram - Tiruchirapalli corridor	699	840	6.6	5.8	20.2
IV	Madurai - Shencottah corridro	534	870	5.0	6.0	62.9
V	Madurai -Kanyakumari corridor	567	1178	5.4	8.1	107.8
VI	Tirunelveli - Tuticorin corridor	218	347	2.1	24.0	59.2
VII	Coimbatore - Dindigul corridor	316	476	3.0	3.3	50.6
10	Total	10608	14488	100.0	100.0	36.6

Source: Analysis based on census data, 1981 and 1991.

Even though the percentage of population in two major corridors, namely Chennai - Coimbatore corridor and Chennai - Madurai corridor has reduced, the population concentration in absolute terms had increased in the former, while in the latter the change was insignificant. The concentration of population in absolute numbers has increased by more than 40 per cent between 1981 and 1991 along Madurai - Shenkottai, Madurai - Kanyakumari, Tirunelveli - Tuticorin and Coimbatore - Dindigul corridors. In fact, the increase has more than doubled along Madurai - Kanyakumari corridor as it gains increasing importance due to tourist related activities mushrooming in the belt. This uneven distribution has left many rural pockets of the region uncovered and deprived them of easier access to consumer goods, services, and facilities for processing and marketing of their agricultural products.

#### **MIGRATION**

Migration could be broadly classified as international, inter-state, inter-district and intradistrict. Since the study of migration in this country is with reference to states, international and inter-state migration can be termed as external migration, and that of inter-district and intradistrict as internal. The average range of composition of these four categories of migration in Tamil Nadu is indicated in gross values as: (i) International: 2 to 3 per cent; (ii) Inter-state : 5 to 10 per cent; (iii) Inter-district: 15 to 30 per cent; (iv) Intra-district: 60 to 70 per cent.

From this range, it could be inferred that proportion of migration is inversely related to distance and ethnic and cultural differentials. While the pattern of flow is more or less similar in intra-state and intra-district movements, that for inter-district movements is entirely different.

## **Spatial Pattern of Migration Flow**

The movement of population in the districts of Tamil Nadu during 1961 and 1981 is given below in Table 1.18

Table 1.18 Spatial Pattern of Migration Flow during 1961 and 1981

Stream	19	81	19	961
	Intra- district	Inter- district	Intra- district	Inter- district
To Rural	73	38	75	49
To Urban	27	62	26	51
From Rural	82	48	89	57
From Urban	18	52	11	43
Rural to Urban	21	50	28	58
Rural to Rural	79	50	72	42
Urban to Rural	. 17	25	43	10
Urban to Urban	83	75	57	90

Source: Analysis based on census data, 1961 and 1981.

In both the inter-district and intra-district movements, the urban component has increased between 1961 and 1981. The inter-district migration flow is more urban dominant than the corresponding intra-district flow. If total migration is disaggregated into male and female migration, it throws more insight into the pattern. Male and female composition in the different streams are as follows:

Category	Percentage	e of migration
	Male	Female
International	70-80	20-30
Inter-district	40-45	55-60
Intra-district	30-40	60-70

This pattern underscores the factor that female migration is more sensitive to the distance and ethnic issues. The variations in the male and female composition is brought to light if the flow is broken into different streams with urban and rural origin and destinations.

# **Reasons for Migration**

The 1981 census has attributed five reasons for migration. They are: 1 Employment; II. Education; III. Family movement; IV. Marriage; and V. Other reasons.

The composition of reasons for male and female migration in 1981 based on place of last residence are indicated in Table 1.19 and Fig.1.11.

Table 1.19 Composition of Reasons for Male and Female Migration, 1981

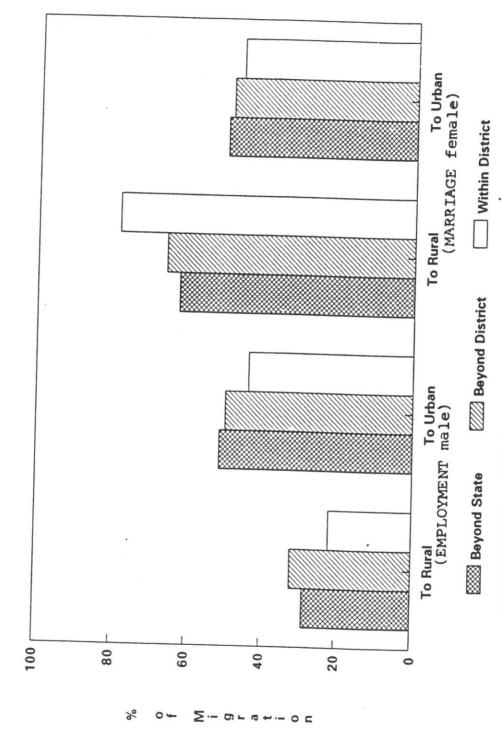
(Figures in per cent)

Sl. No.	Composition	Employ-ment	Education	Family Moved	Marriage	Others
I.	Total Male Female	36.0 3.0	5.0 1.0	31.0 21.0	2.0 64.0	26.0 11.0
II.	To Rural Male Female	24.0 2.0	4.0 1.0	34.0 14.0	4.0 74.0	34.0 10.0
III.	To Urban Male Female	46.0 5.0	5.0 2.0	29.0 35.0	1.0 44.0	19.0 14.0

Source: Analysis based on 1981 census data.

From the above Table, it is observed that the main reason for male migration is employment followed by family movement. The dominant factor for female migration has been marriage. Consideration of the mobility due to marriage as migration has distorted the pattern of

Fig.: 1.11 PERCENTAGE OF DOMINANT REASONS FOR DIFFERENT TYPES OF MIGRATION - 1991



DISTANCE AND ETHNIC AND CULTURAL VALUES WHILE FEMALE MIGRANTS FOR MARRIAGE ARE CONSCIOUS OF MALE MIGRATION FOR EMPLOYMENT IS UNMINDFUL OF THESE FACTORS OBSERVATION:

movement, and as much as three-fourths of the women have been treated as migrants because they have been given in marriage to a place other than that of their own. Paradoxically, migration for education has been minimum among both sexes.

## Pattern of Migration in Districts of Tamil Nadu

The pattern of international, national, inter-district and intra-district migration during 1961 and 1971 in all the districts of Tamil Nadu is indicated in Table 1.20 below.

Chennai district which is 100 per cent urbanised has the highest international, national and inter-district migration, and the smallest non-migrant component. Coimbatore and Chengalpattu which are the other two highly urbanised districts also have a lesser non-migrant component. This pattern suggests that lesser the non-migrant component, higher is the level of urbanisation of the district.

Table 1.20 District-wise Pattern of International, National, Inter-District and Intra-District Migration, 1961 and 1971

				P	ercentage	of Migra	ation			
District	Inter-	national	Nat	ional	Inter	district	Intra	District	Non-M	ligrants
	1961	1971	. 1961	1971	1961	1971	1961	1971	1961	1971
Chennai	1.5	1.0	9.5	9.0	26.0	22.0	-	-	63.0	68.0
Chengalpattu	-	1.0	2.0	4.0	8.0	13.0	20.0	17.0	69.0	65.0
North Arcot	-	-	2.0	1.5	4.0	4.0	19.0	20.0	75.0	74.0
South Arcot	_	-	1.0	1.5	5.0	9.0	20.0	18.0	74.0	71.0
Dharmapuri	-	-	1.0	3.0	5.0	4.0	19.0	18.0	75.0	75.0
Salem	-	-	1.0	1.0	2.0	4.0	19.0	19.0	78.0	76.0
Coimbatore	-	-	2.0	2.0	8.0	6.0	25.0	25.0	65.0	67.0
Nilgiris	-	-	1.0	1.0	6.0	7.0	19.0	17.0	74.0	75.0
Madurai	-	-	1.0	1.0	6.0	7.0	19.0	17.0	74.0	75.0
Tiruchi	-	-	2.0	2.0	10.0	9.0	18.0	19.0	70.0	70.0
Thanjavur	-	-	1.0	2.0	7.0	6.0	24.0	25.0	68.0	67.0
Ramnad	-	-	-	-	4.0	5.0	16.0	14.0	80.0	87.0
Tirunelveli	-	-	1.0	1.0	3.0	3.0	21.0	22.0	75.0	74.0
Kanyakumari	-	-	1.0	3.0	1.0	2.0	16.0	15.0	82.0	82.0

#### SUMMARY OF SALIENT FINDINGS

#### Urbanisation

In terms of level of urbanisation, Tamil Nadu can be broadly classified into four groups: i) North-west part: highly urbanised, industrial sub-region; ii) Chennai-Chengalpattu region: highly urbanised and industrialised; iii) North-east part: poorly urbanised, (except Chennai-Chengalpattu region) predominantly agricultural sub-region; iv) Southern part: medium urbanised, small and medium industries, household industries and agro-industries.

The urban settlements located in the north-west part have a spectacular growth rate and low sex ratio. This indicates that the pattern of urbanisation and the trends of demographic factors are linked to the economic base of the sub-regions. This stresses the need for strengthening the economic base of each sub-region.

## **Concentration of Population**

- i) Even though the primacy index for Tamil Nadu is not very high when compared with those for the national level and for other states such as West Bengal, Maharashtra, Gujarat and Karnataka, the significance of the primacy index of Tamil Nadu lies in its consistent and continuous increase while those of other states, either declines or fluctuates.
- During the period 1901-1991, while urban population in Tamil Nadu increased sixfold, the number of urban settlements increased fifteen times. At the national level, the increase of urban population and urban settlements was eight times and two times respectively. While the over-growth and over-concentration of population cause over-straining of infrastructure and consequently environmental degradation and ecological imbalance, large number of towns with small population base cause serious difficulties for employment generation and creation of sustained economic base, for want of threshold population. These two extreme situations call for deconcentration of Chennai as well as strengthening of selected small towns on priority basis.
- That the centre of gravity of the geographical area of Tamil Nadu with population of urban settlements as point loads has moved in the north-west direction, viz., in the direction of Chennai between 1901 and 1981, this implies that population concentration and consequent economic domination of Chennai in the state has increased over the years. But during 1981 and 1991, the centre of gravity has

moved in the direction which indicates the rise of population in the cities of Coimbatore, Erode and Tiruppur. This suggests that the cities of Coimbatore, Erode and Tiruppur have to be further developed to counteract the growth of Chennai.

## **Growth Performance**

Cities which evolved as agricultural market towns, such as Tiruchirapalli, Madurai, Tirunelveli, Cuddalore, Kumbakonam and Thanjavur, initially had a stronger population base as compared to other cities, such as Coimbatore, Tiruppur and Erode, which became industrial after independence. These three cities were in the first three ranks in terms of growth rate during the decade 1981-91, the order being, Tiruppur, Erode and Coimbatore. Tiruppur and Coimbatore had a higher growth rate for consecutive three decades and Erode for two decades during the period 1901-1991. Among the traditional agricultural market towns, Madurai and Tiruchirapalli have picked up in view of industrial developments while others have been lagging. Even among the non-agricultural towns, those with industrial functions developed fast while others such as hill towns, temple towns and administrative towns lagged behind.

The trend of growth of six classes of urban centres in terms of population content at the national level as well as the state level have been more or less similar. At both the levels, class I cities have grown fast and accounted for more than 60 per cent of the total urban population; the population content of class VI towns have declined fast. In both the cases, class II towns have either improved their population share or maintained its position; the percentage of population of class II, IV and V towns have shown a declining trend. This bears evidence for the declining population content of small and medium towns. In terms of growth rate, only about two per cent of class I cities and five per-cent of class II towns grow at rapid rates while a number of class III and class IV towns grow at a rapid rate. This may be because of the larger population base of class I and class II towns. The rate of growth has been higher in the outer-city areas than in the inner city areas. This may be due to the advantage of lesser land values and transportation facilities to commute. When compared with other Indian states, Tamil Nadu has the least percentage of towns growing at rapid rates and the larger percentage of towns growing at low rates. This reflects the general trend of lower population growth rate in the state.

#### Sex-ratio

Districts of Ramanathapuram, Tirunelveli, Pudukkottai and Thanjavur which have predominantly agricultural base have higher sex-ratio indicating migration of large male population from these areas in search of employment. Also sex ratio has an inverse correlation with employment potential. This may be a pointer to the fact that agricultural economy does not

hold out much promise for sustainable employment. This calls for diversification of agricultural economy.

## **Migration**

In Tamil Nadu, male migration to urban areas is caused mainly due to lack of employment in rural areas. This indicates that the rural exodus could be stopped by generating employment opportunities in rural areas. In migration is mostly to the districts with metropolitan cities, namely Chennai-Chengalpattu, Coimbatore and Madurai. This indicates the promise that the metropolitan cities holdout to the migrants. With the sole exception of Chennai - Chengalpattu region, mobility of migrants is confined to and from neighbouring districts. The pattern of flow of migrants indicates that further concentration and growth in Chennai could be thwarted by Coimbatore and Madurai, the two other metropolitan cities. Because the vast majority of migrants are young adults, in the peak reproduction age-groups, whose fertility is higher than that of urban population, the long-term contribution of internal migration to urban population growth is much greater. Hence the urban growth rate could be minimised by deflecting the migrants.

## **Functional Hierarchy**

Based on functional hierarchy, class I towns may be graded into three orders; Chennai the urban prime of state is in first order of the system. Its position is enviable and unassailable. The functional score of Chennai is ten-fold higher than that of Coimbatore, the second largest city. No other town comes in the second order. Secondary cities, namely Coimbatore, Madurai and Tiruchirapalli, had shown steady progress during 1961, 1971 and 1981 and they form the third order. Among the fourth order cities, Dindigul, Vellore, Tuticorin, Tiruppur and Erode form one group. All these towns have a fairly sound economic base and they (except Tiruppur) enjoy administrative status. The following towns form another group within the fourth order: i) Thanjavur, ii) Nagercoil, iii) Cuddalore, iv) Kancheepuram, v) Kumbakonam, and vi) Tirunelveli.

All these towns had relatively less component scores during the decades 1961, 1971 and 1981. All of them have been historical and ancient towns with a traditional agricultural base. They also have hoary past with rich cultural, religious and literary heritage. The above gradings call for de-emphasis of Chennai in terms of economic and service functions. This also emphasises the need for diversification of agricultural economy.

Most of the suburbs of urban agglomerations such as Avadi, Ambattur, Tiruvortiyur and Singampunari are in the lower rung of the hierarchy suggesting lack of spatial integration, and absence of trickle down effect.

The position of small and medium towns such as Aruppukottai, Bodi, Pudukottai, and Coonoor, where the projects under Integrated Development of Small and Medium Towns have been implemented, have been very poor functionally and economically. This supports the presumption that the schemes for Integrated Development of Small and Medium Towns have not yielded the desired results.

## **Economic Development**

(i) While the historical and ancient urban settlements such as Tiruchirapalli, Tirunelvelli, Thanjavur and Kumbakonam which flourished with traditional economy in early periods, have grown up poorly, a few other towns of recent origin such as Tiruppur, Erode, Coimbatore, Vellore and Tuticorin stormed their way up to a rise. This may be attributed to the factor that as long as agriculture was the mainstay of economy, the towns with traditional moorings flourished. This calls for diversification of agricultural economy and strengthening of industrial economy.

Dependency ratio is inversely related to the level of urbanisation; so higher level of urbanisation consistently reduces the dependency ratio over a period of time. This indicates the link between urbanisation and economic potential. The districts with higher level of urbanisation have a higher proportion of economically active population. While the primary employment has a negative correlation with city size, tertiary employment has a strong positive correlation. However, there is no correlation between city-size and secondary employment. This suggests that cities don't have a strong secondary economic base but only a weak tertiary base.

- (ii) Urban settlements in Tamil Nadu depend on secondary and tertiary employment, administrative and civic status of urban settlements and number of financial institutions operating in that area. Also the results of the analysis have indicated that the growth rate of secondary and tertiary employment dosen't commensurate with that of population size.
- (iii) Chennai has a large share of investment in industrial, transport and infrastructure sectors. As these factors play a vital role in the development of any region, the economic domination of Chennai may be attributed to this disproportionate investment. This calls for check on investment in Chennai.
- (iv) Chennai, Coimbatore and Chengalpattu are the three districts with large scale industrial base. They are also the top three highly urbanised districts in the state. This suggests that urbanisation is by and large synonymous with industrialisation atleast at the macro level.

## **Spatial Pattern**

While towns have clustered around the primate and four secondary cities, (clustered pattern), the pattern is very sparse in the following areas (dispersed pattern): (i) Dharmapuri subregion; (ii) Southern North -Arcot; (iii) Western South -Arcot; (iv) Eastern Salem; and (v) North of Tiruchirapalli.

Due to this dispersed pattern, the following pockets in the above mentioned areas have been deprived of higher order urban services, as per the delineation of service areas.

Pocket I - Dharmapuri and its environ Pocket II - North east part of Tiruchi

Pocket III - Nilgiris (Hill area)
Pocket IV - Kanyakumari district

This situation warrants deliberate and conscious upgrading of certain class I and class II towns, so that urban services are made available to shadow regions.

The overall pattern of distribution of urban settlements suggests that in agricultural sub-regions, the pattern has been even and equi-distant, while in industrial sub-regions, the pattern is skewed. In Cauvery delta region, the pattern is uniform because the urban settlements in these regions are market centres for agricultural produce. Over-growth in industrial sub-regions such as Chennai and Coimbatore is due to the large scale inmigration.

# II. STATE URBAN DEVELOPMENT POLICY AND STRATEGY

## PREVAILING URBAN SCENARIO IN TAMIL NADU

On the basis of the findings as in the previous chapter, urbanisation in Tamil Nadu is likely to accelerate further in the coming decades and is likely to reach a figure of 30 million by 2001, representing about 45% of the total estimated population of 70 million of the state. This assessment is further supported by the trend of urbanisation in the past decades which shows that urbanisation in Tamil Nadu is much faster than the average growth rate for the country as a whole.

Major urban centres of the state are evenly distributed, although Madras Urban Area with a population of 3.84 million lying in the north-east corner dominates the state. The four large urban agglomerations of Coimbatore, Madurai, Salem and Tiruchirapalli which serve as focal points of regional growth are within 160 km. of each other, and are located centrally in relation to the state. Every district of the state except Dharmapuri, Ramanathapuram and Pudukottai and the small hill district of the Nilgiris has one or more class I cities within them. The latter two areas, however, have a few urban centres with a population of more than 50,000. At the microlevel, there are 22 taluks of the state which do not have any urban centre with above 20,000 population as per 1991 census. It is seen that most of these are concentrated in three areas, namely, (i) A belt extending from Madurantakam in Chengalpattu district to Sankari in Salem district covering parts of earlier north Arcot, south Arcot and Dharmapuri districts; (ii) Central part of the state comprising most of Tiruchy district and parts of Thanjavur, Madurai and Ramanathapuram districts; and (iii) Most part of Kanyakumari and southern part of Tirunelveli district. Besides, there are four small pockets of such areas, two in Chengalpattu (Ponneri and Tiruttani), one in Dharmapuri (Hosur) and one in Ramanathapuram (Mudukalattur).

The trends of urbanisation observed from another angle reveal that there is a definite pattern in the location of major urban centres even cutting across state boundaries. It is noticed that if consecutive circles are drawn with Chennai city as the focii, the super metro of the south, each circle at a distance of 100 miles (160 km.) from the other, i.e., circles with a radii of 100 miles, 200 miles (320 km.) and 300 miles (480 km.), the major urban centres of metropolises are located more or less along the circumference of these circles. For instance, Pondicherry, Cuddalore, Villupuram, Vellore, Chittoor (AP) and Nellore (AP) are all located at the periphery of the first circle drawn with a radius of 100 miles. Similarly, Tiruchirapalli, Salem, Bangalore in Karnataka, Nandyal and Tenali in Andhra Pradesh are at a distance of 200 miles. Madurai, Coimbatore, Mysore and Hassan in Karnataka and Vijayawada, Hyderabad and Kakinada in Andhra Pradesh are all located at a distance of 300 miles from Madras.

It is also noticed that the area of influence of the towns and cities located along the periphery of the circles extend approximately over a hinterland covered by a 80 km. (50 miles) circle. It is only logical to select these towns and cities as the regional growth poles for the purpose of arriving at a hierarchy of settlements within the influence of each of these growth poles.

#### INDUSTRIAL DEVELOPMENT AND ITS IMPACT ON URBANISATION

To stem the tide of rural migration into existing major urban agglomerations like Chennai, Coimbatore, Madurai, etc., and also to provide employment opportunities to the migrating rural population, an attempt has been made to generate employment within their catchment areas through industrial development. Formation of industrial estates and industrial townships is one of the many mechanisms adopted for this purpose. The government acquires land, develops it with access roads, provides public utilities including water, sewage disposal and electricity. These developed plots are offered to entrepreneurs on long term lease. They are also offered high priorities for the purchase of machinery, hire purchase loans and technical assistance. Common facilities including workshops, demonstration centres and other services are provided in these places to facilitate and encourage productivity and growth of small scale industries. Example of such centres in the state are Ranipet, Hosur, Navalpattu and Chithode.

In order to achieve decentralisation of industries, government has also taken conscious measures to exclude major industrial development in the metropolitan areas and offer incentives to entrepreneurs, which include loan of capital and tax rebates, to encourage location of industries in the backward areas. These moves have resulted in the location of major industries outside larger metropolitan and other urban centres. These industrial estates and industrial townships tend to create an umbrella of operating utilities of power supply, regular transportation outside the area, and an industrially disciplined labour force which in turn attracts the location and growth of other industries.

The present industrial locations in the state fall into the following three categories: (i) Locations within the core metropolitan cities - mainly export oriented and electronic goods production; (ii) Outside core city but within urban agglomeration limits - mainly heavier industries including those that will introduce an umbrella of auxiliary and dependent industries; and (iii) Those that are introduced into new areas specially selected near smaller settlements or in rural areas without any urban settlement that demand creation of infrastructure facilities and living accommodation. Such deliberate location opens up the area for further industrial development and help the backward areas to get a share in the economic development and thus improve the living conditions of the people.

Industrial locations in its wake brings in other economic activities and employment generation. Construction, transport and service activities predominate, leading to increased migration, resettlement and urban formation.

Hosur in Dharmapuri district, the small urban centre nearer to Bangalore, Ranipet and Manamadurai are examples of such deliberate industrial location. These centres will soon reach the self simulating stage of industrial growth. Attempts are on to develop Pudukottai, Cuddalore and Gummidipoondi as industrial towns with major industrial complexes.

In addition to these, industries like the sugar plants at Myladuthurai and Aranthangi, cement plants at Alangulam and Palayam, mini steel plant at Arakonam, expansion of existing cement works at Ariyalur, detonators and ammonium nitrate plant at Katpadi, chemical plant at Cuddalore, valve castings, manufacture of floppy discs and connectors etc. at Pudukottai, new projects of north Arcot leathers limited at Ranipet and rice bran project at Chengalpattu are some of the projects which were proposed in the last five years.

It may thus be seen that any spatial distribution of the urban population should take into consideration the likely impact of these industrial centres on the urban formation, and assign suitable population to these existing centres or proposed new towns. This aspect has been taken into consideration in assigning future population. But each of these emerging industrial towns would require individual studies not only to determine the population size but also for the provision of infrastructural facilities.

#### DEVELOPMENT OF BACKWARD TALUKS

It has been brought out that there are 22 taluks in the state without urban centres of above 20,000 population or with no urban centre at all. The policy should aim at developing at least one urban centre with above 20,000 population in each of these taluks. If such centres are to be developed to attract the desired population, conscious efforts should be taken to establish economic activities which will generate employment and also attract service population. This can be done through the various projects contemplated under the five year plans. If the principle of bringing these backward taluks into the stream of urbanisation is accepted, a separate study has to be undertaken to identify the centres and formulate specific economic activities to stimulate their growth.

#### PATTERNS OF URBANISATION

The Directorate of Town and Country Planning, Government of Tamil Nadu have estimated the urban population as 30 million by the year 2001, i.e., 11 million more than the urban population in 1991. This population can be distributed in a number of ways from extreme

dispersal in all urban centres to intense concentration in a smaller number of settlements. The final goal is the achievement of a pattern of urbanisation that would best promote the economic and social objectives of development within the geographic relatives of the state.

The case for large metropolitan type centres rests mainly on the 'external economies' that accrue in such settlements. The infrastructure in large cities in the sphere of communication, water supply and power is so developed that it aids further development. Large urban centres are endowed with credit institutions, financial and business services and medical and educational institutions. They provide pools of managerial and labour skills that are not found elsewhere easily. Among the more important advantages of large urban centres is perhaps the readily available markets for industrial products. Concentration of population has helped ancillary suppliers to locate in the same area and help industrial diversification. It is not surprising therefore that in the last two and half decade, industry has shown a marked tendency to concentrate in large metropolitan centres or in their neighbourhood.

Large cities also spearhead change towards modernisation. Innovations have a better chance of being put to practical use in urban centres where there are more people and more outlets for creativity. Large settlements are not only the beneficiaries of external economies but they also make possible 'internal economies' or economies of scale. Small scale industries find it more profitable to locate in these centres.

As against this, the large metropolitan centres have disadvantages also. There is a high incidence of urban poverty which manifests itself in the shape of slums. The alleged role of larger settlements as vehicles of modernisation, particularly in the context of developing countries has been questioned on two grounds. First, the so called urban centres are nothing more than bloated villages. The urban centres in developing and underdeveloped countries cannot boast of the same level of infrastructure available in urban centres of comparable size of the developed world and do not provide the same economies.

Secondly, the creation of modern attitudes and skills required for development call for specific training facilities and do not automatically emerge from an 'urban environment'. The outstanding argument against large concentration of urban population is however the high social and economic cost. Traffic on roads become so congested as to demand investment on high cost transportation infrastructure. Having exhausted water sources in nearby areas, these cities have to depend on sources at a great distance and bringing this water to the city involves very heavy investments - Chennai being a case in point. The slums which are a unique phenomenon of large urban centres require heavy public expenditure for their clearance or improvement or rehabitilation. Although health services are generally better in urban centres, health conditions are often bad owing to overcrowding, housing shortage, pressure on public services, lack of recreational open spaces, pollution and psychological tensions of city living.

Urban unemployment and underemployment is more conspicuous and intense in large centres and industrial unrest often interrupts production schedule and degenerates into violence. Large urban concentration in addition accentuate regional imbalances.

Small urban centres have all the advantages listed as disadvantages and all the disadvantages listed as advantages in large urban centres. Dispersal of population over a large number of small settlements would mean developmental action at a multitude of points which in the context of scarce resources is unhelpful in achieving a rapid rate of growth.

The arguments for and against concentration and dispersal make it clear that no one pattern could be suggested as the ideal one to apply in all situations. The fact that there is no one ideal pattern means that one has to be careful in deciding whether decentralisation is the best policy. Some of the important questions to be answered in coming to a policy decision are: Which pattern of settlement will minimise over-head costs and maximise social and economic benefits? What is the cost of developing infrastructure such as schools, hospitals, water supply, communication, etc. in small & large settlements?

Medium sized communities have been increasingly favoured as combining the merits of both large and small sized centres. They have cheap land, a fairly low level of density, minimal transportation problem, and a fairly wide range of economic activities and enjoy the economies that flow from agglomeration without the dis-economies of high concentration. There is however no general agreement on the size of 'medium-sized' settlement. The estimate has ranged from as low as 20,000 to as high as a million.

The final choice on the pattern of development and the population content of different sizes of urban settlements in a hierarchy of settlements will therefore depend on : (i) the prevailing situation; (ii) the geographic constraints; and (iii) the defined objectives and strategy.

#### REGIONAL APPROACH TO URBANISATION

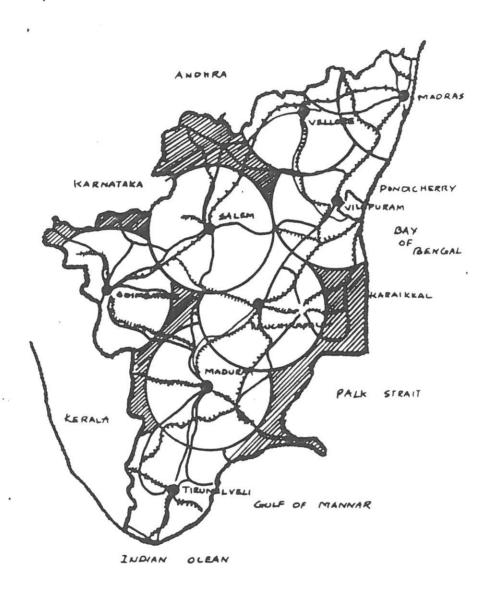
It is evident that urbanisation in the scale envisaged cannot be attempted in a piecemeal manner through the selection of urban centres arbitrarily. It is essential to introduce a regional approach to urbanisation in order to regulate urban centres and assign suitable population for them keeping in view the overall interest of each region. Only such an approach will indicate the areas requiring accelerated urban development and the areas where urbanisation should be slowed down through incentives and disincentives and other economic planning measure. Fortunately, urban settlements in Tamil Nadu are well spread out making the task of selecting settlements easy. Location of major urban settlements permits a regional approach without any major structural changes.

The previous paragraphs have considered various aspects which should be taken note of in the spatial distribution of urban population. Fig.2.1 shows the possible regional growth poles. Taking into consideration these regional growth poles, it is suggested that the entire state is delineated into planning regions which can be developed on the basis of various development and revenue parameters. The exercise of assigning population to various urban centres has to be done keeping in view the interest of these regions, and to secure a regional balance in urban development. They could be such as Chennai, Vellore, Villupuram, Tiruchirapalli, Salem, Madurai, Coimbatore and Tirunvelveli.

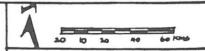
# URBAN DEVELOPMENT STRATEGY FOR TAMIL NADU

Taking into consideration the various aspects and trends of development discussed, the following urban development strategy is suggested in consultation with the Directorate of Town and Country Planning for Tamil Nadu.

- 1. Urban Development in Tamil Nadu should be based on a regional approach to secure balanced distribution of urban population among all the regions and also to prevent high concentration of population in a few centres, e.g., Bombay in Maharashtra.
- 2. The 1991 census figures show that class I, II and III towns account for about 92 per cent (class I above 66%) of the total urban population of the state and the balance of 8 per cent is distributed over the class IV to VI towns. The same ratio may be adopted for the projected population of 30 million in 2001. This will mean that the urban population in class I to III towns/agglomerations would be around 27 million. Assigning population among these towns and agglomerations should ensure that the growth of major metropolitan and class I centres will be slowed down and growth of class II and III towns will accelerate whenever necessary.
- 3. Chennai city metropolitan area is the super metro of the state and will continue to attract more population. While its further growth cannot be prevented, efforts should be made to develop countermagnets as in the case of national capital region to slow down the growth of Delhi.
- 4. The other four larger urban agglomerations, viz. Coimbatore and Madurai, have already attained (as of 1997) the status of metropolitan areas Trichy, Salem in the near future, and will continue to dominate the urban scene of Tamil Nadu. Here again conscious measures should be taken to keep their growth within manageable limits.



REGIONAL GROWTH POLES
- TAMIL NADU



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- 5. The emerging new industrial centres discussed earlier should be assigned a higher urban population where necessary through the development of new towns. In other cases, the related settlements should be upgraded suitably taking into consideration the likely additional urban population due to these industrial activities.
- 6. Suitable small towns or, where necessary, big villages should be identified in the least urbanised taluks at least one town in each taluk and developed for a population of above 20,000 in order to give fillip to urbanisation in these taluks. They may serve as service or market towns.

#### HIERARCHY OF SETTLEMENT WITHIN A REGION

It is suggested that the urban centres within a region be organised under three tiers below the regional growth poles. The first tier should include all towns which attain the status of class I and II towns by the year 2001. The towns which are in the category of class III town should constitute the second tier. All the block headquarters and other smaller urban settlements should constitute the third and last tier in the hierarchy. These will function as rural growth centres providing the basic services and facilities needed for the rural population. The towns at different levels will provide the necessary infrastructural facilities for their respective hinterlands. Development of these towns should be planned to meet this objective.

#### OBJECTIVES AND GOALS OF URBAN DEVELOPMENT POLICY

The objectives and goals of an Urban Development Policy as enunciated by the Directorate of Town and Country Planning can now be defined. Since regional imbalances are such that they may be corrected without investing heavily in areas which are least urbanised and that agriculture cannot be the main driving force in raising further the economy of the state, as there is little additional land that can be cultivated and there are serious constraints to increasing production, such as shortage of water, the objective should be to promote the economic growth of the state through industrial development. This could be achieved by developing small and medium sized towns particularly in the category of class II and III. Such a policy will not only achieve the economic and social goals but will also slow down the growth of the metropolitan centres.

## A brief summary of the findings are given below:

 The super metropolitan area of Chennai and four future metropolitan centres of Coimbatore, Madurai, Tiruchy and Salem will continue to grow and dominate the urban scene of Tamil Nadu. A careful planning on a long range basis offering greater incentives for the development of other urban centres in an integrated urban pattern approach may slow down the growth of these metropolises. Assuming such a policy is evolved, the population these centres may tend to show a trend of stabilisation rather than a run-away growth tendency.

- 2. Based on the trends of industrial development and the conscious efforts which the government is making to develop backward areas, selected centres should be given preferential treatment in development. Suitable population sizes have to be assigned to these centres.
- 3. It is evident from the prevailing urban scenario that the policy thrust to coordinate investment and urban development is absent. There is an urgent need to coordinate economic development plans with the physical development plans of urban centres.
- 4. Attempts should also be made to encourage or discourage development of selected urban centres through incentives and disincentives like subsidies, taxation measures, provision or non-provision of necessary inputs, etc.
- 5. Special efforts should be taken to develop small towns, at least one, in each of the identified least urbanised taluks of the state.
- 6. The development of urban centres should be based on a regional approach to urbanisation. Attempt has to be made to balance the urban population between the regions identified except in the case of Chennai metropolitan region where such balancing is not possible. Urban settlements in each region have also to be organised on a hierarchical basis with the regional growth pole at the apex, and three tiers of urban settlements, the last tier being the rural growth centre.
- 7. In the hierarchical set up, the blocks should constitute the primary unit and the block headquarters and class IV to VI towns should be planned to function as the rural growth centres to provide the rural settlements with the services needed by them. Every such rural growth centre will constitute the primary urban settlement in the hierarchy.

# CONSTITUTION (74TH) AMENDMENT ACT IN BRIEF

The Constitution (74th) Amendment Act, 1992, has ushered a new area in the history of urban local government in the country. It is, indeed, a first serious attempt to ensure adequate constitutional obligation so that democracy in the municipal government is stabilised. Until now, there was no constitutional obligation for local self-government in urban areas, even though there is a reference to village panchayats in the Directive Principles of State Policy, but there is no

reference to municipalities except by way of Entry No.5 in the State List as the subject of local self-government is the function of state. It is common knowledge that the municipal bodies are frequently suspended and superseded even though the municipal Acts provide for regular elections to them. As of 1994, more than half of the municipal corporations superseded and some of the suspensions are for over a decade which had a very deleterious effect on democracy at the grass root level. This has been largely responsible for eroding the very fabric of local self government in urban areas.

The 74th Amendment is a pointer to the determination of the state of bestow power to the people to plan for themselves and participate in the decision making process. With this Amendment, the urban local self-government units have not only received constitutional sanction, but important provisions have also been made for this level of government which would lead to improvement of the financial health of the municipal bodies, rationalise their structure and functions and ensure a greater degree of meaningful involvement of the people in the process of planning and development at local levels. The newly added Part IX-A to the Constitution has laid down important provisions for the first time introducing spatial and environment planning in the planning system at various levels right from nagar panchayats to metropolitan regions and then integrating the municipal plans with district plan and through them with the state and national plans.

The 74th Amendment has provided the uniform constitution of the municipalities by classifying them as: a) Nagar Panchayat; b) Municipal Council for smaller urban areas; and c) Municipal Corporation for larger urban areas. They are bestowed with sufficient powers, authority and responsibility. Under article 243-W relating to powers, authority and responsibility of local bodies states that the legislature of the state may, by law endow:

- a) The municipalities with such powers and authority as may be necessary to enable them to function as institutions of self-government and such law may contain provision for the devolution of powers and responsibilities upon municipalities subject to such conditions as may be specified therein, with respect to: i) the preparation of plans for economic development and social justice; and ii) the performance of functions and the implementation of schemes as may be entrusted to them including those in relation to the matter listed in the Twelfth Schedule.
- b) The committees with such powers and authority as may be necessary to enable them to carry out the responsibilities conferred upon them including those in relation to the matters listed in the Twelfth Schedule.

The schemes/functions listed in the Twelfth Schedule are of varied nature and comprise urban planning including town planning, regulation of land use, planning for economic and social

development, public utilities, services and amenities, slum improvement and urban poverty alleviation programmes, promotion of cultural, educational and aesthetic aspects, etc.

## Current Developments under 74th CAA in the State

All along, planning for development has been done at the state level. The heads of development departments formulate annual and five year plan proposals pertaining to their departments and these were being overseen and revised by the secretaries to government in charge of the administrative department at the government level after taking into account the plan priorities and policy directions of government. The state planning commission is charged with the responsibility of formulating the annual and five year plans of the state, and in this task, it examines the plan proposals received from the heads of departments/secretaries to the government, and fixes the size of the plan taking into consideration the resource position and the plan priorities. It also estimates the growth potential of the economy over the five year period. The commission constitutes sectoral working groups to go into details and to formulate sectoral plans. The state planning commission also engage experts to study and explore new areas of development.

The plan thus formulated is sent to the government. It undertakes periodic review of the plan implementation at the state level, and brings out the weaknesses and advocates remedial measures to the implementing departments.

As a part of monitoring, the concerned secretary to government conducts periodic reviews of the progress of implementation of the schemes under his control with the assistance of the concerned department. The finance department watches the progress of expenditure in the state plan through periodical reports and returns. The planning and development department at the government level examines the departmental plan proposals and suggests interlinkages of the plan, and horizontal and vertical coordination at the different levels.

#### Decentralised Planning Practice in Vogue in Tamil Nadu

As a part of the decentralised planning operation, the Government of Tamil Nadu had set up on pilot basis, District Planning Cells (DPC) in 1987 in three districts namely, Pasumpon Muthuramalinga Thevar, Tirunelveli - Kattapomman and the Nilgiris. These DPCs had compiled resource profiles of the respective districts and also had formulated the district plans. Each cell is manned by one chief planning officer, one project appraisal expert and one credit planning officer. These districts except the Nilgiris were allocated Rs.1.5 million each every year as supplemental finance in addition to the normal allocations to the districts made in the annual budgets, mainly to bridge the gap in the requirement for development works relating to construction of buildings, roads and so on.

The state government has decided to give special emphasis to decentralised planning at district level. Earlier for planning purpose, the suitable administrative unit was considered to be a development block. After a review, however, the government considered it better that the planning unit is the district, and the district development council has been entrusted with the responsibility of preparing the district plan. Micro-level plans at the block level and at the panchayat level are to be integrated at the district level. The state planning commission has prepared the methodology for the preparation of district level plans.

## **Devolution of Powers to Local Bodies**

The state government has granted greater responsibility, powers, and financial resources of local bodies in stages. The state government also would request the central government to amend the constitution providing for village panchayat president to become ex-officio members of the panchayat union council and for the direct election of the panchayat union chair persons as existed earlier in Tamil Nadu. On the basis of recommendations of state planning commission regarding devolution of additional responsibilities to the local bodies, the state government has decided for entrusting the responsibility for the implementation and supervision of schemes in important areas like poverty alleviation, drinking water supply, public distribution system, roads & communication, khadi, village and cottage industries, technical training, libraries, rural electrification and non-conventional energy sources. The Govt. also is categorical that the local bodies would take decision on the responsibilities entrusted to them and officials would only have the responsibility to implement those decisions.

# Action Taken by Government of Tamil Nadu, as a Follow up of the 74th Amendment to the Constitution of India

## Conformity Legislation

Tamil Nadu state legislature passed the conformity legislation in 1994 and the same received the Governor's assent on 17th May 1994. The amended provisions of the Tamil Nadu District Municipalities Act 1920, the Chennai Corporation Act, 1919, and other Municipal Corporation Acts, include the following major ingredients of the Constitution 74th Amendment: a) Periodic elections to local bodies; b) Constitution of an election commission; c) Constitution of a finance commission; d) Reservation for women and for scheduled castes and tribes in the positions of councillors and chairpersons; e) Constitution of Ward Committees, etc.

Subsequently, the Acts were further amended in August and then in December 1996, making a few more changes. Some of these important changes are: a) Term of Deputy Mayor - extended to five years; b) Deletion of provision for nomination of 'specialists' in Municipal Councils; c) Constitution of a Joint Committee between Chennai Corporation and Chennai

Metropolitan Water Supply and Sewerage Board with Mayor as Chairman to ensure the coordinated functioning of the two institutions.

## Elections

Based on the changes made in the Acts, elections were conducted in 634 town panchayats, 102 municipalities and 6 municipal corporations in September-October 1996. The elected representatives assumed office on 25th October 1996. The Chennai municipal corporation had an elected body after 23 years.

## Finance Commission's Recommendations

The State Finance Commission, submitted it's report to the government in October 1996. Some of the major recommendations which have been accepted by the state government are: a) Surcharge on stamp duty will be passed on, in full, to the local bodies; b) 90 per cent of the entertainment tax will be passed on to the respective local body; c) 8 per cent of total tax receipts of the state (excluding surcharge on stamp duty & entertainment tax) will be passed on to the local bodies; d) Of 'c' above, 15 per cent would be set apart as an incentive cum equalisation fund, to take care of post devolution anomalies; e) Of the balance (85%), 45 per cent will devolve to urban local bodies and the balance to rural local bodies; and f) Intense allocation among urban local bodies will be based on: i.) Total population, ii.) SC/ST population, iii.) Per capita revenue of the local body.

Acceptance of these recommendations by the state government is to result in a quantum increase in fund transfer to the local bodies. As regards urban local bodies, the total amount that will be transferred in 1997-1998 will be about Rs.3 billion (as against the present level of Rs.50-60 crores - representing a portion of surcharge on sales tax).

#### Other Administrative Changes

- a. Powers for issue of administration sanction for works and for acceptance of tenders, have been considerably enhanced from earlier levels. As a result, works costing over Rs.10 million also need to come to the government for clearance.
- b. In respect of municipal corporations, separate powers have been delegated to mayors in this regard. In the case of Chennai it is Rs.2 million and for others it is Rs.0.5 million.
- c. A special mayors discretionary fund has been created from which specific items of work can be undertaken.

- d. The state planning commission has been requested to go into the question of delegation of powers to local bodies in respect of subjects listed in the XII Schedule of the Constitution. Their report is awaited.
- e. Powers have been delegated to corporation council to decide on:
  - i) Number of standing committees to be constituted (upto a maximum of 6);
  - ii) Number of members to be elected to each of the standing committees (minimum 6; maximum 15);
  - iii) Portfolio, powers and responsibilities of standing committees.
- f. Similarly, councils have been authorised to decide on delegation of powers to ward committees.
- g. The Tamil Nadu Water Supply and Drainage Board Act has been amended allowing municipal corporations, certain municipalities to execute on their own, their water supply schemes (earlier only TWAD Board could do this work).
- h. Norms for appointment of sanitary workers, has been recently revised (existing norm was fixed in 1942), and Director, Municipal Administration is permitted to allow recruitment as per norms subject to finances of the local bodies permitting it.
- i. A high level committee has been constituted to make recommendations to the state government on the debt restructuring needs of urban local bodies.

## The Tamil Nadu Urban Development Fund (TNUDF)

The World Bank aided TN Urban Development Project was recently restructured as the TN Urban Infrastructure Trust Corporation with participation of government of Tamil Nadu; ILFS; ICICI and HDFC. This corporation has entered into a management contract with Tamil Nadu Urban Infrastructure and Financial Services Limited to manage the corpus fund which lends for urban infrastructure. The restructured project has also a grant fund component which can be accessed by ULBs for project preparation; upgradation of technical, administrative and other services, etc. The fund, in operation for about six months now, has been able to appraise municipal projects, effectively. Also, the grant fund is being utilised to provide computers for all urban local bodies, as also the necessary software for various operations.

#### URBAN AGENDA FOR THE FUTURE

The government of Tamil Nadu has identified the following areas, for action in the future:

**Legal Changes:** A common urban local bodies Bill has been introduced in the last session of the state assembly, and is now before a select committee. The Bill provides for the following major points: i) A clear delineation of obligatory and discretionary functions of local bodies; ii) Criteria for constitution of urban local bodies; iii) A changed property tax basis; iv) Provision for levy of advertisement tax, impact fees, etc. by local bodies; v) Tighter provision for control of unauthorised constructions, encroachments, unauthorised dumping of garbage, etc.

The Bill, once it becomes an Act, is expected to remove major bottlenecks in urban administration.

**Finances:** The state is contemplating the drawing up of specific 'accounting standards' for local body accounts; drawing up a revised format of double-entry accrual based accounting format, etc.

**Human Resources :** Development of the persons working in the sector will be made a continuing process.

## III. STATUS OF URBAN INFRASTRUCTURE AND SERVICES

# PRESENT STATUS OF BASIC SERVICES OF URBAN LOCAL BODIES

One of the very important and major obligatory functions of the local bodies relates to provision of basic civic services. The provision of basic services has been inadequate in quantity if not in quality invariably in all the categories of urban local bodies namely Town Panchayats, Municipalities and Corporations. As per the norms evolved by the Central Public Health Engineering and Environment Organisation, Ministry of Urban Affairs and Employment, Government of India, domestic water supply now varies from 40 lpcd to 200 lpcd. For communities with less than 20,000 population, 40 lpcd is the minimum if through stand posts, 70-100 lpcd if through house service connections; 100-150 lpcd for communities between 20,000-100,000 population size, and 150 to 200 lpcd for more than 100,000 population size. Institutional requirements are however extra.

In Tamil Nadu, the norm adopted is 70 lpcd for urban areas excluding metro water area, and the present situation is that not even 50 per cent of the municipal towns have reached this norm, and it is still worse in the case of town panchayats.

## **Town Panchayats**

Of the 635 town panchayats, 28 belong to special grade, 283 to selection grade, 248 to grade I and 76 to grade II, all having a total population of 8.78 million (Table 3.1).

- a) Water supply: In the case of town panchayat, 266 of them are in rural areas and the rest form part of urban agglomerations or within the hinterlands of big urban centres. While the town panchayats around big urban areas are to some extent covered, those in the rural tracts do hardly have an organised/protected water supply system.
- b) The town panchayats maintain in all, 13,302 km. of roads, of which as much as 1,117.9 km. comprise mud roads and WBM roads.
- c) Sanitation: The Town Panchayats also badly lack in sanitary measures, and more often worse than in rural areas.

Performance of Town Panchayats in Provision of Basic Service in Tamil Nadu (as on 31.3.1994) Table 3.1

			Length of Drains (in kms.	Length of Drains (in kms.)	Length Roads (in kms	Length of Roads (in kms.)	Lightin	Lighting (Nos.)		Water	Water supply	
SI. No.	Category	Population		per		per		per	Length lines (i)	Length of pipe lines (in kms.)	Combin	Length of pipe Combined water lines (in kms.) supply (Nos.)
			Total	1000 pop.	Total	1000 pop.	Total	1000 pop.	Total	per 1000	Total	per 1000
										pop.		pop.
	1. Special grade	801830	519	0.647	362	1.1998	18994	23.688	621	0.774	49449	61.670
2.	Selection grade 4635646	4635646	3032	0.654	6331	1.3657 116880		25.213	40905	8.824 235261	235261	50.750
33	I Grade	2665340	1472	0.552	4888	1.8339	64728	24.285	38670	38670 14.508 71372	71372	26.778
4.	II Grade	677281	227	0.335	1121	1.6551	1.6551 13467	19.884	8618	8618 12.724	9117	13.461
	Total	8780097	5250	0.547	13302	1.5140	214069	13302 1.5140 214069 23.268	•	9.208 365241	3	38.165

In the provision of drains, selection grade town panchayats are better served than other town panchayats (0.654 km.1000 persons). On an average, length of roads per 1,000 person, grade I town panchayats score first; in the provision of street lighting, selection grade stands first; comparing the average length of pipe lines per 1,000 persons, grade I town panchayats have registered a better position than all other town panchayats. Special grade town panchayats, on an average, provide about 61 combined water supply connections per 1,000 population, and rank first among town panchayats. With the overall ranking of current level of services provided by town panchayats, selection grade, on an average perform better. However, standards of water supply and sewerage are to be considered to classify them by quality of performance standards rather than by ranking based on current performance.

## **Municipalities**

In all, there are 104 municipalities of which 13 belong to special grade, 15 to selection grade, 30 to grade I, 30 to grade II, and 16 to grade III.

- a) Water Supply: Of the 104 municipalities, 101 have water supply schemes in one form or the other, and on the whole, the population covered is less than even one third of the total population of the municipalities.
- b) Road: About 6,000 km. long roads are being maintained by the 104 municipalities, and of them, third accounts for mud and gravel surface.

As per the records of municipal administration in respect of provision of basic services, special grade municipalities out-perform other grade municipalities except in the length of pipe line for water supply for which grade II and grade III municipalities are better served (10 km.1,000 persons) (Table 3.2). Among all the municipalities, grade II shows a poor level of service. However, the performance of urban municipalities is to be matched to the norms of basic services, rather than to conclude on the basis of ranking of current performance.

## **Municipal Corporations**

There are six municipal corporations, viz., Chennai, Coimbatore, Madurai, Salem, Tiruchirapalli and Tirunelveli.

a) Water Supply: Though comparatively the water supply level in the six corporations is much better than other categories of urban local bodies, the supply level is only equal to the minimum norm level stipulated for urban areas of 20,000 population size, when supplied through house service connections.

Performance of Municipalities in Provision of Basic Services in Tamil Nadu (as on 31.3.94) Table 3.2

			Length o	ength of Drains Length of Roads (in kms.)	Length (in k	gth of Roads (in kms.)	Lighting (Nos.)	3 (Nos.)		Water	Water supply	
SI. No.	Category	Population		per		per		per	Length lines (ii	Length of pipe lines (in kms.)	Combined wate supply (Nos.)	Combined water supply (Nos.)
			Total	1000 pop.	Total	1000 pop.	Total	1000 pop.	Total	per 1000	Total	per 1000
										Lob.		hoh.
	1. Special grade	1968990	1394	0.708	1800	0.914	51608	26.210	3399	1.726	155628	79.0395
2.	Selection grade	1463033	991	0.677	1187	0.811	34771	23.766	6012	4.109	79612	54.416
w.	I Grade	1942277	1573	0.8099	1530	0.788	48834	25.143	4360	2.245	192803	990 00
-	11 0 42	1107	1001	0	0						0001	007://
<del>1</del>	II Grade	13/4011	1094	0./96	1090	0.793	31172	22.687	14562	10.598	104877	76.329
5.	III Grade	411653	287	0.697	445	1.081	11489	27.909	4139	10.055	26410	64.156
	Total	7159964	5339	0.73758	6052	0.8774	0.8774 1177874 25.143	25.143	32472	5.7466	559330 74 6413	74 6413

Provision of Basic Services in Municipal Corporations of Tamil Nadu (as on 31.3.94) Table 3.3

			Length (in 1	Length of Roads (in kms.)	Length (in 1	Length of Drains (in kms.)	Lighting (Nos.)	; (Nos.)		Water supply	supply	
SI. No.	Municipal Corporation	Population	Total	per 1000	Total	per 1000	Total	per 1000	Length of pipe lines (in kms.)	Length of pipe lines (in kms.)	Combin	Combined water supply (Nos.)
				pop.		pop.		.dod	Total	per 1000 pop.	Total	per 1000 pop.
-	Coimbatore	816321	289	0.842	780	0.956	16347	20.025	555	0.680	63775	78.125
2.	Madras (Chennai)	3841396	2157	0.561	N.A.	1	72922	18.983	N.A.	1	N.A.	ī
3.	Madurai	940889	2886	3.067	388	0.412	15405	16.373	1955	2.078	69587	73.959
4.	Salem	593968	409	0.689	=	0.019	15865	26.710	1974	3.323	37955	63.901
5.	Tiruchirapalli	668648	959	0.980	301	0.449	20287	30.295	1192	1.780	35492	53.001
.9	Tirunelveli	374058	431	1.152	N.A.	ı	111100	29.674	11111	2.970	29116	77.838
	Total	7235280	7226	1.215	1480	0.459	151928	23.677	7071	2.1662	235925	69.3648

- b) Roads: Only 65 per cent of the roads are tarred/BT surfaced.
- Sanitation: Part of Coimbatore, Salem, Madurai, Trichy and Tirunelveli do not c) have a proper sewerage system.

On an average, there is about 1 km. of road for every 1,000 population in the municipal corporations. Madurai (3.067 km. 1,000 persons) and Tirunelveli (1.152 km.1,000 persons) have road facilities better than other municipal corporations (Table 3.3). In the provision of drainage, Coimbatore is better than any other municipal corporation, as in street lights Tiruchirapalli, Salem and Tirunelveli fare comparatively better than other municipal corporations. In terms of length of water supply line, Salem leads but in combined water supply connections Coimbatore, Madurai and Tirunelveli out-perform other municipal corporations in Tamil Nadu. On overall comparison. Tirunelveli stands first among municipal corporations in the provision of basic services. However, indicators like length of pipe lines depend more on the morphology of the town rather to be used as an attribute to measure performance. This logic is also extended to all the other services as there are no fixed norms that could be compared for assessment of performance. Moreover, the use of certain services like water supply is geographically dependent variable; therefore, evaluating the services level of each of them needs a subject test.

A summary of the basic services by coverage of population in the categories of urban local bodies is presented in Table 3.4.

Table 3.4 Level of Basic Services in Urban Local Bodies, 1995-96

Urban Local	Wate	er Supply	Sewerage and Sanitation	Solid Waste management	Storm water drains	Roa	nds
Bodies	LPCD average	Population coverage (%)	Population coverage(%)	Collection performance (%)	(Pucca open) coverage(%)	Coverage (%)	Pucca surface (km.)
Town Panchayats*	34	<50	17	46	23	10	59
Municipalities <sup>+</sup>	48	32	23	70	53	53	67
Corporation	73	57*	22	82	23	54	89

Note: \* Chennai 78 per cent.

The situation of the present level of availability of the services is poor as may be seen from the above table. The degree of lackness of the services may be appreciated when we see that the coverage of population in respect of protected water supply in the urban areas as a whole in the country stands at 60 per cent, 77 per cent and 83 per cent in 1971, 1975 and 1981, and in the case of sanitation it is 27.5 per cent, 27 per cent and 26.9 per cent in the respective years;

<sup>+</sup> Gradewise information is not readily available.

but in the year 1996 in Tamil Nadu the level of these two services is less than what it was 15 years ago on an average at the national level.

The policy note of the state government pertaining to the governance of urban local bodies during 1996-97, indicates an allocation of Rs.167.4 million for water supply works in municipalities, and about Rs.370 million for town panchayats. Though sewerage and sanitation items are also allotted funds, the amount provided are highly unlikely to be spent on these items, as priority would be only for water supply.

#### PRINCIPAL CAUSES FOR THE PRESENT STATUS OF SERVICES

#### **Financial**

The first and foremost cause is the well known financial inadequacy in almost all the urban local bodies. Though the income expenditure statements of the categories of urban local bodies indicate a semblance of comfortable position as the income is more than expenditure, in actuality, the expenditure is a 'suppressed' one as per the directives from the above. If the expenditure were to be as per the needs of the local bodies, it would have far exceeded the income thus leaving fairly a big gap. It may be noted that the conditions are really worse in the town panchayats where more than one third of the state's urban population live.

From the income of the local body, nearly 40 per cent goes to meet the salaries of the staff, and another 60 per cent for O & M and to meet the capital expenditure. Hardly any money is left for maintenance including augmentation of the services. For instance, in the case of water supply, the traditional sources are drying up faster which require drudging and repair. More often, the sources lie far away from the communities which again require huge capital for transmission of water. As regards roads, the capital requirement for construction of the roads is fast going up as the need for more roads keep rising due to large number of new developments.

#### Administrative Lacuna

The urban local bodies are totally controlled by the state government with the result that the local bodies do not have any freedom for even fixation of pay, allowance, etc.to their own staff.

Decision regarding salary structure, number of posts to be approved, pay revision and other service conditions vests only with the state government. In this process, creation of posts, selection of candidates to the posts, and posting, etc. take enormous time, which tends not only to delay the process of ameliorating the acute difficulties which the local bodies face, but also

frustrates the zeal and enthusiasm in discharging the obligatory functions of the local bodies for want of right personnel at the right time.

#### Legal Framework

The statues governing the responsibilities of the local bodies are nearly eight decades old and as such, it is apparent that the context and circumstances obtained today are almost entirely different in terms of quantity and quality compared to those eight decades back. As the provisions of the Acts are no longer relevant, operationalising those Acts become infructuous today. Moreover, the Acts are also too complicated to follow in the changed situation. For instance, in the revenue receipts of the local bodies, property tax accounts for a lion share of more than 50 per cent. As per the provisions of the Acts, the fixation of the rental value is highly discretionary and gives room for enormous manipulation naturally in under valuing. If the full potential of this source of revenue is tapped on a scientific and realistic basis, property tax alone will yield many times more than what it is today. Moreover, their is no penalty for non payment of the property tax. This is aggravated by the inefficiency in collection performance which has rather become too deep rooted in the system. And also there is hardly any transparency in the accounting system of the local bodies. In this context, if the local bodies on the other hand are vested with powers to decide on these issues including revising the tax structure, may be once in five years, it will bring in a tremendous change for better not only in the efficiency and effectiveness of the functioning of the local body, but also would significantly improve their financial position perhaps rendering most of them self-sufficient and self-sustaining. This only requires a statutory remedy with a conscious political bill.

#### Technical expertise

Local body is a total entity and a mini governments in all respects at the local level. Today, many of the functional wings under local body which are in effect service set ups, woefully lack proper expertise and specialisation in the concerned service. Some departments relating to engineering aspects, public health, city planning, etc. do not have qualified persons with required experience commensurate with the requirement and level of the local body. Invariably, the core staff who manage the slow of each of the service and other means of the local body are on deputation from the state departments, and, who, for all purposes are governed and controlled by rules and regulations of the concerned parent departments at the state level. As a result, one cannot expect such staff to be fully dedicated in discharging their duties consciously, and cooperate with the local administration in a team spirit. The administrative head of the local body, whether commissioner or executive officer, does not have any control over such staff on deputation which results in an apathy ultimately. A case in point is the post of health officers in the local bodies, who are drawn from the state health departments.

# IV. INSTITUTIONAL ARRANGEMENT FOR URBAN INFRASTRUCTURE

All human activities take place on land, and as it is a non-renewable resource, becomes increasingly scarcer as the need for it gallops as the human activities multiply. Though the landman ratio keeps dwindling as years roll by in general, its vulnerability is accurately felt in urban areas. Access to land, therefore, in urban area is becoming increasingly constrained to all sections of the society, be it for public or private use. The resultant distortions of the land market lead to some very injurious effects on the urban fabric. Of all uses on land, housing is human being's one of the most essential requirements. The urban land market is highly competitive and imperfect. It is subject to umpteen number of constraints in terms of rules and regulations. Under these circumstances, the public agencies in the form of local bodies often find it beyond their means economically, technically and administratively to provide at minimum norms, the essential urban civic services which are invariably capital intensive. The government, therefore, from time to time seeks to make certain institutional arrangements to regulate, to the extent possible, the land supply and provide for the needy at state, regional and local levels. Such institutional arrangements in vogue in the state catering to specially the urban sector, in its various forms have been discussed here.

#### PROCESS OF DEVELOPMENT PLANNING

The government started for the first time development of towns in a planned manner after the enactment of Chennai Town Planning Act, 1920 which remained in force till 1971. Incorporating certain stipulations, the Act was enacted again as the Town and Country Planning Act, 1971 by the state in 1971, and it received the accent of the President of India in 1972.

In the pre 1971 era, the local authorities were to prepare, publish and obtain sanction from the government for the general town planning schemes relating to the municipal areas and, detailed town planning schemes for local areas within the municipal areas. The planning schemes usually contained: i) A land use plan, and ii) A set of schedule and clauses to regulate development.

The respective local bodies were expected to carry out the planning thoughts within their jurisdiction.

In the post 1971 period, planning efforts began with the local bodies with the guidance and assistance of the regional offices of Directorate of Town and Country Planning. Though the various municipalities under the Tamil Nadu Districts Municipal Act and panchayat unions under the Tamil Nadu Panchayat Act, 1958 formulated proposals or development of house sites and building layouts, these efforts were not fully successful as they lacked statutory backing. Under

the 1971 Act, the planning authorities were to prepare the master plans and detailed development plans (DDPs) for the respective areas. In fact Chennai Metropolitan Development Authority (MMDA) was also set up in 1972, to start with as an adhoc body, but was confirmed to a status of Development Authority in 1974.

# INSTITUTIONAL ARRANGEMENTS FOR DEVELOPMENT

In the case of Chennai, on the basis of the report prepared by MMDA for additional financial resources from international funding agency, namely the World Bank, Chennai Urban Development Project (MUDP) scheme came into being in the Chennai Metropolitan Area. At the same time, the Tamil Nadu Urban Development Projects (TNUDP), a statewide venture was also constituted to service the World Bank's assistance for urban development projects. The main objective of these projects is to develop and promote low cost solutions in the efforts relating to providing shelter, employment, water supply, sewerage and sanitation and, more particularly to focus on the needs of the urban poor.

For this purpose of providing the above said aspects, many different agencies were involved as described below:

# Tamil Nadu Municipal Urban Development Fund (TNMUDF)

Following the formulation of TNUDP, an institution called Project Management Group (PMG), was constituted under the housing and urban development department of the state government mainly to improve the project implementation and effect coordination. This Group is headed by a Director from Indian Administrative Service and Chief Planner besides members. As a part of this programme, a revolving fund namely Municipal Development Fund has been created, and it is funded by contribution from state government in the form of loans as well as grants, and repayment by the local bodies. The objective of the fund is to assist urban local bodies in the planning, financing, managing, maintenance and improvement of the urban services through the provision of technical assistance.

#### **Arrangements Within Chennai**

#### Land Servicing Programme (LAND)

After implementing MUDP-I and MUDP-II, land servicing programme envisaged developing land to provide service to residential plots, non-residential plots, and core houses and community facilities for low income families. The services cover water supply, conventional and low cost sanitation, roads and electricity in addition to social facilities such as primary and high schools, health centres, community centres, police and fire protection and markets.

# Guided Urban Development (GUD)

In order to bring the land locked-up under the Urban Land Ceiling (ULC) act, guided urban development was proposed as a private and public partnership venture. The in-built features of GUD are, that private land owners and developers provide large number of sites to EWS and LIG at an affordable cost. The service standards are similar to that of the other public schemes. The private developers could provide the infrastructure and transfer them to the government free of cost. Whenever these sites could not generate minimum profits, MMDA has to fund the provision of off-site infrastructure and also community facilities. The development authority would sell the plots to LIGs at pre-determined prices.

The private land owner and developer is given the incentive in terms of exempting from ULC Act and allowance of sale of the plots which are not meant for EWS and LIG, at market prices and adoption of efficient and low cost engineering standards to increase marketable land. Permission for conversion into urban use and reclassification of land accordingly would also be given for those availing GUD. Initial financial assistance in the form of advance money against the payment for low income plots is also being made available by MMDA.

#### Slum Improvement Programme (SIP)

After MUDP, about 45,000 households would get assistance in the model of MUDP programme.

#### Land Sharing/Readjustment for Private Slums

This is meant to cover at least about 10,000 households out of the total 42,000 households occupying private land, by service provision. These households were excluded from the earlier MUDP due to tenure related problems.

The scheme involves clearance of 20 per cent of the potentially most valuable area in a slum neighbourhood through voluntary hut relocation with the site and retention of the cleared area by the owner. Tenure is given on the same condition as applied in the case of slums on public land.

#### Master Plan of 1974 and 1992

The MMDA, in accordance with the provision of the Act, has prepared a master plan in 1974 for Madras Metropolitan Area (MMA) covering 1,770 sq. km. area. This received the approval of the government in 1976. This plan was revised in 1992 - 93 for a perspective period upto 2011 AD.

The master plan under the Act proposes/provides for the manner in which the land in the planning area shall be used including allotment or reservation of land for residential, commercial, industrial and agricultural purposes and for parks, playgrounds and open spaces, institutions and for civic amenities. It also makes provision for national highways, arterial roads, ring roads, major streets, communication lines including railways, airports and canals, and traffic and transport pattern and circulation pattern.

Taking the long term requirements into consideration, the master plan seeks to lay down policies and programmes for the overall development of the Chennai Metropolitan Area.

The master plan consists of two inter-related parts: (i) Land Use Plan: The land use plan classified the area into zones and designated one of the 10 uses (predominant) to all the zones under MMA; and (ii) A set of rules termed 'development control rules' which are used to regulate development in accordance with the master plan.

# Development Control Rules (DCR) for MMA

These regulate the granting of planning permissions within MMA. Over the years, several amendments have been made to these rules and have received the approval of the government. The DCR covers aspects related to the subdivision of land, the type of land use, the intensity of use, the extent of site coverage and the form of buildings.

# The Planning Application Process in MMA

It is mandatory for the plot owner/developer to take permission from the competent authority. In the use designated zones, certain uses are permitted normally and the authority to issue permission vests with the local body within its jurisdiction. However, in practice, even for these uses, the local bodies outside MMC area have to refer all the cases to MMDA. Within MMC, the corporation is the authority to issue permission.

There are other uses which are permitted only by MMDA by appeal to it irrespective of whether it is located within MMC or the outer areas of MMA. These cases include building types with more than 300 sq.m. floor area, development in specified highway corridors and cases of reclassification of land use.

# Detailed Development Plans (DDP) in MMA

Within the master plan framework, DDPs are to be prepared for each of the planning units. The DDP identifies each parcel of land by its survey number and pinpoints the detailed use

for each and every parcel. Any development in the areas covered by DDP must conform to the use specified under DDP.

These plans specify ownership and extent of land, existing and proposed uses of land, reservations or allotments of land for streets, roads, squares, etc., open spaces, recreational grounds, schools, markets, shops, factories, hospitals, public buildings and public purposes of all kinds. It also contains zoning regulations.

In the areas covered by DDPs, the control mechanism is in accordance with provision in DDP. In the areas not covered by DDP, the master plan provisions and development control rules operate.

# Land Acquisition for Public Purposes in MMA and other Local Bodies

Any land required, reserved or designated in the master plan, a detailed development plan or a new town development plan, as the case may be, is deemed to be land required for public purpose. Acquisition is thus done under the Land Acquisition Act, 1894. The mode of acquisition is as follows: a) The local authority may enter into an agreement with any person for acquisition from him by direct purchase. However, if the value of such land exceeds rupees fifty thousand, the planning authority has to get prior approval from the government before entering into negotiation; and b) Make an application to the government for acquiring such land under the Land Acquisition Act.

Generally, acquisition is done through the government. The compensation is fixed at the market value of the land prevailing on the date of the declaration of intent to acquire.

#### Arrangements Outside MMA in the State

#### Planning Mechanism

The role of the planning mechanism in land servicing could be measured in terms of the extent of land brought into urban use as against the requirements in terms of time and place. The effectiveness of the mechanism could be measured in terms of how the actual development has occurred compared to the provisions of the plan.

# **Instituting Sectoral Organisations**

To strengthen the capabilities of urban local governments of Tamil Nadu, the state government had initiated to constitute a number of sectoral agencies. Since the municipal government is pre-occupied with the revenue collection and public health sector, number of sectoral agencies were instituted to undertake huge engineering and related projects. Some of the important sectoral organisations and their functions are depicted in Table 4.1.

Table 4.1 Institutional and Functional Responsibilities of Sectoral Agencies in Tamil Nadu

S.No.	Name of the Agency	Functional responsibilities
1.	Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB)	Planning, programming, designing constructing and operating and maintaining of water supply and sanitation systems in Chennai Metropolitan Area (CMA).
2.	Tamil Nadu Water Supply and Drainage Board (TWADB)	Planning, programming, designing and constructing water supply and sanitation programmes in Tamil Nadu other than CMA.
3.	Directorate of Municipal Administration (DMA), and Directorate of Town Panchayats (DTP)	General administration of all municipalities and town panchayats of Tamil Nadu, operation and maintenance of water supply and sanitation system in municipalities and municipal townships and construction of minor works, costing not more than a specified amount.
4.	Tamil Nadu Housing Board (TNHB)	Planning, programming, designing and construction of housing colonies with water supply, drainage, sanitation facilities.
5.	Directorate of Rural Development (DRD)	General administration of panchayats, operation and maintenance of water supply and sanitation system in panchayats, construction of few minor works not exceeding a pre-fixed monitory limit.
6.	and Tribal welfare	Organising welfare programmes and provision and construction of Adi-Dravidar and Tribal colonies including water supply and sanitation.
7.	Board (TNSCB)	Organise and execute slum related programmes including construction of houses and environmental improvement programmes. Provision of minimum basic services of water supply, sanitation street lighting and environmental improvement programmes.

# LAND DEVELOPMENT AT THE STATE LEVEL

At the sub-state level, land development includes acquisition of land for a particular purpose, obtaining planning permissions, land development with provision of on-site services,

construction and allotment of plots. Land development is mostly done by the following bodies: i) Public agencies such as Tamil Nadu Housing Board, Tamil Nadu Slum Clearance Board, CMDA in Chennai Metropolitan Area. Other state and central government departments and local bodies (state PWD, central PWD, railways, defence, port trust, municipal corporation, etc.), employees housing; ii) Private real estate developers; iii) Builders/housing developers; iv) Individuals/co-operatives; v) Unauthorised layouts; and vi) Informal development.

# **Public Agencies**

The main agency is Tamil Nadu Housing Board. The TNHB was established in 1961 as a statutory body with the objective to undertake housing programmes for the entire state of Tamil Nadu. The board also undertook the sites and services component of MUDP I and II in CMA. Under TNUDP project, (co-financed by HUDCO), TNHB is developing sites and services plots in a number of towns.

# **Development Process**

Acquisition of land is through the Land Acquisition Act of 1984. The TNHB prepares the layout and executes it. No planning permission is required. Water supply, sewerage facilities and roads are provided by the board. However, when trunk lines exist, service lines are linked to the existing network. Otherwise, for such facilities, on-site provision is made. To execute the water supply and sewerage facilities, assistance is taken from TNWSSB. Roads built in the project area, along with open spaces, are handed over to the local bodies.

#### Real Estate Developers

The real estate developers basically acquire land, prepare layouts, get approvals from planning bodies and sell the plots. The number of real estate developers operating in CMA alone is about 340. They are mainly partnership firms or private limited companies. Public limited companies are also in the business.

#### **Builders/Housing Developers**

With the ever increasing expansion of urban areas, land prices are rising at a rapid rate and problems of infrastructure development has really rendered household flats for houses. Nowadays many entrepreneurs have chosen this option. In Chennai alone, like the real estate promoters, most of these builders' groups are also private limited companies or partnership companies.

#### Land

After obtaining planning permission, the development of flats is mainly on vacant plots in the urban areas or by converting old buildings. Land is procured by: (i) Outright purchase; (ii) Development and promotion rights of builder, without transferring ownership; and (iii) Lease promotion.

# Disbursement

The advertisements are made soon after the project is planned. The purchaser has to pay about 25 per cent of the initial deposit at the time of agreement. The remaining amount is collected through installments, with the last installment collected at the time of taking possession.

# **Co-operatives**: (individuals)

Till 1950, the state capital, Chennai was in the forefront with regard to operatives. However, the role of housing societies in Chennai as well as Tamil Nadu since then has been very limited due to lack of adequate funds. The apex body, the Tamil Nadu Cooperative Housing Society, obtains finances from the Life Insurance Corporation of India (LIC), the nationalised banks, HUDCO, and the Government of Tamil Nadu.

Amongst the various types of co-operatives, there are three types of primary housing societies which are dominant. These are:

# Co-operative House Building and Construction Society

These societies are formed on an individual ownership basis. These societies acquire land, prepare layout and allot them to individual members. They obtain loans from the apex society, which is then lent to the individual members for the construction of houses. The collateral for these loans is the site and the building. Construction activities/house building is totally undertaken by the individual members.

#### Co-operative House Service Society

Here the house building activity is undertaken by the society on behalf of the members, and the rest as the one at (a) above.

# Co-operative Housing Society

These operate on the basis of co-partnership tenancy system. These societies acquire land, build houses and allot them to the members. These members get ownership after completion of payment of all the loan installments. These are peculiar to flat-type housing development. In these, the society maintains the building and operate services against which service charges are collected from the members.

#### **Unauthorised Layouts**

Unauthorised land development generally takes place in the peripheral areas, often outside the town limits. These layouts are in fact violations of the regulations relating to zoning, development control rules or the urban land ceiling provisions.

The private developer makes an affidavit regarding alteration of land. Such transactions avoid the payment of stamp duties. Plots in unauthorised colonies are 40 to 50 per cent cheaper than the authorised plots in the same locations. The trade off between risk and lower prices usually pays off, as many of these get regularised over time.

Such developments are taking place in the villages around the big urban centres. A number of small farmers have resorted to this practice to make quick and big money in a number of big cities like Chennai, Madurai, Coimbatore, Trichy, etc.

#### **Informal Sector**

Of all the alternatives the cheapest form of residential development is in the squatter settlements. These developments are taking place mainly on government lands and also on private and temple lands. All these developments are without any planning permission. The house standards are very low both in terms of size (less than 20 sq.m.) and the construction materials. Services hardly exist. Tenure security was possible only under the World Bank assisted slum improvement programme. Due to this and various other programmes sponsored by the central and state governments, improvements have occurred in these slums.

Despite all these efforts, the level of services are very poor in Chennai and other places. Even in the developed areas of Chennai, people have to resort to the purchase of water from tankers. In the outer areas, water as well as sanitation and other facilities are non-existent. The local bodies, which are responsible for the provision of these facilities, have serious constraints in terms of resources.

# INSTITUTIONAL ARRANGEMENT FOR DELIVERY OF URBAN SERVICES

The provision of water supply, sewerage, drainage and roads form the basic component of land development. Different institutions are responsible for the services in the state. The existing situation and institutional framework between the corporation areas and other areas differ from each other.

#### **Institutional Arrangement Within MMA**

#### MMWSSB for MMA

The Chennai Metropolitan Water Supply and Sewerage Board (MMWSSB) was established in the year 1978 by a state Act. It's responsibility includes construction, operation and maintenance of water supply and sewerage in the city of Chennai and the ground water supply for the industrial area of Manali which it took from the state public works department. All the assets and liabilities as well as most of the manpower with the corporation related to the provision of water supply and sewerage were transferred to the MMWSSB. The Board functions under the administrative control of the municipal administration and the water supply department of the secretariat.

The responsibility of the Board includes the operation and maintenance of water supply and sewerage system in the entire Chennai metropolitan area. The Board also executes works for providing water supply on behalf on the MMDA, TNHB, TNSCB and other government departments, taking deposits from the agencies concerned.

#### Sources of Finance

The MMWSSB depends largely on the budgetary provisions by the state government for financing its activities. External finances like World Bank loans are routed through the Government of Tamil Nadu. Under the T & CP Act of 1971, the development charges levied or recovered by the local body (CMDA) related to the provision of infrastructure need be transferred to the MMWSSB in part or full. A fixed proportion (7%) of property tax levied is also transferred to the MMWSSB towards the operation and maintenance of these services.

A number of schemes with assistance from the Government of Tamil Nadu, and the World Bank assisted 'Chennai City Water Supply and Sanitation Project' have also been implemented. As a long term solution, the Chennai Transmission, Distribution and Sewerage Project (MTDS) is also under implementation.

# Institutional Arrangement at State Level

# Provision of Water Supply and Sanitation

The local bodies are responsible for providing basic infrastructure in these areas. These provisions are made under the Tamil Nadu District Municipalities Act, 1920 (DM Act) in the municipal areas and the Tamil Nadu Panchayat Act, 1958 (P Act) in the rural areas.

Under the said Acts, the local bodies are to provide for and maintain basic services, and undertake town planning and formulation of housing schemes within their jurisdictional areas. The local bodies are also empowered to levy taxes. Though the local authorities operate as autonomous bodies, the state government, under the Act, has several powers to control the functioning of municipalities. With the introduction of new state sponsored projects such as the Integrated Urban Development Programmes (IUDP), the interaction between the government and the local bodies is further strengthened.

With a view to help the municipalities and panchayats in Tamil Nadu to have their own protected water supply and drainage systems, the Tamil Nadu government has constituted the Tamil Nadu Water Supply and Drainage Board (TWADB) under the provision of the Tamil Nadu Water Supply and Drainage Board Act.

The Board, on the request of a local body, undertakes the investigation and execution of water supply and drainage schemes. They also assist the local bodies to get loans from the LIC and the government in the ratio of 2:1. The government, in advancing loans, insists that the local body should run the water supply schemes on a remunerative basis charging user charges for water supply. The cost of the project is borne by the local bodies.

The Board hands over the charge of these systems on their completion to the local body, and thereafter, it becomes the responsibility of the local body to carry out operations and maintenance. It is a general practice however that the local bodies delay taking the charge mainly to avoid the operation and maintenance due to lack of funds and manpower.

# Sanitation

Disposal of sullage and night soil through (underground) drainage system is non-existent in almost all the municipalities and panchayat areas. Some settlements have underground drainage systems but the coverage is limited to small areas. Generally, sullage is disposed of into cess pools constructed within the premises of the plot or left into open fields and earthen drains. Night soil is disposed of through septic tanks or dry pit latrines. A major portion of the population still

use the open fields. Some local bodies have provided public conveniences, but maintenance is very poor. During monsoon, it is common to find sullage overflowing on roads. Industrial effluents are generally discharged into nearby streams or open grounds.

# Storm Water Drainage

Municipalities and town panchayats are responsible for providing storm water drainage. However, very few local bodies have provided such facilities.

# Roads

The local bodies have to construct and maintain the road systems within their jurisdictions. The national highways lying within the jurisdiction of the local bodies are maintained by the state government and funded by the central government. Other highways and major roads were built by the state's highway department and rural works department. The department is also responsible for maintaining these roads. The municipal bodies and other local bodies are responsible for building roads within their jurisdictional limits. This also includes roads built under the Private Street Act.

#### PRIVATE SECTOR PARTICIPATION IN SERVICE DELIVERY

The reasons for private sector participation in the delivery of service is mainly due to the poor performance of the public systems and drying up of the conventional sources of funds. At the same time not that all the public services could be privatised. The crucial factor for the private sector is to fix the tariff rates and the customer's willingness to pay for the service. The method is generally followed when an infrastructural facility is privatised as "Build Operate and Transfer" (BOT) or Build Operate Own and Transfer" (BOOT) or "Build Operate Lease and Transfer" (BOLT).

The advantages of privatisation is better efficiency and adoption of updated technology. It greatly relives the government/local body of the burden on wages and operating cost on servicing.

Mainly the maintenance of water supply systems, sewage treatment and pump house should be privatised. Even solid waste management could be privatised. The experience of CIDCO and MMWSSB has shown a saving of 20 per cent to 25 per cent. Street sweeping, debris removal, garbage collections, maintenance of community latrines, maintenance of public places like parks and markets can be entrusted to private parties. Very recently Coimbatore municipal corporation has privatised the maintenance of a number of community latrines after successful "Test Dose in the Past". EXNORA International, a voluntary NGO based in Chennai, is a model

of public participation in primary collection of garbage. Here collection of service charges can be entrusted to NGOs and social organisations after verifying their reputation and earlier performance.

# SOURCES OF FINANCE FOR INFRASTRUCTURE DEVELOPMENT

The main sources of finance for these local bodies are the various taxes levied under the respective Acts such as property tax, professional tax, and non-tax items such as, water charges, etc. Tax collections from entertainment tax and surcharge on stamp duty are collected by the state government, and shared between the government and the municipalities. Several types of grants, specific purpose grants, are paid to the municipalities as subsidies towards the payment of dearness allowances to local body staff. This has been stopped for quite some time. Specific purpose grants are usually made as adhoc grants for the maintenance of roads. Compensatory grants are given as compensation in lieu of motor vehicles license fee and toll tax. Miscellaneous grants are allotted for purchase of equipment, building class rooms, etc. The government also advances loans to municipalities for the implementation of land programmes.

- The financial position of the municipalities and other local bodies is traditionally not sound. With increasing population pressure, they have undertaken several major schemes like water supply and drainage through obtaining loans from LIC and the government. Debt servicing alone becomes a major burden to the local bodies. Many local bodies have increased their water rates to meet these deficits. The loan is raised by TWAD Board on behalf of the local bodies on government guarantee. Under "Public Debt", the loans from Life Insurance Corporation of India, under receipts, amount to Rs.222.8 million during 1995-96 and the revised estimate for 1996-97 is Rs.249.9 million, and this budget estimate for 1997-98 is Rs.274.8 million.
- ii) Chennai Urban Development Finance (MUDF) provided both loans and grants on the basis of performance and needs. But this has come to a close in September 1996, since TNUDF replaced it. It is being managed by the Assets Management Company (AMC) with the participation of ICICI, HDF, ILFS and Government of Tamil Nadu.
- iii) For small and medium towns both of Municipalities and town panchayats, financial assistance is available from the centre and state under IDSMT scheme and IUDP scheme.
- iv) TUFIDCO extends loans for investments in infrastructure in low income areas for low cost sanitation, Prime Minister's Urban Poverty Alleviation Programme, NRY, etc.
- v) Within Chennai metropolitan area, Metropolitan Infrastructure Development Corporation (MIDC) provided financial support for implementing projects under mega city project by

providing upto 50 per cent of the project cost, and 10 per cent subsidy. However, MIDC has recently been merged with TUFIDCO.

- vi) The Public Debt. Act, 1944 and local authorities local rules, 1937 permit the centre, the state and local bodies to raise resources. The Chennai corporation is permitted to raise resources under Chennai City Municipal Corporation Act, 1919. Similar provisions for raising resources exist under Section 32 of the Metro Act, 1978, and Section 34 of the TWAD Act, 1971.
- vii) Normally, the state government provides the guarantees for loans for approved public developmental purposes, except for commercial activities. By March 1994, the state government guaranteed an amount of Rs.63.03 billion of which as much as Rs.35.38 billion towards principal is still outstanding. Of this as much as Rs.2.4 billion is the loan taken by TWAD Board from LIC.
- viii) Most of the loan guaranteed involve revision of tariff and levy of new taxes. In practice however, this is hardly done leading to the violations of the guarantee condition and subsequent inability of the local bodies.

A possible solution could be that for capital investment, the corporation can go for public issues of equity or bond or approach the institutional finance on its own credit worthiness. The other categories of urban local bodies can however go for more remunerative, self paying and service projects with loans and grants.

# V. URBAN INFRASTRUCTURE FINANCING

#### REVIEW OF MUNICIPAL FINANCE

# Revenue Accounts: Receipts and Expenditure

The municipal accounts performance during 1991-92 to 1993-94 presents, on the whole, an apparently rosy picture as the surplus of both revenue and capital accounts put together works out to Rs.488.4 million. The receipts both under revenue and capital amount to Rs.5.75 billion on an average per annum during the said years of which the revenue receipts alone is 80 per cent. On the expenditure side, the average annual expenditure both under revenue and capital amounts to Rs.5.26 billion of which the revenue expenditure is only 68.70 per cent. Taking the revenue accounts alone of all the local bodies, the revenue expenditure, is only 80 per cent of the revenue receipts but on the capital account side the capital expenditure exceeds the capital receipts by 40 per cent, i.e., by Rs.474.3 million. However, as it is understood, the expenditure is a suppressed one as it was made to be so and as such the financial performance as is revealed by the statistics of urban local bodies is to be seen in this context in mind.

Though an element of surplus in the revenue accounts is seen in the different categories of local bodies namely, corporations, municipalities and town panchayats. The corporation's local body account shows the maximum of Rs.770 million followed by Rs.100 million in the case of municipalities. On the contrary, under the capital accounts, the capital expenditure exceeds in all the categories of local bodies, the maximum being in the category of corporation where the deficit is Rs.446.84 million which in fact is more than the capital receipts of Rs.368.2 million. The expenditure is almost two and quarter times the capital receipts. In other two categories of local bodies, the deficit is marginal being only 2.5 per cent in the case of the municipalities, and 5.7 per cent in the case of town panchayats (Table 5.1).

#### Corporations

For all the 6 corporations taken together, from the information available for 3 years i.e., 1991-92 to 1993-94, the average annual revenue receipts accounted for Rs.2.45 billion per annum against the revenue expenditure of Rs.1.68 billion per annum. Of this Chennai corporation alone accounted for Rs.1.65 billion of revenue receipts per annum against the revenue expenditure of Rs.1.03 billion per annum, the least being Tirunelveli with Rs.52.9 million as receipts and revenue expenditure of Rs.20.7 million.

In terms of per capita accounts, the average annual revenue receipt is Rs.1,538 against a revenue expenditure of around Rs.1,128 per year, where again the Chennai corporation tops the list, with corresponding figures of Rs.429 and Rs.269 (Table 5.2).

Table 5.1: Overall Performance of Capital and Revenue Accounts of Urban Local Bodies, Tamil Nadu, 1991-92 to 1993-94

		Revenue	Receipt	Revenue E	xpenditure	Capital	Receipt	Capital E	xpenditure
SI. No.	Urban Local Body Category	Avg. actual (in million Rs.)	Avg. Per capita (in Rs.)	Avg. actual (in million)	Avg. Per capita (in Rs.)	Avg. actual (in million)	Avg. Per capita (million Rs.)	Avg. actual (in million)	Avg. Per capita (in Rs.)
1.	Municipal Corporations	2448.66	1538.0	1676.71	1128.0	368.25	320.8	815.09	334.9
2.	Municipalities	1390.30	907.0	1289.99	847.0	568.39	392.0	582.41	405.0
3.	Town Panchayats	740.19	342.0	649.76	291.0	236.47	112.0	249.87	115.0
	Total	4579.16	2787.0	3616.46	2266.0	1173.11	824.8	1647.38	854.9

7	Total Receipts		Tota	l Expenditure		Balance	
Head	Avg. Actual (in million Rs.)	Avg. Per Capita (in Rs.)	Head	Avg. Actual (in million Rs.)	Avg. Per Capita (in Rs.)	Receipts - Expenditure	Avg. Per Capita (in Rs.)
Revenue receipts	4579.16	2787.00	Revenue expenditure	3616.46	2266.00	962.70	521.00
Capital receipts	1173.11	824.80	Capital expenditure	1647.38	854.90	- 474.27	- 30.10
Total	5752.26	3611.80	Total	5263.83	3120.90	488.43	490.90

Table 5.2: Revenue Accounts Receipts and Expenditure - Urban Local Bodies Municipal Corporations

	ame of the	Acutals	for the year	ar (in thou	sand Rs.)		Per capi	ta (in Rs.)	
	Aunicipal orporation	1991-92	1992-93	1993-94	Average	1991-92	1992-93	1993-94	Average
Coimb	Receipt Expenditure	276552 170682	296690 211399	388036 204661	320426 195583	339 209	363 259	475 251	393 240
Chenn	ai (Madras) Receipt Expenditure	1242939 909918	2191495 1017260	1508581 1175979	1647672 1034386	324 237	570 265	393 306	429 269
Madur	rai Receipt Expenditure	159012 173393	214421 214219	213154 256740	195529 214784	169 184	228 228	227 273	208 228
Salem	Receipt Expenditure	105351 131473	96724 88536	120505 96306	107527 105438	177 221	163 149	203 162	181 178
Tiruch	irapalli Receipt Expenditure	112815 90832	116419 104290	146135 122211	125123 105778	169 136	174 156	219 183	187 158
Tirune	<b>Iveli</b> Receipt Expenditure	43321 20900	51667 21650	62197 19677	52882 20742	116 56	138 58	166 53	140 55
Total	Receipt Expenditure	1939990 1477198	2967416 1657354	2438568 1875574	2448659 1676711	1294 1043	1571 1115	1683 1115	1538 1128

# Research Study Series Number 67

P.H. 80 10150

# Urban Sector Profile: Tamil Nadu

Sponsored by
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Urban Sector Profile Project
ADB TA No. 2098-IND

National Institute of Urban Affairs New Delhi, India April, 1998 It may be noted that expenditure is less than the receipts as expenditure is suppressed as per the directions from above.

# (ii) Municipalities

In all 104 municipalities taken together, the average revenue receipts work out to Rs.1.39 billion per annum as against Rs.1.29 billion as revenue expenditure per annum. The per capita revenue receipt is Rs.907 as against a revenue expenditure of Rs.847 per annum. In order of magnitude, the 13 special grade municipalities account for as much as 34 per cent of revenue receipts and 33 per cent of the revenue expenditure followed by all the 30 grade I municipalities put together with corresponding figures of 27 per cent each for both revenue receipts and expenditure (Table 5.3).

#### **Town Panchayats**

In all the 635 town panchayats put together, the average revenue receipts amounted to Rs.740.2 million per annum as against a revenue expenditure of Rs.649.8 million per annum. The selection grade town panchayats totalling 283 in number account for 60 per cent of revenue receipts and also revenue expenditure followed by 248 grade I town panchayats accounting for 20 per cent of the receipts and slightly more (21.6%) of the expenditure. The per capita receipts and expenditure more or less reflect the same order in the total revenue amounts (Table 5.4).

# **Capital Accounts: Receipts and Expenditure**

#### Corporations

The capital receipts have been flucuating as per the demands during the 3 years under study though expenditure is consistently on the increase as the years progressed. The receipt which was Rs.376.78 million in all the corporations together in 1991-92 dipped to Rs.321.39 million in the following year but shot up to Rs.406.6 million in 1993-94. On the other hand, capital expenditure which was always much above the receipt in the corresponding years went up much faster from Rs.383.45 million in 1991-92 to Rs.1.45 billion, in 1993-94 registering, thus almost a four-fold increase as against the receipts which registered a marginal 8 per cent increase over the 3 years. Among the corporations again, Chennai corporation on an average accounted for a Lion's share both in the receipts as well as expenditure registering as much as 88 per cent of the capital expenditure against it's contributions of nearly 44 per cent of the capital receipts among all the 6 corporations put together. This is but natural, for, Chennai is the state capital and as a fast sprawling metropolis would requires infrastructure and other demands such as housing at a much faster rate than the other metropolises (Table 5.5).

Table 5.3: Revenue Accounts Receipts and Expenditure - Urban Local Bodies Municipalities

Category	Acutals	for the ye	ar (in thou	sand Rs.)		Per capit	ta (in Rs.)	
	1991-92	1992-93	1993-94	Average	1991-92	1992-93	1993-94	Average
Special Grade								
Receipt	421079	445437	559182	475233	214	226	284	241
Expenditure	397908	436160	481257	428442	187	222	244	218
Selection Grade								
Receipt	247613	273796	306227	275879	169	187	209	189
Expenditure	220614	247574	283115	250434	151	169	194	171
I Grade								
Receipt	340135	372503	409162	373933	175	192	211	193
Expenditure	314310	352301	367329	344647	162	181	189	177
II Grade								
Receipt	189069	209389	237029	211829	138	152	173	154
Expenditure	191515	218207	236444	215389	139	159	172	157
III Grade					,			
Receipt	45384	53749	61153	53429	111	131	149	130
Expenditure	46258	50529	56432	51073	112	123	137	124
Total								
Receipt	1243280	1354874	1572753	1390303	807	888	1026	907
Expenditure	1170605	1304771	1424577	128995	751	854	936	847

Table 5.4: Revenue Accounts Receipts and Expenditure - Urban Local Bodies
Town Panchayats

Category	Acutals	for the yea	ar (in thous	sand Rs.)		Per capi	ta (in Rs.)	
	1991-92	1992-93	1993-94	Average	1991-92	1992-93	1993-94	Average
Special Grade								
Receipt	99533	109670	134366	114523	124	137	168	143
Expenditure	69882	87946	110399	89409	87	110	138	112
Selection Grade								
Receipt	374759	436261	517659	442893	81	94	112	96
Expenditure	326609	386037	458007	390218	70	83	99	84
I Grade								
Receipt	132177	141675	181218	151690	50	53	68	57
Expenditure	120097	133964	166399	140153	45	50	62	53
II Grade								
Receipt	26568	29852	36841	31087	39	44	54	46
Expenditure	26020	28032	35727	29926	38	41	53	44
Total								
Receipt	633037	717458	870084	740193	294	328	402	342
Expenditure	542608	635979	770532	649759	240	284	352	291

Table 5.5: Capital Accounts Receipts and Expenditure - Urban Local Bodies Municipal Corporations

Name of the	Acutals	for the year	ar (in thous	sand Rs.)		Per capi	ta (in Rs.)	
Municipal Corporation	1991-92	1992-93	1993-94	Average	1991-92	1992-93	1993-94	Average
Coimbatore								
Receipt	98550	93382	159357	117096	121	114	195	143
Expenditure	24370	17879	24622	22290	30	22	30	27
Chennai (Madras)								
Receipt	164200	167000	151300	160833	43	43	39	42
Expenditure	287160	508600	1349500	715087	75	132	351	186
Madurai								
Receipt	12022	9723	57691	26479	13	10	61	28
Expenditure	21289	21596	18942	20609	23	23	20	22
Salem								
Receipt	89244	37995	33562	53600	150	64	57	90
Expenditure	45064	44874	42979	44306	76	76	72	75
Tiruchirapalli								
Receipt	12518	9127	3883	8509	19	14	6	13
Expenditure	5195	12651	12460	10102	8	19	19	15
Tirunelveli								
Receipt	244	4158	806	1736	1	11	2	5
Expenditure	374	3424	3115	2304	1	9	8	6
Total								
Receipt	376778	321385	406599	368254	346	256	360	321
Expenditure	383452	590272	1451618	815094	213	281	500	335

# **Municipalities**

In the case of municipalities, the receipts as well as expenditure under the capital accounts during the 3 years under study do not show any dynamism except for a small increase of about 15 per cent during 1991-92 to 1992-93 in the capital receipts as well as in the capital expenditure. During 1992-93 and 1993-94, both receipts and expenditure did not show any significant increase or improvement at all.

Here again, special grade municipalities (13 Nos.) as a group, account for as much as 37 per cent of the capital receipts as well as expenditure followed by grade I municipalities (13 Nos.) with 23 per cent of the capital receipts and expenditure among all the 104 municipalities (Table 5.6).

# Town Panchayats

The capital account both under receipts and expenditure exhibit a very marginal increase during the years under study for all 635 town panchayats put together. The capital expenditure, though a suppressed one as in other urban local bodies left a marginal deficit in 1991-92 and 1993-94 to an extent of Rs.11.9 million and Rs.40.4 million respectively. The capital receipts on an average were Rs.236.5 million per annum as against the capital expenditure of Rs.249.9 million per annum.

The selection grade town panchayats, 283 in number, account for a maximum of 56 per cent of the capital receipts and 59 per cent of the capital expenditure on an average of all the town panchayats put together followed by 248 first grade town panchayats accounting for 24 per cent of capital receipts and 22 per cent of capital expenditure (Table 5.7).

#### Revenue and Capital Accounts by Sources and Items

#### Revenue Receipts by Sources

From all the 745 urban local bodies, the average annual revenue receipts during 1991-92 to 1993-94 amounted to Rs.4.58 billion of which the corporations alone contributed 53.5 per cent (Table 5.9). By sources, 'own tax' item is by far the principal source contributing as much as 75 per cent of the total receipts of all ULBs followed by collection from properties being around one-eighth. In the case of corporations, own taxes contribute more than four-fifths of the receipts. Grants from the state amounts to about 4.2 per cent maximum being for municipalities to an extent of 5.7 per cent as may be seen from Table 5.9.

Table 5.6: Capital Accounts Receipts and Expenditure - Urban Local Bodies Municipalities

	Acutals	for the yea	ar (in thous	sand Rs.)		Per capit	ta (in Rs.)	
Category	1991-92	1992-93	1993-94	Average	1991-92	1992-93	1993-94	Average
Special Grade								
Receipt	2138.26	1995.35	2224.76	2119.46	109	101	113	108
Expenditure	2244.24	1785.23	2136.60	2055.26	114	91	109	104
Selection Grade								W.
Receipt	559.98	726.15	1089.32	791.82	38	50	74	54
Expenditure	637.22	904.28	1187.41	909.64	44	62	81	62
I Grade								
Receipt	1163.62	1435.90	1387.31	1328.94	60	74	71	68
Expenditure	1228.04	1521.04	1425.53	1391.54	63	78	73	72
II Grade								
Receipt	1068.24	1357.09	889.43	1104.92	78	99	65	80
Expenditure	900.93	1455.44	977.79	1111.39	66	106	71	81
III Grade								
Receipt	248.89	434.45	332.95	338.76	60	106	81	82
Expenditure	289.91	406.32	372.32	356.18	70	99	90	87
Total								
Receipt	5178.99	5948.94	5923.77	5683.90	345	430	404	392
Expenditure	5300.34	6072.31	6099.65	5824.11	357	436	424	405

Table 5.7: Capital Accounts Receipts and Expenditure - Urban Local Bodies
Town Panchayats

Category	Acutals	for the yea	w (in thous	and Da)		Dan 2211	- (:- D-)	
Category	Acutais	Tor the yea	T (III thous	and Rs.)		Per capit	a (in Rs.)	
	1991-92	1992-93	1993-94	Average	1991-92	1992-93	1993-94	Average
Special Grade								
Receipt	18674	27148	38043	27955	23	34	47	35
Expenditure	25114	29332	42919	32455	31	37	54	40
Selection Grade								
Receipt	94658	158952	145414	133008	20	34	31	29
Expenditure	102890	152085	188851	147942	22	33	41	32
I Grade					18551			
Receipt	48437	50615	72254	57102	18	19	27	21
Expenditure	48829	46866	66890	54195	18	18	25	20
II Grade								
Receipt	15465	16070	23665	18400	23	24	35	27
Expenditure	12270	12433	21141	15281	18	18	31	23
Total								
Receipt	177234	252785	279376	236465	84	111	140	112
Expenditure	189103	240716	319801	249873	89	106	151	115

#### Revenue Expenditure by Items

In the ULBs as a whole, the sole item incurring maximum expenditure relates to 'obligatory services' including provision of essential services accounting for about 45 per cent of the total expenditure, the next in order being the 'public works' with 17 per cent, water supply and drainage (14%) and general supervision and collection (13%). By category of ULBs, next to 'obligatory services', water supply and drainage accounts for second maximum in both municipalities and town panchayats, whereas, in the corporations, the second highest expenditure is in 'public works'. In town panchayats, public works incur third highest and general supervision cum collection being the fourth, whereas in municipalities it is the reverse. The difference in both the categories of ULBs is marginal as indicated in Table 5.10. Details of break up of the revenue expenditure are given in Table 5.11.

# Capial Receipts by Sources

By proportion, in all the ULBs together, one-third of the capital receipts come as loans from government institutions, and nearly 55 per cent as assistance from centrally sponsored schemes, and another one-tenth each from transfer from general fund, and grant in aid from the government (Table 5.12).

Taking corporations alone, a little more than two-third of the capital receipts are in the form of loans from government institutions, and about one-seventh as transfers from general fund, and nearly one-twelfth as grant in aid from government. But in the case of municipalities and town panchayats, nearly 60 per cent of the capital receipts come as assistance from centrally sponsored schemes substantial amount being grants from centre and state government. Grant in aid from government is much more (16.4%) in town panchayats compared to municipalities (4.7%). But the municipalities take more loan (22%) from government institutions than town panchayats (8.7%), grants, loans and grant in aid depend largely on the repaying capacity and size of the ULBs. Transfer from general fund is nominal, but more (9.2%) in the case of town panchayat than in municipalities (6.6%) as may be seen from above Table 5.13.

#### Capital Expenditure by Items

The priorities in capital expenditure significantly vary among the different categories of ULBs namely corporations, municipalities and town panchayats. But on the whole, for the entire ULBs together, a little more than one-third of the capital is spent on public works, obligatory services and centrally sponsored schemes. Taking only the corporations as one group, one-half of the capital goes to public works followed by two-fifth in obligatory services, the distrant third being on works through special assistance from state governmet (7.3%). All other items are almost insignificant in terms of capital expenditure by proportion in the corporations. Contrarily, both in municipalities and town Panchayats, though public works is a major item of expenditure, it is only the second incurring one-fifth, the first being the centrally sponsored schemes where a little more than half of the capital is invested. While the obligatory services form an important item incurring nearly 18 per cent of the expenditure in municipalities, it is only about 6 per cent in town panchayats where schemes under special assistance from state government require about 15 per cent of the capital expenditure as indicated in Table 5.14 and detailed out in Table 5.15.

Proportion of Revenue Receipt by Sources Table 5.8

S	;		Own Tax Revenue	evenue	Acsignod	Non to		Income	Other	Grants in	
No.	OLB	Category	Property tax	Pilgrim Tax	Revenue	Revenue	Properties	Special Services	Miscella- neous Receipt	Aid from State	Total
	*Corporations (6)		148131 (36.04)	1	192287 (46.79)		53388 (13.00)	88		17166 (14.18)	410972 (100)
5.	Municipalities (104)	Special Grade	180844 (38.10)	0 (0)	61001 (12.84)	12887 (2.71)	61130 (12.86)	40415 (8.5)	18537	17289	392103
		Selection Grade	113010 (4.1)	(0.002)	39865 (14.45)	5802 (2.1)	31387 (11.38)	24064 (8.7)	14744 (5.3)	13780 (5.0)	242658 (100)
		I Grade	133415 (35.60)	1 (0)	52964 (14.16)	12721 (3.4)	56762 (15.18)	32494 (8.7)	13811 (3.7)	27978 (7.5)	330146 (100)
		II Grade	76871 (36.3)	2 (0)	37656 (17.78)	6840 (3.2)	23880 (11.27)	20883 (9.9)	11040 (5.2)	14387	191559
		III Grade	18212 (34.1)	0	9701 (18.16)	4515 (8.5)	6935 (12.98)	4723 (8.8)	2674 (5.0)	2849	49609
	Total (104)		522352	6	201187	42765	180094	122579	90809	76283	1206075
ë.	Town Panchayats (635)	SP Grade	40350 (35.23)	18 (0.02)	29250 (25.5)	6930 (6.1)	12397 (10.82)	8762 (7.7)	10262 (9.0)	1955 (1.7)	109924 (100)
		Selection grade	147229 (33.24)	1004 (0.23)	130164 (29.39)	21260 (4.8)	56321 (12.72)	36113 (8.15	16470 (3.72)	12922 (2.92)	421483 (100)
		I Grade	52123 (34.36)	569 (0.375)	48940 (32.26)	7693 (5.07)	13808 (9.1)	8777 (5.79)	5018 (3.31)	9363 (6.17	146291 (100)
		II Grade	9689	284 (0.91)	11253 (36.20)	1204 (3.87)	2448 (7.87)	1356 (4.36)	1180 (3.80)	2717 (8.74)	30131
	Total (635)		239702	1875	219607	37087	84974	55008	32930	26957	698140
	Grand Total (745 LBs)		919874	1884	613081	79852	265068	230975	93736	120406	2315187

Note :(i) \* (ii)

Average of six corporations. Figures within the parentheses indicate percentages.

Table 5.9 Revenue Receipts by Sources in Urban Local Bodies (Annual Average for 1991-92 to 1993-94)

Municipal Corporations

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	Own tax	Own tax revenue	Non tax revenue, Income from properties, Income from special services and other miscellaneous receipt	nue, Income , Income from es and other us receipt	Grants in aid from state	d from state	Total	al
	Avg. actuals (in million Rs.)	Avg. per capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per capita (in Rs.)
	261.93	320.9	55.13	67.5	3.37	4.1	320.43	393.0
$\rightarrow$	1413.62	368.0	169.55	44.1	64.50	16.8	1647.67	429.0
_	154.16	163.8	34.83	37.0	6.54	7.0	195.53	208.0
	80.76	136.0	20.84	35.1	5.93	10.0	107.53	181.0
-	93.35	139.6	26.30	39.3	5.48	8.2	125.12	187.0
-	38.69	103.4	13.69	36.6	1		52.38	140.0
	2042.50	1231.17	320.33	259.6	85.83	46.1	2448.66	1538.0
$\overline{}$	(83.4)		(13.1)		(3.5)		(100)	

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lal	Avg. per- capita (in Rs.)	241	189	193	154	130	907	5
Total	Avg. actuals (in million Rs.)	475.23	275.88	373.93	211.83	53.43	1390.30	(100)
Grants in aid from state	Avg. per- capita (in Rs.)	10	6	14	10	7	50	
Grants in	Avg. actuals (in million Rs.)	20.61	13.78	27.98	14.39	2.85	79.61	(5.7)
rellaneous ipt	Avg. per- capita (in Rs.)	6	10	7	8	9	40	
Other miscellaneous receipt	Avg. actuals (in Rs.) Avg. permillion (in Rs.)	18.54	14.74	13.81	11.04	2.67	60.81	(4.4)
Income from special services	Avg. per- capita (in Rs.)	21	91	17	15	=======================================	80	
Income from s services	Avg. actuals (in million Rs.)	40.42	24.06	32.49	20.88	4.72	122.58	(8.8)
from	Avg. per- capita (in Rs.)	31	21	29	17	17	115	
Income from properties	Avg. actuals (in million Rs.)	61.13	31.39	56.76	23.88	6.94	180.09	(12.9)
revenue	Avg. per- capita (in Rs.)	7	4	7	5	11	34	
Non tax revenue	Avg. actuals (in million (in Rs.)	12.89	5.80	12.72	6.84	4.52	42.77	(3.1)
revenue	Avg. per- capita (in Rs.)	164	127	119	86	77	585	
Own tax revenue	Avg. actuals (in million Rs.)	321.66	186.10	230.17	134.80	31.73	904.46	(65.1)
	Category	Special Grade	Selection Grade	I Grade	II Grade	III Grade	Total	(% Total)
	Si. No.	-:	2.	33	4.	5.		

C. Town Panchayats

								7
_	Avg. per- capita (in Rs.)	143	96	57	46	342		
Total	Avg. actuals (in million Rs.)	114.52	442.89	151.69	31.09	740.19	4579.15	(100)
in aid from state	Avg. per- capita (in Rs.)	2	0	4	4	13 (3.6)		
Grants in aid from	Avg. actuals (in million Rs.)	1.95	12.92	9.36	2.72	26.96	192.39	(4.2)
ellaneous	Avg. per- capita (in Rs.)	13	4	2	-	20 (4.4)		
Other miscellaneous receipt	Avg. actuals (in million Rs.)	10.26	16.47	5.02	1.19	32.93 (4.4)	93.74	(2.0)
Income from special services	Avg. per- capita (in Rs.)	11	8	3	2	24		
Income fr	Avg. actuals (in million Rs.)	8.76	36.11	8.78	1.36	55.01 (7.4)	177.59	(3.9)
from	Avg. per- capita (in Rs.)	15	12	S	4	36 (11.6)		
Income from properties	Avg. actuals (in million Rs.)	12.40	56.32	13.81	2.45	84.97 (11.6)	585.39	(12.8)
revenue	Avg. per- capita (in Rs.)	6	5	6	2	19 (5.0)		
Non tax re	Avg. actuals (in million Rs.)	6.93	21.26	69.7	1.20	37.09	79.85	(1.7)
evenue	Avg. per- capita (in Rs.)	92	28	40	32	192 (68.0)		
Own tax revenue	Avg. actuals (in million Rs.)	74.22	299.80	107.03	22.18	503.24 (68.0)	3450.20	(75.3)
	Category	1. Special Grade	Selection Grade	I Grade	II Grade	Total (% Total)	Grand total	%
	S.S.	_;	2.	3.	4.			

Table 5.10 Proportion of Revenue Expenditure by Items

(SOO)	-	09(	278	958	53	13	780	63	89	873
(Ks. in 1000s)	_	337060	352278	408958	24453	35013	942780	70263	89008	2250873
(KS.	All	(13.0)	(17.1)	(13.8)	(0.9)	(2.4)	(44.8)	(2.7)	(5.3)	(100)
6	Grade	7558 (25.26)	6393 (21.36)	6651 (22.22)	276 (0.92)	14 (0.05)	8229 (27.50)	447 (1.47)	357	29925 (100)
chayats	Grade I	32348 (23.08)	28132 (20.07)	31351 (22.37)	390 (0.28)	195 (0.14)	42993 (30.68)	3417 (2.44)	1328 (0.95)	140154 (100)
Town Panchayats	Selection Grade	69237 (17.74)	83738 (21.46)	83115 (21.30)	1162 (0.3)	565 (0.14)	135878 (34.82)	15290 (3.92)	1233 (0.32)	390218 (100)
	S.P. Grade	12621 (14.12)	16593 (18.55)	18578 (20.78)	212 (0.24)	132 (0.15)	31785 (35.55)	7125 (7.97)	2363 (2.64)	89409 (100)
	Grade III	10435 (20.4)	5500 (10.77)	8335 (16.32)	451 (0.88)	297 (0.58)	24413 (47.8)	1505 (2.95)	138 (0.27)	51074 (100)
SS	Grade	38258 (17.76)	27990 (13.00)	31784 (14.76)	3108 (1.44)	3742 (1.74)	99600 (46.2)	10057 (4.67)	851 (0.26)	215390 (100)
Municipalities	Grade I	55661 (16.15)	3488 (12.62)	61753 (17.92)	6096 (1.77)	(1.9)	163107 (47.33)	7096 (2.06)	885 (0.26)	344646 (100)
Mu	Selection Grade	32536 (12.99)	22566 (9.01)	47749 (19.06)	4521 (1.81)	5208 (2.08)	119349 (47.65)	5459 (2.18)	13044 (5.21)	250432 (100)
	S.P. Grade	51971 (12.1)	64489 (15.05)	97333 (22.71)	6415 (1.5)	8030 (1.87)	181715 (42.41)	14602 (3.41)	3886 (0.91)	428441 (100)
	Corporations	26435 (9.46)	53389 (19.1)	22309 (7.98)	1822 (0.65)	10256 (3.67)	135711 (48.56)	5265 (1.88)	55983 (20.03)	311170 (100)
Itoms of Doronis	Expenditure	General supervision and Collection	Public Works	Water supply and drainage	Town planning	Education	Obligatory services	Discretionary services	All remunerative services	Total
ō	No.	-	2	3.	4	5.	9	7.	∞:	

Note:

Average of six corporations. Figures within the parentheses indicate percentages.

Table 5.11: Revenue Expenditure by Sources in Municipalities (Annual Average for 1991-92 to 1993-94)

A. Municipal Corporation

						_				
Total	Avg. per- capita (in Rs.)	112.5	245.2	167.7	11.8	32.7	490.4	24.1	43.9	1128.3
T <sub>0</sub>	Avg. per- actuals (in million Rs.) (%) Rs.)	158.57 (9.5)	320.33 (19.1)	111.54 (6.6)	10.93	61.54	814.26 (48.6)	31.59 (1.9)	167.94 (10.0)	1676.71
elveli	Avg. per- capita (in Rs.)	9.2	8.0	26.3	1.8	0.2	9.5	0.4	,	55.0
Tirunelveli	Avg. Avg. per- actuals (in capita (in million Rs.)	3.44	2.98	9.83	0.67	0.08	3.57	0.17	ı	20.74
rapalli	Avg. per- capita (in Rs.)	10.6	20.7	29.1	2.6	1.2	86.7	7.3	ī	158.0
Tiruchirapalli	Avg. actuals (in capita (in Rs.)	7.08	13.85	19.47	1.73	0.82	57.97	4.86	ı	105.78
ш	Avg. per- capita (in Rs.)	29.4	10.1	62.5	1.8	1.0	6.69	2.7	0.1	178.0
Salem	Avg. actuals (in million Rs.)	17.49	5.98	37.12	1.07	0.59	41.54	1.62	0.03	105.44
urai	Avg. per- capita (in Rs.)	27.8	37.1	35.4	2.4	18.6	103.4	3.6	ji	228.0
Madurai	Avg. actuals (in million Rs.)	26.15	34.89	33.34	2.27	17.46	97.28	3.39		214.78
nai	Avg. per- capita (in Rs.)	24.9	41.1		6.0	10.9	143.3	4.4	43.7	269.0
Chennai	Avg. actuals (in million Rs.)	95.78	157.99	T	3.33	41.96	550.58	16.89	167.85	1034.39
atore	Avg. per- capita (in Rs.)	10.6	128.2	14.4	2.3	0.8	77.6	5.7	0.1	240.0
Coimbatore	Avg. actuals (in million Rs.)	8.62	104.63	11.79	1.86	0.64	63.32	4.66	90.0	195.58
	Revenue expenditure	General supervision and collection	Public works (maintenance works)	Water supply and drainage (maintenance works)	Town planning	Education	Obligatory services	Discretionary services	All remunerative services	Total
	No.	1.	2.	e,	4	5.	.9	7.	∞.	
							-			

B. Municipalities

		Special Grade	Grade	Seleciton Grade	Grade	I Grade	ade	II Grade	ıde	III Grade	rade	Total	-
S. S.	Revenue expenditure	Avg. actuals (in millionRs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.) (%)	Avg. per- capita (in
-:	General supervision and collection	51.97	26	32.54	22	55.66	29	38.26	28	10.44	25	188.86	130
2.	Public works (maintenance works)	64.49	. 33	22.57	91	43.49	22	27.99	20	5.50	13	164.03	104
3.	Water supply and drainage (maintenance works)	97.33	49	47.75	33	61.75	32	31.78	23	8.33	20	246.95 (19.1)	157
4.	Town planning	6.42	0	4.52	.co	6.10	3	3.11	2	0.30	-	20.44 (1.6)	12
5.	Education	8.03	4	5.21	4	6.56	3	3.74	ε	0.45	-	23.99 (1.9)	15
.9	Obligatory services	181.72	92	119.35	82	163.11	84	09'66	72	24.41	59	588.18 (45.6)	389
7.	Discretionary services	14.60	7	5.46	4	7.10	4	10.06	7	1.51	4	38.72	26
8.	All remunerative services	3.89	2	13.04	6	0.88	1	0.85	-	0.14	,	18.80	12
	Total	428.44	218	250.43	171	344.65	177	215.39	156	51.07	123	1289.98	845

		Special Grade	Grade	Selection Grade	Grade	I Grade	ıde	II Grade	ade	Total	[8]	Grand	Grand Total
Sl. No.	Revenue expenditure	Avg. actuals Avg. per- (in million capita Rs.) (in Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actu (in millio Rs.) (%	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	(%)
-:	General supervision and collection	12.62	16	69.24	15	32.35	12	7.56	11	121.76 (18.8)	54	469.19	13.0
2.	Public works (maintenance works)	16.59	21	83.74	18	28.13	11	6:39	6	134.86 (20.8)	59	619.22	17.1
3.	Water supply and drainage (maintenance works)	18.58	23	83.11	18	31.35	12	6.65	10	139.69 (21.5)	63	498.19	13.8
4	Town planning	0.21		1.16		0.39	1	0.28		2.04 (0.3)		33.40	6.0
5.	Education	0.13		0.56	,	0.19	1	0.01		0.91		86.43	2.4
.9	Obligatory services	31.78	40	135.89	29	42.99	16	8.23	12	218.88	76	1621.33	44.8
7.	Discretionary services	7.12	6	15.29	3	3.42	1	0.45	1	26.33 (4.0)	14	96.64	2.7
∞.	All remunerative services	2.36	3	1.23	,	1.33	1	0.36	,	5.28 (0.8)	4	192.03	5.3
	Total	89.41	112	390.22	84	140.15	53	29.93	44	649.76	291	,	

Table 5.12 Proportion of Capital Receipts by Sources

									(Rs in 1000s)
ULB Category government institution	70	Loan fro governme institutio	n it u	Grant in AID from govt.	Assistance from centrally sponsored schemes	Special assistance from state govt.	Contribution	Transfer from general Fund	Total
*Corporations 49669 (6) (53.63)	49669 (53.63)	49669 (53.63)		7328 (7.9)	ı	6146 (6.64)	4481 (4.84)	24993 (26.99)	92617
Municipalities Special Grade 70930 (104)		70930 (33.47)		7022 (3.31)	86080 (40.61)	17243 (8.14)	3348 (1.58)	27322 (12.89)	211946
Selection 18550 Grade (23.40)		18550 (23.40)		4671 (5.90)	50789 (64.14)	1892 (2.39)	0 (0)	3279 (4.14)	79182
I Grade 15413 (11.60)		15413 (11.60)		5621 (4.23)	90353 (67.99)	15259 (11.48)	2644 (1.99)	3605 (2.71)	132894
II Grade 13437 (12.16)	134	13437		7832 (7.09)	80433 (72.80)	6001 (5.43)	749 (0.48)	2040 (1.85)	110492
III Grade 6335 (18.70)		6335 (18.70)		1482 (4.37)	21503 (63.48)	3534 (10.43)	0 (0)	1023 (3.02)	33876
Total (104) 124665	124665	124665		26628	329158	43929	6741	37269	568390
Town Panchayats SP Grade 6101 (635)		6101 (21.82)		4826 (17.26)	4975 (17.80)	1784 (6.38)	2974 (10.64)	7295 (26.10)	27955
Selection 11787 grade (8.86)		11787 (8.86)		21219 (15.95)	76794 (57.74)	11058 (8.31)	469 (0.35)	11628 (8.78)	133008
I Grade 1395 (2.44)		1395 (2.44)		10260 (17.97)	38772 (67.90)	4009 (7.02)	96 (0.17)	2570 (4.5)	57102
II Grade 1268 (6.89)		1268 (6.89)		2582 (14.03)	12774 (69.42)	1524 (8.28)	0 (0)	252 (1.37)	18400
Total (635) 20551	20551	20551		38887	133315	18375	3539	21745	236412
Grand Total (745 LBs)	194885	194885		72843	462473	68450	14761	84007	897419

Note:

Average of six corporations. Figures within the parentheses indicate percentages.

Table 5.13: Capital Receipts by Sources in Local Bodies (Annual Average for 1991-92 to 1993-94)

A. Municipal Corporations

tal	Avg. per- capita (in Rs.)	143.3	41.8	28.1	90.2	12.6	7 4	320.8	
Total	Avg. actuals (in million Rs.)	117.09	160.83	26.48	53.60	8.51	174	368.25	(100)
om general ds	Avg. Avg. per- actuals (in capita (in nillion Rs.) Rs.)	1	t	11.0	66.7			7.77	
Transfers from general funds	Avg. actuals (in million Rs.)	1	r	10.38	39.60	1		49.98	(13.6)
utions	Avg. per- capita (in Rs.)	1	1	4.8	,	,		4.8	
Contributions	Avg. actuals (in capita (in (in million Rs.) Rs.)  Avg. per-Avg. actuals Avg. per-apita (in million Rs.) (in Rs.)	·	1	4.48	,			4.48	(1.2)
sistance te govt.	Avg. per- capita (in Rs.)		4.3			2.6	0.1	7.0	
Special assistance from state govt.	Avg. actuals (in million Rs.)		16.67	1	,	1.75	0.02	18.44	(5.0)
ce from sponsored mes	Avg. per- capita (in Rs.)				,	4.5		4.5	Asset)
Assistance from centrally sponsored schemes	Avg. per- capita (in million Rs.)  Avg. per- actuals (in capita (in million Rs.)  Avg. Avg. per- actuals (in capita (in million Rs.)  Rs.)		,	,		3.04		3.04	(0.9)
ant-in-aid from government	Avg. per- capita (in Rs.)	0.4	6.2	12.3	8.4	2.3	4.3	33.9	
Grant-in-aid governme	Avg. actuals (in million Rs.)	0.33	23.83	11.62	5.02	1.56	1.60	43.96	(11.9)
Loan from govt. institutions	Avg. per- capita (in Rs.)	143.0	31.3		15.1	3.2	0.3	192.9	
Loan frinstitu	Avg. actuals (in million Rs.)	116.76	120.33	ı	8.98	2.16	0.11	248.35	(67.4)
	Category	Coimbatore	Chennai	Madurai	Salem	Tiruchirapalli	Tirunelveli	Total	(% Total)
	S. No.	1.	2.	3.	4.	5.	9		

# B. Municipalities

Sl. Gategory Avg. Ferral Grant				_	_	_			
Category         Avg. per land ling in Rs.)         Avg. per land lin	tal	Avg. per- capita (in Rs.)	108	54	89	80	82	392	
Category         Avg. per land ling in Rs.)         Avg. per land lin	T <sub>0</sub>	Avg. actuals (in million Rs.)	211.95	79.18	132.89	110.49	33.88	568.39	(100)
Category actuals (in Rs.)         Avg. per lates actua	om general ds	Avg. per- capita (in Rs.)	14	2	2	-	2	21	
Category         Avg. per lange institutions         Avg. per lange in institutions         Av	Transfers fr		27.32	3.28	3.60	2.04	1.02	37.27	(9:9)
Category         Avg. per-lastition Rs.)	utions	Avg. per- capita (in Rs.)	2		-	-		4	
Category         Avg. peraction Grade         Avg. peraction Grade<	Contrib	Avg. actuals (in million Rs.)	3.35	1	2.64	0.75		6.94	(1.2)
Category         Avg. peraction Grade         Avg. peraction Grade<	sistance e govt.	Avg. per- capita (in Rs.)	6	1	8	4	6	31	
Category   Avg. per- actuals (in Rs.)   Avg. per- Avg. actuals (in million Rs.)   Avg. per- Avg. actuals (in Rs.)   Avg. per- Avg. actuals (in million Rs.)   Avg. per- Avg. actuals (in Rs.)   Avg. per- Avg. per- Avg. actuals (in Rs.)   Avg. per- Avg. per- Avg. per- Avg. per- Avg. per- Avg. per- Avg.	Special as from stat	Avg. actuals (in million Rs.)	17.24	1.89	15.26	00.9	3.53	43.93	(7.1)
Category   Avg. per- actuals (in Rs.)   Avg. per- Avg. million Rs.)   Avg. per- Avg.	e from onsored tes		44	35	47	59	52	197	
Category   Avg.   Avg. per- actuals (in million Rs.)   Avg. per- actuals (in Rs.)   Avg. per- actuals (	Assistance centrally sp schen	Avg. actuals (in million Rs.)	86.08	50.78	90.35	80.43	21.50	329.15	(57.9)
Category   Avg.   Avg. per- actuals (in million Rs.)   Avg. per- actuals (in Rs.)   Avg. per- actuals (	id from nent	Avg. per- capita (in Rs.)	4	3	ε,	9	4	20	
Loan from govt. institutions     Category   Avg. actuals (in Rs.)     Special Grade   70.93   36     Selection Grade   18.53   13     I Grade   15.41   8     II Grade   6.33   15     Total   124.66   82     (% Total)   (21.9)	Grant-in-a govern	Avg. actuals (in million Rs.)	7.02	4.67	5.62	7.83	1.48	26.63	(4.7)
Category Special Grade Selection Grade I Grade III Grade III Grade (% Total	n govt. ions	Avg. per- capita (in Rs.)	36	13	8	10	15	82	
	Loan fror institut	Avg. actuals (in million Rs.)	70.93	18.53	15.41	13.44	6.33	124.66	(21.9)
		Category	Special Grade	Selection Grade	I Grade	II Grade	III Grade	Total	(% Total)
	ō	No.	-:	1	3.	4	5.		

# Town Panchayats

5		Loan from govt. institutions	om govt. itions	Grant-in-aid from government	nid from ment	Assistance from centrally sponsored schemes	e from consored res	Special assistance from state govt.	sistance te govt.	Contributions	utions	Transfers fu	Transfers from general funds	Total	Te.
No. 9	Category	Avg. Avg. per- actuals (in capita million (in Rs.)	Avg. per- capita (in Rs.)		Avg. per- capita (in Rs.)	Avg. Avg. per- Avg. actuals (in capita (in actuals (in million Rs.) Rs.) million Rs.)	Avg. per- capita (in Rs.)	actuals (in capita million (in Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)
-:	1. Special Grade	6.10	8.0	4.83	6.0	4.97	0.9	1.78	2.0	2.97	4.0	7.29	0.6	27.95	35.0
2.	Selection Grade	11.79	3.0	21.22	5.0	76.79	17.0	11.06	2.0	0.47		11.68	3.0	133.00	20.0
3.	I Grade	1.39	1.0	10.26	4.0	38.77	15.0	4.01	2.0	0.09		2.57	1.0	57.10	0.72
4	II Grade	1.27	2.0	2.58	4.0	12.77	19.0	1.52	2.0			0.25		18.40	0.12
	Total	20.55	14.0	38.89	19.0	133.31	57.0	18.37	8.0	3.54	4.0	21.80	13.0	236.46	112.0
	(% Total)	(8.7)		(16.4)		(56.4)		(7.8)		(1.5)	~	(9.2)		(100)	
	Grand Total (%)	393.56 (33.6)		109.48 (9.3)		465.50 (39.7)		80.74 (6.9)		14.76		109.05		1173.10	
												(0:/)		(001)	

Table 5.14 Proportion of Capital Expenditure by Items

(S)		-		T	T	Т	T	1	1	1	Т
(Ks. in 1000s)	Total		232988	4399	3379	175786	15991	448974	94984	692	977193
(KS.		Grade	461	00	0 0	482 (3.15)	166 (1.09)	11625 (76.07)	2547 (16.67)	0 (0)	15281 (100)
	chayats	Grade I	4386 (8.09)	35 (0.07)	7 (0.01)	2796 (1.15)	510 (0.94)	38197 (70.48)	8265 (15.25)	0	54196 (100)
	Town Panchayats	Selection Grade	31216 (21.1)	353 (0.24)	926 (0.63)	10138 (6.9)	2939 (1.99)	80866 (54.66)	21292 (14.39)	212 (1.4)	147942 (100)
		S.P. Grade	17093 (52.67)	0 (0)	64 (0.2)	2702 (8.32)	1277 (3.9)	5476 (16.87)	5843 (18.00)	00	32455 (100)
		Grade III	3916 (10.99)	489 (1.37)	189 (0.53)	1587 (4.45)	820 (2.3)	23415 (65.73)	5203 (14.61)	0 (0)	35619 (100)
	S	Grade	19798 (17.81)	784 (7.05)	565 (0.5)	12130 (10.91)	1273 (1.15)	67951 (61.14)	8533 (7.7)	105 (0.09)	(100)
	Municipalities	Grade I	23507 (6.73)	312 (0.09)	556 (0.16)	14095 (4.04)	3604 (1.03)	82632 (23.67)	14115 (4.04)	331 (0.0)	139152 (100)
	M	Selection Grade	25628 (28.17)	1218 (1.34)	658 (0.72)	6104 (6.7)	329 (0.36)	52916 (58.17)	4111 (4.52)	0	90964 (100)
		S.P. Grade	38712 (18.83)	960 (0.47)	(0.10)	70666 (34.38)	2271 (1.1)	82592 (40.18)	10137 (4.93)	0	205535 (100)
	(*	Corporations	68271 (47.11)	248 (0.17)	217 (0.15)	55086 (38.01)	2802 (19.33)	3304 (2.28)	14938 (10.31)	44 (0.03)	144910 (100)
	Items of Revenue	Expenditure	Public works (Major)	Education	Town planning	Obligatory services	Discretionary services	Centrally sponsored schemes	Special assistance from State Govt.	All remunerative services	Total
	SI.	No.	Т.	2.	3.	4.	5.	.9	7.	∞.	

Note:

Average of six corporations. Figures within the parentheses indicate percentages.

Table 5.15: Capital Expenditure by Sources in Local Bodies (Annual Average for 1991-92 to 1993-94)

. Municipal Corporations

	١		T		Τ	T	Τ		T	Τ
Total	Avg. per- capita (in Rs. )	144.7	1.0	8.0	98.1	7.0	4.9	78.3	0.1	334.9
I	Avg. actuals (in million Rs.) (%)	409.62 (50.3)	0.74 (0.1)	0.65	330.98 (40.6)	9.99	3.30 (0.4)	59.75	0.00	815.09
Tirunelveli	Avg. per- capita (in Rs.)	1.5	r	î	0.3	Î	-	4.3	ı	6.1
Tirun	Avg. actuals (in million Rs.)	0.57	1	·	0.11		1	1.62	,	2.30
rapalli	Avg. per- capita (in Rs.)	8.0	0.5	0.3	7.0	0.0	4.9	0.5	0.1	15.0
Tiruchirapalli	Avg. actuals (in million Rs.)	5.33	0.33	0.23	0.48	0.02	3.30	0.36	90.0	10.10
m	Avg. per- capita (in Rs.)	2.3	0.2	81	2.9	,	1	69.2	T	74.6
Salem	Avg. actuals (in million Rs.)	1.37	0.09	1	1.74	0.40	ı	41.10	1	44.30
rai	Avg. per- capita (in Rs.)	10.0	0.3	0.1	10.8	0.7	1		i.	21.9
Madurai	Avg. actuals (in million Rs.)	9.43	0.33	0.07	10.13	0.65	ı	1	1	20.61
ınai	Avg. per- capita (in Rs.)	2.96	1	,	82.8	2.3	,	4.3	1	186.1
Chennai	Avg. actuals (in million Rs.)	371.50	ı	č	318.00	8.92	ř.	16.67	ī	715.09
itore	Avg. per- capita (in Rs.)	26.2	1	0.4	9.0	1	1	1		27.2
Coimbatore	Avg. actuals (in million Rs.)	21.42	ı	0.35	0.52	ı		,	,	22.29
	Capital expenditure	Public works (major)	Education	Town planning	On Obligatory services	On Discretionary services	Centrally sponsored schemes	Spl. Asst. from state govt.	All remunerative services	Total
	Si.	-i	2.	3.	4	S.	.9	7.	8.	

		Special	Special Grade	Selection	Selection Grade	I Grade	ıde	II Grade	rade	III Grade	rade		Total
SI. No.	Capital expenditure	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.) (%)	Avg. per- capita (in Rs.)
1.	Public works (major)	38.71	20	25.63	18	23.51	12	19.79	14	3.92	10	111.56 (19.2)	74
2.	Education	96.0	1	1.22	1	0.31	1	0.78	1	0.49	-	3.76 (0.6)	4
3.	Town planning	0.19	,	99.0	,	0.56	ı	0.56	ı	0.19	1	2.16 (0.4)	
4.	On obligatory services	70.67	36	6.10	4	14.09	7	12.13	6	1.59	4	104.58 (17.9)	09
5.	On discretionary services	2.27	1	0.33	,	3.60	2	1.27	1	0.82	2	8.30 (1.4)	9
9	Centrally sponsored schemes	82.59	42	52.92	36	82.63	43	67.95	49	23.41	57	309.51 (53.2)	227
7.	Spl. asst. from state govt.	10.14	5	4.11	С	14.11	7	8.53	9	5.20	13	42.09	34
∞.	All remunerative services	1	3	1	1	0.33	1	0.10	,			0.44	E.
	Total	205.54	104	90.96	62	139.15	72	111.14	81	35.62	98	582.41 (100)	405

C. Town Panchayats

		Special	Special Grade	Selection Grade	Grade	I Grade	ope	open J II	ope	1			
So.	Capital expenditure	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	ac mil	Avg. per- capita (in Rs.)	Av actual milli Rs.	Avg. per- capita (in Rs.)	Avg. actuals (in million Rs.)	Avg. per- capita (in Rs.)	Avg. actua (in million Rs.) (%)	Avg. per- capita (in Rs.)	Avg. actuals (%) Rs.) (%)	(%)
	Public works (major)	17.09	21	31.22	7	4.39	2	0.46	_	53.16 (21.3)	31	574.34	34.9
2.	Education		,	0.35	1	0.03		,	ı	0.39	,	4.89	0.3
e.	Town planning	90.0		0.93		0.07		,	1	0.99		3.81	0.2
4.	On obligatory services	2.70	3	10.14	2	2.79	-	0.48	1	16.12 (6.4)	7	451.68	27.4
S.	On discretionary services	1.28	2	2.94	-	0.51	,	0.16	ı	4.89 (2.0)	т	23.18	1.4
.9	Centrally sponsored schemes	5.48	7	80.87	17	38.19	14	11.62	17	136.16 (54.5)	55	448.97	27.3
7.	Spl. asst. from state govt.	5.84	7	21.29	5	8.26	3	2.55	4	37.95 (15.2)	19	139.79	8.5
∞i	All remunerative services		e	0.21			ı		1	0.21 (0.1)	1	0.70	
	Total	32.45	40	147.94	32	54.19	20	15.28	23	249.87 (100)	115	1	r

Finance Requirements for Capital Investment and O & M - Urban Local Bodies, Basic Services, 1997-2002 Table 5.16

(in million Rs.)

No.	Category	Town Panchayats	nchayats	Munic	Municipalities	Chennai Corporation	orporation	Other Corporations	porations	T	Total
I. Wate	Services	CI	0 & M	CI	0 & M	IJ	0 & M	CI	0 & M	CI	0 & M
	Water Supply	1393.9	401.7	1687.8	516.6	2633.6	484.8	1528.7	347.6	7244.0	1750.7
2. Sewe	Sewerage and sanitation	1009.7	125.9	4147.4	384.8	1568.2	9.989	5404.4	334.5	12129.7	1531.8
3. Solid	Solid waste management	187.5	245.9	259.1	953.3	179.1	534.5	143.9	531.1	9.692	2264.8
4. Roads	ls	1533.4	310.7	994.3	595.6	1749.9	318.9	542.3	255.1	4819.9	1480 3
5. Storn	Storm water drains	491.2	30.1	1572.8	27.8	1020.8	14.2	1664.7	03.7	4749.5	75.8
6. Stree	Street lighting	499.0	197.2	168.2	206.5	58.7	147.4	150.8	102.1	876.7	653.2
Total	_	5114.7	1311.5	8829.6	2684.6	7210.3	2186.7	9434.8	1574.1	30589.4	7756.6
Perce	Percentage	16.72	16.90	28.86	34.61	23.57	28.19	30.85	20.30	100.00	100.00

CI O&M Note:

Capital Investments. Operation and Maintenance.

Table 5.17 Capital Requirements by Services, 1997-2002

No.         Extinated cost         % cost         Estimated cost         % cost         % cost         R											(in r	(in million Rs.)
Services         Estimated cost         %         %         %         %         %         %         %         %         %         %	Ø.	Category	Town Pan	ıchayats	Municip	alities	Chennai Co	rporation	Other corp	orations	Tota	_
Water Supply         1795.6         19.96         2204.4         24.51         3118.4         34.67         1876.3         20.86         894.7           Sewerage and sanitation         1135.6         8.31         4532.2         33.17         2254.8         16.50         5738.9         42.02         13661.5           Solid waste management         433.4         14.28         1212.4         39.96         713.6         23.52         675.0         22.24         13663.9           Roads         1844.1         29.27         1589.9         25.23         2068.8         32.84         797.4         12.66         6300.2           Storm water drains         521.3         10.80         1600.6         33.17         1035.0         21.45         1668.4         34.58         4825.3           Street lighting         696.2         45.51         374.7         24.49         206.1         13.47         222.9         16.53         1529.9           Total         6426.2         30.03         30.03         24.51         328.70         100.00         100.00	No.	Services	Estimated cost	%	Estimated cost	%	Estimated cost	%	Estimated cost	%	Estimated cost (%)	%
Sewerage and sanitation         1135.6         8.31         4532.2         33.17         2254.8         16.50         5738.9         42.02         13661.5           Solid waste management         433.4         14.28         1212.4         39.96         713.6         23.52         675.0         22.24         3034.4           Roads         1844.1         29.27         1589.9         25.23         2068.8         32.84         797.4         12.66         6300.2           Storm water drains         521.3         10.80         1600.6         33.17         1035.0         21.45         1668.4         34.58         4825.3           Street lighting         696.2         45.51         374.7         24.49         206.1         13.47         252.9         16.53         1529.9           Percentage         16.76         30.03         24.51         30.03         24.51         100.00         100.00		Water Supply	1795.6	19.96	2204.4	24.51	3118.4	34.67	1876.3	20.86	8994.7 (23.46)	100.00
Solid waste management         433.4         14.28         1212.4         39.96         713.6         23.52         675.0         22.24         3034.4           Roads         1844.1         29.27         1589.9         25.23         2068.8         32.84         797.4         12.66         6300.2           Storm water drains         521.3         10.80         1600.6         33.17         1035.0         21.45         1668.4         34.58         4825.3           Street lighting         696.2         45.51         374.7         24.49         206.1         13.47         252.9         16.53         1529.9           Total         6426.2         11514.2         30.03         24.51         3996.7         11008.9         38346.0           Percentage         16.76         30.03         24.51         24.51         28.70         100.00	5.	Sewerage and sanitation	1135.6	8.31	4532.2	33.17	2254.8	16.50	5738.9	42.02	13661.5 (35.63)	100.00
Roads         1844.1         29.27         1589.9         25.23         2068.8         32.84         797.4         12.66         6300.2           Storm water drains         521.3         10.80         1600.6         33.17         1035.0         21.45         1668.4         34.58         4825.3           Street lighting         696.2         45.51         374.7         24.49         206.1         13.47         252.9         16.53         1529.9           Total         6426.2         11514.2         30.03         24.51         3396.7         11008.9         16.00         100.00	3.	Solid waste management	433.4	14.28	1212.4	39.96	713.6	23.52	675.0	22.24	3034.4 (7.91)	100.00
Storm water drains         521.3         10.80         1600.6         33.17         1035.0         21.45         1668.4         34.58         4825.3           Street lighting         696.2         45.51         374.7         24.49         206.1         13.47         252.9         16.53         1529.9           Total         6426.2         11514.2         30.03         30.03         24.51         100.00         100.00	4.	Roads	1844.1	29.27	1589.9	25.23	2068.8	32.84	797.4	12.66	6300.2 (16.43)	100.00
Street lighting         696.2         45.51         374.7         24.49         206.1         13.47         252.9         16.53         1529.9           Total         6426.2         11514.2         9396.7         9396.7         11008.9         100.00           Percentage         16.76         30.03         24.51         28.70         100.00	.5.	Storm water drains	521.3	10.80	1600.6	33.17	1035.0	21.45	1668.4	34.58	4825.3 (12.58)	100.00
6426.2         11514.2         9396.7         11008.9         38346.0           ntage         16.76         30.03         24.51         28.70         100.00	9	Street lighting	696.2	45.51	374.7	24.49	206.1	13.47	252.9	16.53	1529.9 (3.99)	100.00
16.76 30.03 24.51 28.70		Total	6426.2		11514.2		9396.7		11008.9		38346.0 (100.00)	100.00
		Percentage	16.76		30.03		24.51		28.70		100.00	

CI O&M

Capital Investments. Operation and Maintenance.

#### SOURCES OF FINANCE FOR INFRASTRUCTURE AND SERVICES

The main sources of finance for local bodies are the various taxes levied under the respective Acts such as property tax, professional tax, and non-tax items such as, water charges, etc. Tax collections from entertainment tax and surcharge on stamp duty are collected by the state government, and shared between the government and the municipalities. Several types of grants from the state are given to local bodies. These are general purpose grants, specific purpose grants, compensatory grants and miscellaneous and isolated grants. General purpose grants are paid to the municipalities as subsidies towards the payment of dearness allowances to local body staff. This has been stopped for quite some time. Specific purpose grants are usually made as adhoc grants for the maintenance of roads. Compensatory grants are given as compensation in lieu of motor vehicles, licence fee and toll tax. Miscellaneous grants are allotted for purchase of equipment, building class rooms, etc. The government also advances loans to municipalities for the implementation of land use programmes.

- The financial position of the municipalities and other local bodies is traditionally not sound. With increasing population pressure, they have undertaken several major schemes like water supply and drainage through obtaining loans from LIC and the government. Debt servicing alone becomes a major burden to the local bodies. Many local bodies have increased their water rates to meet these deficits. The loan is raised by TWAD Board on behalf of the local bodies on government guarantee.
- ii) Chennai Urban Development Finance (MUDF) provided both loans and grants on the basis of performance and needs. But this has come to a close in September 1996, since TNUDF replaced it. It is being managed by the Assets Management Company (AMC) with the participation of ICICI, HDFC, ILFS and Government of Tamil Nadu.
- iii) For small and medium towns both of municipalities and town panchayats, financial assistance is available from the centre and state under IDSMT scheme and IUDP scheme.
- iv) The Tamil Nadu Urban Development Fund (TNUDF) has been set up for improving basic services such as drinking water supply cum sewerage schemes, shopping complexes and transport in all urban local bodies of Tamil Nadu. The state governments share in this fund is Rs.1200 million and that of all india financial institutions will be Rs.510 million. Loans to an extent of Rs.600 million could be sanctioned from this fund for local bodies. In addition, a grant fund of Rs.300 million would be set up for poviding grants to schemes benefiting the urban poor.

- v) TUFIDCO extends loans to municipalities and town panchayats in the state for investment in infrastructure in low income areas for low cost sanitation, prime minister's urban poverty alleviation programme, NRY, etc.
- vi) Within Chennai metropolitan area comprising Chennai corporation, Tambaram, Alandur and Tiruvellore municipalities, Metropolitan Infrastructure Development Corporation (MIDC) is incharge of conceiving and financing mega city projects. The idea of forming the MIDC, with an annual seed capital of Rs.150 million each by the union and the state governments, is to grant loan to the corporation and the municipalities in the metropolitan area, with a matching grant from financial bodies, such as the HUDCO, and nationalised banks. The projects may be full cost recovery schemes, partial recovery or full or partial subsidy or a combination of these. Now, the above said two corporations are to be merged, as the government is of the view that both of them are working on the same lines, and there is no need for two separate entities.
- vii) The Public Debt Act, 1944 and Local Authorities Local Rules, 1937 permit the centre, the state and local bodies to raise resources. The Chennai corporation is permitted to raise resource under Chennai City Municipal Corporation Act, 1919. Similar provisions for raising resources exist under Section 32 of the Metro Act, 1978, and Section 34 of the TWAD Act, 1971.
- viii) Normally, the state government provides the guarantees for loans for approved public developmental purposes, except for commercial activities. By March 1994, the state government guaranteed an amount of Rs.63.03 billion of which as much as Rs.35.38 billion towards principal is still outstanding. Of this as much as Rs.2.4 billion is the loan taken by TWAD Board from LIC.
- ix) Most of the loans guaranteed involve revision of tariff and levy of new taxes. In practice, however, this is hardly done leading to the violations of the guarantee condition and subsequent inability of the local bodies.

A possible solution could be that for capital investment, the corporations can go for public issues of equity or bonds or approach the institutional finance on its own credit worthiness. The other categories of urban local bodies can, however, go for remunerative, self-paying and service projects with loans and grants.

#### REMEDIAL MEASURES IMPLEMENTED AND CONTEMPLATED IN THE STATE

The areas for concentration in applying the remedial measures relate to the same four problem areas namely, financial, administrative, legal and technical as seen in section 3 earlier. In addition, there could be certain peripherals to support these steps for successful performance.

# **Financial Aspects**

The only way to sort out the financial incapacity of local bodies is to devolve to them funds from the state government on a properly worked out basis.

The State Finance Commission, constituted as per the 74th Amendment to the Constitution has submitted its report to the government of Tamil Nadu and, the government has taken the following decisions on the recommendations:

- i) Hitherto, the local bodies were given 60-70 per cent share of the total entertainment tax collections. From 1997-98, 90 per cent of the entertainment tax receipts, will be assigned to the local bodies.
- ii) For the first time in the state, 8 per cent of the total tax revenue receipts excluding the entertainment tax will be transferred to the local bodies.
- iii) This 8 per cent allocation will be distributed to all the local bodies based on certain parameters. In order to correct the possible inequities arising out of this distribution and to continue the existing incentive grants to the local bodies, 15 per cent of the above mentioned 8 per cent allocation will be transferred to a fund called Equalisation and Incentive Fund. 60 per cent of this fund will be allocated to the rural local bodies and 40 per cent to the urban local bodies.
- iv) Of the remaining amount from the 8 per cent allocation, 55 per cent will be transferred to the rural local bodies and 45 per cent to the urban local bodies.

As a result of these decisions, the grants to the local bodies on revenue account will increase from Rs.6.46 billion during 1996-97 to Rs.11.74 billion during 1997-98.

This decision of the government alone, is expected to put the finance of most of the ULBs back on rails. However, it will have to be coupled with corrections to be made in municipal accounting systems, debt status of local bodies, etc.

The government of Tamil Nadu has also made necessary changes to Municipal Corporation Acts to provide for additional financial powers to the mayors, councils and commissioners of all the municipal corporations.

In view of the highly discretion oriented system of taxation with inadequate legal backing, coupled with inefficient collection system and which had resulted in local bodies not being able to harness the full potential of this source of income, the government is bringing a comprehensive change in the property tax system to achieve the objectives of transparency, equity and byouancy. Provisions for this would be included in the common bill for urban local bodies.

Decrease in the periodicity of revisions from five years to three years, following a system of unit area rate instead of the annual rental value as the basis for taxation, computerisation of the details of assessees are some of the major recommendations of the State Finance Commission.

In the government, some important decisions regarding devolution of powers to the urban local bodies have been taken. Accordingly, in respect of all individual beneficiary oriented welfare schemes of the government, a specific allocation would be made for the urban areas of the district and the tasks of beneficiaries selection would be that of the urban local bodies.

# **Administrative Aspects**

Areas which need to be attended to in this field relate to substantial delegation of powers to local bodies both in areas of augmenting resources and general administration. Further, the administration has to be made much more transparent and responsive.

# **Technical Aspects**

On the human resources development side, today, there is hardly any attempt worth the name in the urban local body administration. When one looks at the infrastructure created over the last 6-7 plan periods all over the country for training in the R & D sector, virtually nothing is done in the municipal administration sector. In fact, ULBs in Tamil Nadu cannot talk even of computerisation of the vital statistics leave alone their employees being aware of the basics of financial appraisal, project management or for that matter, doing an economic feasibility of a capital investment. There is need for a comprehensive training strategy to be worked out at the national and state levels. This should be based on the experiences gained so far, and should include a demand oriented training programme which is responsive to the requirements of the urban local bodies. Regional and state level institutions as well as universities and other institutions should be enabled in the medium term to manage, finance and execute these training programmes.

The qualitative and quantitative aspects of the training requirements should clearly reflect on the subject areas, target groups, training modules and also periodicity of training. In this regard, the state government's recent efforts as a follow up of the advent of local body elections is worth mentioning. The state government has a training institute in the name of Tamil Nadu Institute of Urban Studies (TNIUS) at Coimbatore, the main objective of it being, to impart training to the elected members of the local bodies in all their powers and functions including planning, implementation, maintenance and management of all projects and programmes. Presently, under the World Bank assistance (Rs. 6 million), the institute is organising training programmes under five modules which include municipal finance, project management and the social acceptance process. The programme is scheduled to run from March 1997 to December 1997 at four centres namely Chennai, Coimbatore, Trichy and Madurai. For imparting the training, the TNIUS along with the World Bank has identified four national level institutions namely: i). National Institute of Urban Affairs, New Delhi; ii). Administrative Staff College, Hyderabad; iii). Institute of Local Self Government, Mumbai, and iv) Anna University (Centre for Human Settlements), Chennai.

These programmes are expected to train both the officials and elected members at the urban local bodies level, which would help the local bodies ultimately to achieve self-sustainment in technology expertise and knowledge of information. The government proposes to retain the Anna Institute of Management, Chennai as a consultant to assess the training needs of various sectors, levels and functions involved in local government structure and in line department/agency, and give a comprehensive training plan. In this context, the Madras Institute of Development Studies, Chennai, UNICEF, Gandhigram Rural Institute, Institute for Financial Management and Research, Chennai, Madras School of Economics, Chennai, NIPFP, New Delhi, Satyamoorthy Foundation, Chennai, in addition to the institution earlier mentioned could be sources of the expert resource persons to disseminate the concepts and to bring about attitudinal transformation both in the governing bodies and the urban communities.

The non-official elected members of local bodies should also be trained so that they are oriented and sensitised to government policies and programmes and the provisions of the Constitution 74th Amendment Act, privatisation of services, improving the cost recovery performance, and methods therefore, and the importance of public participation.

# **Legal Aspects**

The concerned Acts have to be suitably amended to suit the changed situations wherein provisions for levying extreme penalty for non-payment of tax dues, etc. should be inbuilt. A comprehensive legal statute with all changes in order to empower the local bodies with necessary powers and functions should become available. The Tamil Nadu government has decided to

replace the 1919 and 1920 Acts governing the local bodies by a common Act applicable to all urban local bodies in the state.

The model in strategies in capacity building urban local government vividly exhibits this mechanism.

#### **Others**

# Privatisation and Joint Ventres

Certain services where user charges can be collected should be privatised on BOT, BOO, BOOT or BOLT basis. Prospective areas are maintenance of services, solid waste management, water supply schemes in newly developing areas, and construction and maintenance of them at regional, and also local levels where feasible infrastructure like roads, bridges, subways, bypasses, etc., need to be thought of. Joint ventures in electricity generation supply can also be attempted.

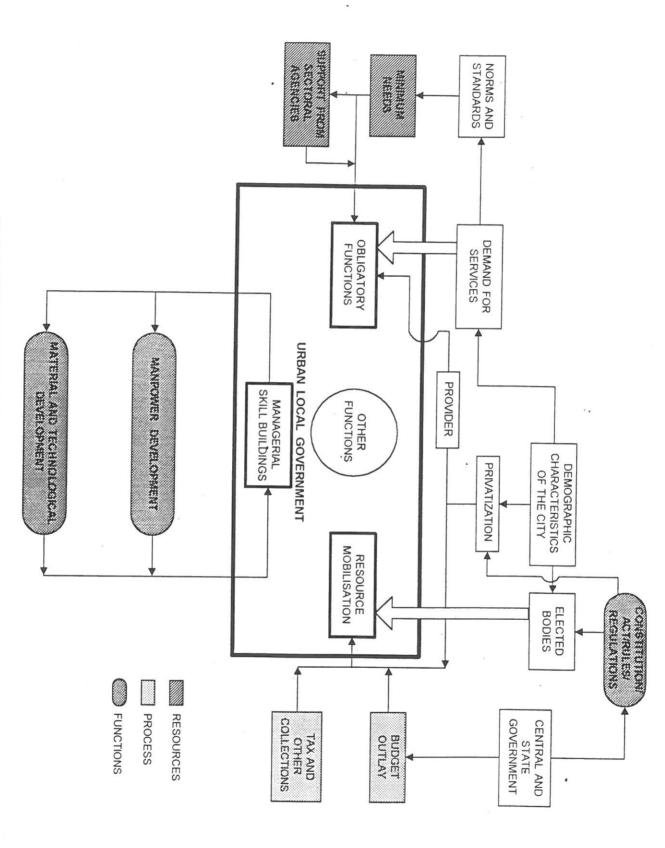
# Role of NGOs and Community Participation

Collection of service charges could be entrusted to NGOs and social organisations who can closely work with the Community Based Organisations (CBOs). In all development programmes, the role of community is very curcial both for the success of the programmes as well as for its sustainability. NGOs are better suited to organise the community and evolve suitable structures for such participation by the community. In addition to NGOs, organisations like scout, NSS can be involved for maintenance of community infrastructure like water supply, roads, and street lighting.

# Data base

For improving the managerial capacity of the local bodies, Urban and Regional Information System (URBIS) for creation of database should be set up.

The devolution arising out of the State Finance Commission's recommendations is meant for O & M expenditure, and does not relate to capital. However, the status regarding the capital needed for investment in urban areas is more worrying. A study has been done on the capital requirements for the local bodies.



STRATEGIES IN CAPACITY BUILDING - URBAN LOCAL GOVERNMENT TAMIL NADU

# CAPITAL REQUIREMENTS FOR IMPROVING CIVIC SERVICES

The capital requirement of providing services including storm water drains and street lighting in all the urban local bodies (town panchayats, municipalities and municipal corporations) of Tamil Nadu is estimated at Rs.30.59 billion during the period 1997-2002 while the additional O & M component is expected to cost over Rs.7.76 billion. Thus the total investment will be in the order of Rs.38.35 billion in the Ninth Plan period. As may be seen from the Table 5.16, the six corporations out of 745 urban local bodies in Tamil Nadu alone account for more than 50 per cent of these capital investment requirements, and O & M charges, whereas the town panchayats account for only one-sixth and the rest by the municipalities.

Among the services again, the financial requirements for sewerage and sanitation including solid waste management for all the urban local bodies put together account for 43 per cent, the next being water supply accounting for 24 per cent (Table 5.17). However, it may so happen that water supply being the most essential service requirement, in the event of resource constraints, it is unlikely that other services like sewerage retain their priority.

While the above quantum of resources for provision of services in the urban local bodies are to be found and mobilised, it may be mentioned that the urban local bodies as on date are already overdue to a tune of over Rs.5 billion on repayment of loans, and over Rs.2 billion towards interest. Debt status of urban local land bodies needs to be seriously addressed by the state government to make them financially healthy. It would not be out of place to mention here that the continuous neglect of capital needs of urban local bodies by both the state and central governments has today pushed up the requirement figures to such astronomical proportions that any decent level of service can not be ensured without substantial investment.

# **BUDGET PROVISIONS FOR INFRASTRUCTURE AND SERVICES DURING 1997-98**

# **Urban Water Supply**

An amount of Rs.315 million has been provided for water supply schemes in municialities, and town panchayats during 1997-98. This allocation is meant to cover the left-over works in completing the drinking water supply schemes in five municipalities and 18 town panchayats, and also for taking up 11 new schemes in four municipalities and seven town panchayats.

# Chennai Municipal Corporation

Among the municipal corporations, Chennai is being supplied 440 mld. of water at present, and this level of supply is expected to be maintained in the future. Two major projects

will be implemented in order to distribute the 3 tmc. of Krishna water being received at present and 12 tmc of Krishna water to be received by 1999-2000. An outlay of Rs. 800 million has been made towards the project during 1997-98, and the estimated cost of the project is Rs.5.14 billion. This is to be implemented with the financial assistance from the World Bank.

In the next phase, another project has been formulated at an estimated cost of Rs.15.33 billion and sent to the World Bank for funding.

A project for treatment of sewage at a cost of Rs.5.72 billion with financial assistance from the Japanese Overseas Economic and cooperation Fund has been started. A part of the sewage of Chennai city would be treated and supplied to the industries.

# Other Infrastructure and Services

#### Chennai

A number of schemes have been accorded sanction in the CMA at an estimated cost of Rs.3.26 billion. These schemes include construction of Moffussal bus stand and a flyover at Koyambedu at an estimated cost of Rs.980 million, constructing overbridges at Perambur and Nungambakkam at an estimated cost of Rs.440 million, and constructing drinking water supply head works at Ekkattuthangal and Choolaimedu at an estimated cost of Rs.210 million. Additional schemes that would cost another Rs.2 billion are envisaged to be sanctioned during 1997-98.

# Other Corporations and ULBs

An amount of Rs.250 million for the other five corporations, Rs.100 million for municipalities, and Rs.250 million for the town panchayats has been made for improving infrastructure facililities during 1997-98.

# **MRTS**

In the union railway budget, a provision of Rs.500 million is made for the construction of the second phase of MRTS during 1997-98. The state government has also provided a matching amount of Rs.500 million for this purpose in the budget during 1997-98. The second phase of MRTS is from Velacherry to Luz in Mylapore.

## Roads

Huge funds are required for improving all the roads in the state to facilitate industrial growth. Realising that the government alone cannot provide all the resources required for road

development, the government of India has announced a policy for private sector participation in the national highway projects. Accordingly, priority would be given for widening, upgradation and maintenance of national highways through joint efforts of the private sector and the government. The government has proposed to take up the formation of a by-pass on the national highway near Coimbatore and construction of a new bridge at Karanodai on Chennai-Calcutta national highway through the private sector. For widening and upgradation of roads of high traffic density, a project has been drawn up at a cost of Rs.9.5 billion for obtaining financial assistance from the World Bank.

The construction of a sub way and an interchange on the Tindivanam-Pondicherry-Krishnagiri road has been taken up at a cost of Rs.198.9 million. During, 1997-98, the highways department and southern railway will undertake the cosntruction of an over bridge at a cost of Rs.50 million near Kilperumpakkam railway station in Villupuram town. A bridge will be constructed across the river Palayar connecting Melamanakudi and Keelamanakudi in Kanyakumari district at a cost of about Rs.60 million.

Out of the remaining 517 villages of 1,000 population size which are to be linked, 108 villages will be provided link roads during 1997-98, and the balance 409 villages during 1998-99. Following year, a scheme is being drawn up to provide link roads to 4,986 villages having a population between 500 and 1000. Thus in five years all the villages in Tamil Nadu, will have link roads.

NABARD would sanction Rs.2.5 billion for road development works during 1997-98 and a similar quantum of assistance will be availed next year also.

# Road Maintenance

The government would constitute a 'road maintenance fund' for the maintenance and upgradation of roads. A specified share of the receipts under motor vechicle tax will be transferred to this fund. The views of road users' organisations will be obtained on the administration of this fund, and accordingly works would be taken up from out of the fund. A provision of Rs.2.87 billion has been made in this year's Budget for the maintenance of roads.

As there has been a ban on recruitment of gang mazdoors after 1977, at present there are only 4,975 persons in this position, and 10,000 gang mazdoors would be appointed on the basis of the existing norm of two persons per 8 km. and the maintenance activities expanded.

# **Transport**

In addition to the purchase of 2,200 new buses in 1996-97 for the Transport Corporations at a cost of Rs.1.5 billion, 3,600 more new buses will be purchased at a cost of Rs.2.92 billion during the next year.

Body building units with modern technology will be established at four places in the state with foreign technical collaboration to build buses for Transport Corporations.

Private sector will ply vans in the unserved interior rural sector. Permits will be given to these vans to operate on route lengths upto 16 km. only.

#### INFRASTRUCTURE FINANCE

For creating infrastructural facilities and to implement development schemes, it is necessary to raise adequate extra budgetary resources. Having regard to the fact that banks, insurance funds, capital market, small savings, pension and provident funds are appropriate sources of funds for such schemes, an expert committee will be constituted to make suitable recommendations to the government on raising financial resources from these sources.

Government of Tamil Nadu was pressing the central government that at least one All India Development Financial Institution should be established with its head quarters at Chennai. The central government has accordingly registered Infrastructure Development Finance Corporation (IDFC) with Chennai as its head quarters.



#### I. CITY PROFILE

#### COIMBATORE IN ITS REGIONAL SETTING

Coimbatore, one of the metropolises of Tamil Nadu is the third largest in population in the state as per 1991 census. Lying at a distance of 500 km. from Chennai, at an elevation of 442 mts. above mean sea level, the city is skirted in the south by the Noyyal river which originates from the Velligiri hills on the western ghats, and is situated between 10°50′ and 11°2′ north latitude and between 76°56′ and 77°1′ east longitude. Municipal towns of Mettupalayam, Pollachi and Thiruppur are within a radius of 40 km. from the city, and Udagamandalam, Gopichettipalayam, Erode, Dharapuram and Udumalpet are at a distance of 80 to 100 km. from the city. It is served by both broad gauge and metre gauge lines of the southern railways (Fig.1.1). Coimbatore has a domestic airport and is linked with Chennai, Trichy, Madurai, Trivandrum, Cochin and Bangalore.

Coimbatore corporation extends over an area of 105.6 sq.km. as per 1991 census.

# PHYSICAL CHARACTERISTICS

# Soil

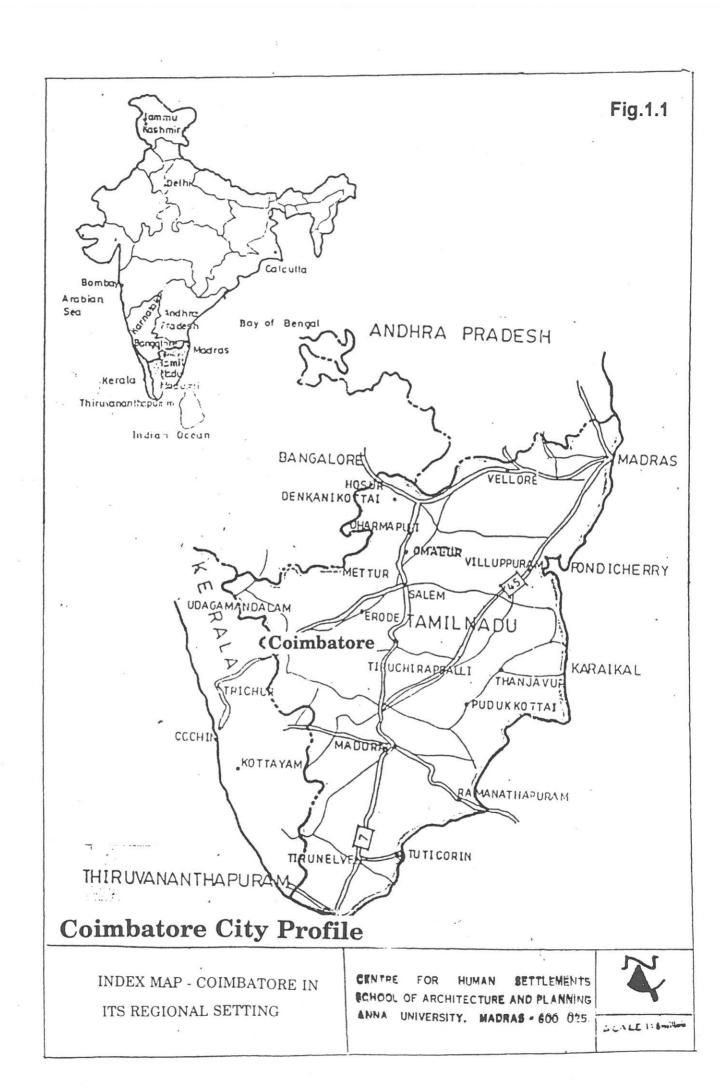
The area is bestowed with minerals like limestone, felspar, gypsum and Kankar, granite stone quarries exist near Kinathukadavu. Predominant soils underlying the city are red loamy, sand and gravel, and black loamy.

#### Climate

The climatic condition is moderate and the weather is uniformly salubrious due to elevation, and nearness to the thick forests of western ghats, and the Palghat pass. The average maximum and minimum temperatures are 35.8°C and 22.4°C respectively. The average rainfall is 71 cm. per annum.

#### HISTORY OF THE CITY

Existence of the city finds mention in the records of Vira Rajendran who ruled during 1200-1252 AD. Since 1895, Coimbatore was made the head-quarters of the district and now is a metropolitan city, and one of the important industrial centres in the state and a well known textile centre which earned it the name of "Manchester of South India".



#### **MUNICIPAL STATUS**

As early as 1866, Coimbatore was declared as a municipal town extending over an area of 10.88 sq.km. and the municipality had been upgraded from a special grade municipality to a corporation with effect from 11.2.1978. And simultaneously, new areas such as Singanallur municipality, Kumarapalayam town panchayat, Sanganur town panchayat, Thelungupalayam town panchayat, Coimbatore rural, Ganapathy town panchayat and a portion of Vilankurichi town panchayat were added to the corporation. As of 1911 census, the corporation area extends over 105.60 sq.km. of land.

## **DEMOGRAPHIC PROFILE**

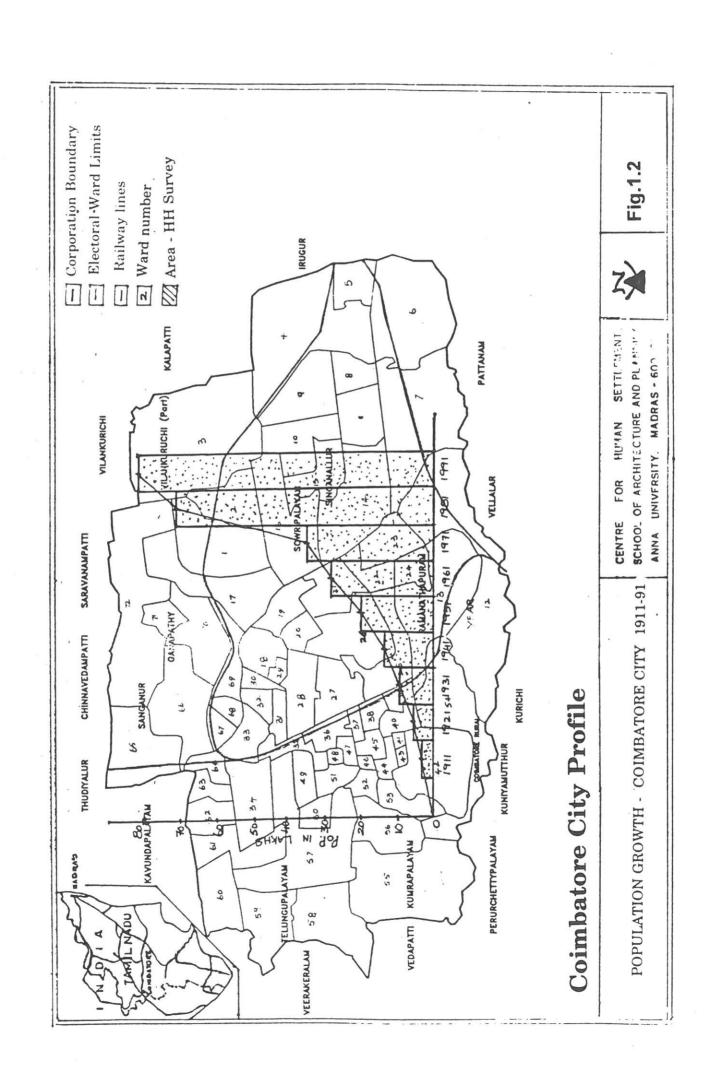
# **Growth of Population**

The city by population has been growing at a rate more than that of the urban sector in the state. The population which was mere 47,000 in 1911, has gone upto 8,16,000 by 1991, registering more than 18 fold-increase over the 8 decades ending 1991 (Table 1.1). The demographic data shows that the census years 1951 and 1981 had recorded significant leaps in population growth, mainly due to the establishment of a large number of industries as adequate electric power became available, and as inclusion of sizeable additional areas to the city respectively. The seemingly declining trend of the population as per the 1991 census is due to the sudden swelling of the base population in 1981 (Fig.1.2).

Table 1.1: Growth of Population - Coimbatore City, 1911 - 1991

Year	Population	Decadal Variation	% increase
1911	47007	=	-
1921	65788	18781	39.95
1931	95198	29140	44.70
1941	130348	35150	36.92
1951	197755	67407	51.71
1961	286305	88550	44.77
1971	356368	70063	24.47
1981	700923	344555	96.88
1991	816321	105398	15.04

Source: Census publications.



# **Density**

The density of population in the city as a whole is fairly high. The density ranges from 300 to 625 persons per hectare in the old parts of the city comprising Bazaar area, N.H.Road and Sukkuravarpet, whereas, in the Race Course area, R.S.Puram and Tatabad, the density varies from 140 to 300, and in the rest of the area, it is below 140 persons/ha. High density of population is seen near the fringes of the city. The gross population density of the city is 105 persons per hectare, and net density is 185 persons per hectare.

#### OCCUPATIONAL STRUCTURE

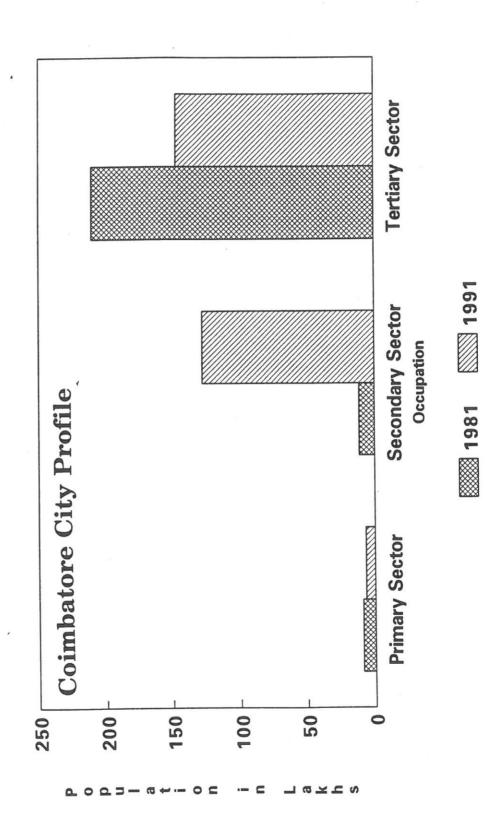
The participation ratio was 32.7 per cent in 1981 which has marginally increased to 34.5 per cent in 1991, with the main work-force count reaching 281,194 (1991). The secondary sector engaged 127,469 workers constituting nearly 45.3 per cent (including construction workers) of the total workers, while the tertiary sector comprising trade and commerce, transport and communication and other services occupied 146,947 workers accounting for 52.3 per cent of the total work-force (Table 1.2 and Fig.1.3).

Table 1.2: Occupational Structure, Coimbatore City, 1981 and 1991

S. No.	Occupation	Work force		% of total work force	
		1981	1991	1981	1991
1.	Primary Sector  a) Agriculture  b) Livestock, Mining c) Quarrying, Hunting, etc.	8962	6778	3.39	2.41
2.	Secondary Sector  a) Manufacturing/Processing b) Construction c) Other than household industries	11,220	1,27,469	4.87	45.33
3.	Tertiary Sector  a) Trade and Commerce b) Transport, Communications & Storages c) Other Works	2,10,348	1,46,947	91.24	52.25
	Total	2,30,530	2,81,194	100.00	100.00

Source: Census publications of 1981 and 1991.

Fig. 1.3 Occupational Structure - Coimbatore City 1981 and 1991



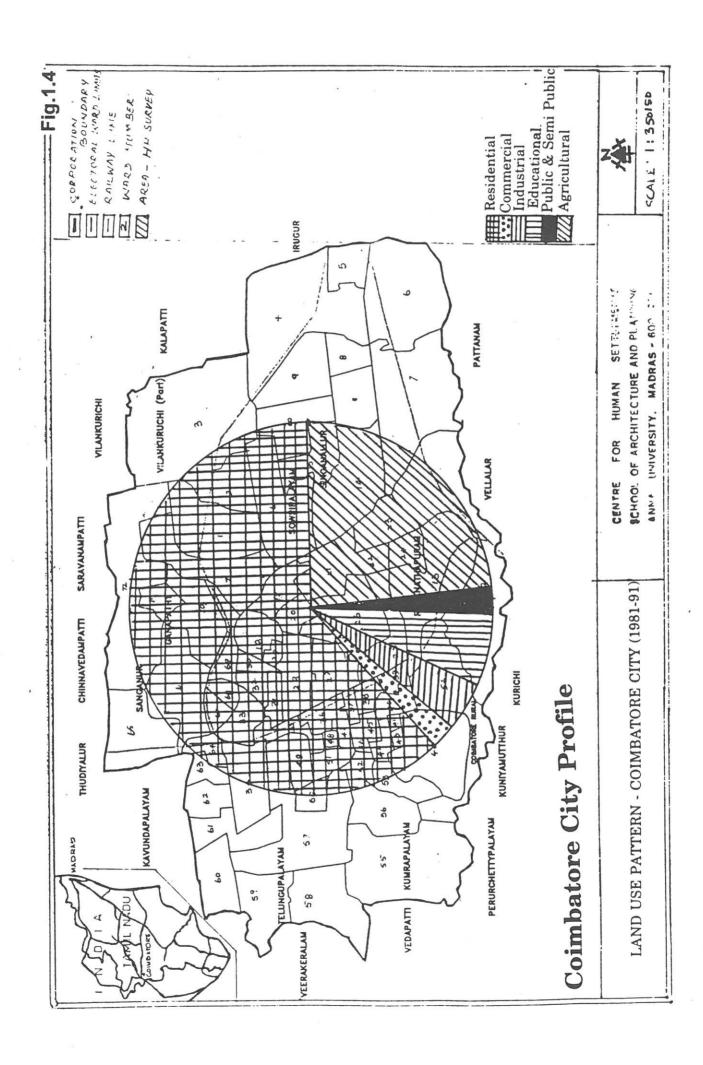
#### LAND USE PATTERN

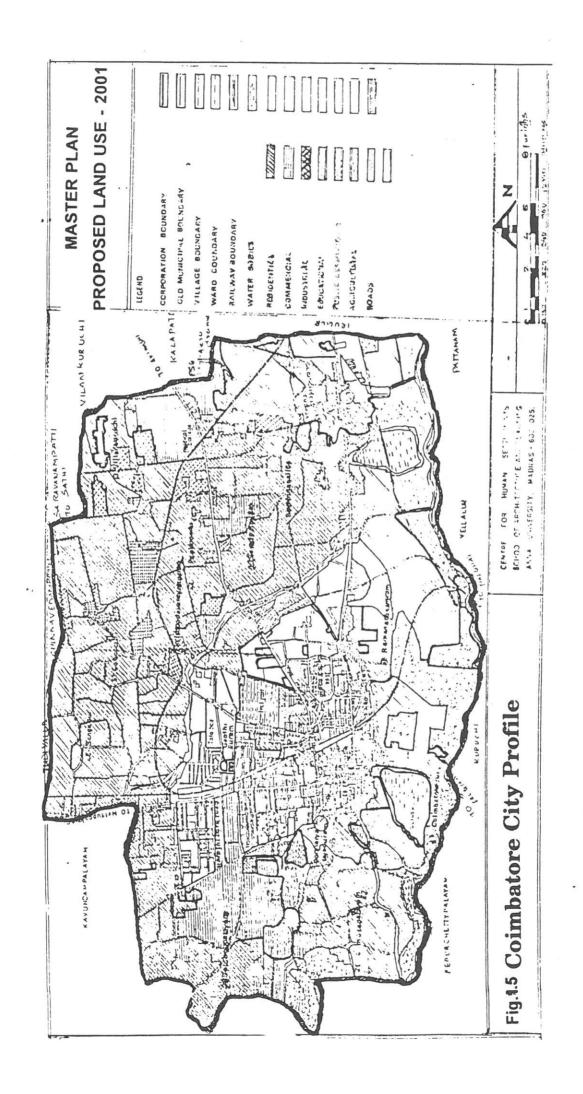
Of the 105.6 sq.km. land area of the city, 24.5 sq.km. of land constituting 23.2 per cent is under agricultural use, and of the rest, as much as 65.27 sq.km. area, i.e. 61.85 per cent, is under residential use which, in fact excluding the agricultural land, works out to 80.57 per cent of the area, while other uses such as commercial, industrial, and educational account for 13.36 sq.km., i.e., 12.67 per cent of the total area, and 2.37 sq.km. (excluding agricultural use) constituting 2.25 per cent of the rest of the area is under public and semi public uses (Table 1.3, Fig.1.4, 1.5).

Table 1.3 Land use Pattern, Coimbatore

S.No.	Use	Area (in hectares)	% of Developed area	% to total area
1.	Residential	6,527.36	80.57	61.85
2.	Commercial	236.34	2.92	2.24
3.	Industrial	440.00	5.43	4.17
4.	Educational	660.45	8.15	6.26
5.	Public & Semi Public	237.35	2.93	2.25
6.	Agricultural	2,451.98	-	23.23
	Total	10553.43	100.00	100.00

Source: Coimbatore Local Planning Authority.





# II. STATUS OF URBAN SERVICES

Coimbatore forms a part of the Coimbatore - Tiruppur - Erode industrial corridor. The city is known for its industrial activities mainly textile, engineering and specialised agricultural support equipment and implements. The city is the district head-quarters and commands rich agricultural hinterland. The local and regional infrastructural facilities play a very important role in the economy of the city.

#### CIVIC SERVICES

# Water Supply

Coimbatore draws its present supply of water mainly from Siruvani water supply scheme, which was commissioned way back in 1929. The source of water supply is located 31.33 km. away from the city, in Kerala. The original scheme was designed for 100,000 population at 91 lpcd. Mains were added in Gandhi Park area in 1959 to cater to an additional population of 197,000. The supply was increased to 19 MLD with the construction of an E.S.R. at Gandhi Park. Improvements to the storage and distribution system were effected in 1971 which helped to increase drawal to 34 MLD. As the population of the city was increasing rapidly, with all the efforts, the maximum supply during summer is only around 45 lpcd. This is more due to the fact that the maximum capacity of reservoir is limited to 25 mcft. Work on a new masonry dam was initiated two km. downstream to hold 650 mcft. of water in 1986-87. The total quantity of water supplied to Coimbatore corporation on an average is reported at 87.81 million litres a day presently.

The position today is as under:

Drawl as per agreement with

Govt. of Kerala - 101.4 MLD
Supply/day - 105 MLD
Through lorries - 1 ML
Borewells - 3 ML
Public fountains - 1,317

Over Head Tanks - 25 (+17 being added)

On completion, the storage will aggregate to 150 mld. Protected water supply mains - 555.16 km.

# No. of connections:

Domestic - 67,912 (65,925 metered as on 31.7.96)

Non-domestic

Commercial - 1,772 Industrial - Nil

Stand posts - 215

There are 139 bore wells and 64 open wells supplying water at different parts of the city. In order to rationalise supply and recover the water charges, TWAD Board had already initiated action to set right the system of functioning of the water supply sector including correcting the inaccuracies of the meters and plugging leakages in the supply lines. It is reported that 80 per cent of the meters are malfunctioning as 58 per cent of them do not conform to specifications.

# Sanitation

# Sewerage

Zone I covers the south western portion of the old city. The ultimate population of this zone is 270,000. The sewage collected from this zone is treated in 40 ha. of land at Ukkadam, for growing grass using the treated sewage. The quantity of sewage inflow is 230 mgd. Work in this zone was started in 1956 and completed during 1960, and it is being maintained by the municipal corporation.

Raw sewage flows by gravity and is treated by the infiltration method. Treatment capacity of the plant is 2.70 mgd. The effluent is used for raising fodder crops, coconut trees, eucalyptus and some forest tree species.

Zone II covers the north-east portion of the old town. The scheme was completed in 1980 and started functioning from 1992. Sewage inflow is 7.05 mgd., utilisation is 6.75 mgd. and excess from Zone I Treatment is by biological oxidation.

Population served : 82,000 (1981), 120,000 (1996)

Length of sewers : 38 km.

No.of House Service

connections : 6,832

Area of sewage farm : 93 ha.

Effluents are disposed at Vellalur sewage farm, 10 km. away from the city and maintained by the municipal corporation.

The areas covered under Zone III are north, north-east and south portions of the city.

Population served : 158,000 (1981), 210,000 (1996)

Length of sewers : 70 km.

Treatment : Biological oxidation

No.of House Service

connection : 16,791 Quantity of sewage collected: 5.25 mgd.

Area of sewage farm : 93 ha.

Effluents are to be used for afforestation. All the works under this zone are completed in the pumping station and lagoons in the sewage farm site in May 1996.

Septic tanks maintained by individuals and underground sewer system in major part of the city take care of sewage collection and conveyance, and also to some extent the disposal. The underground sewers are provided in all the three zones. There are three treatment plants to treat the sewage at primary level. The combined capacity of the treatment plant is 55 MLD, which is 83 per cent of sewage produced.

# Drainage/Sullage

One treatment plant with a capacity of 25 mld serves 21,196 UGD connections. The mains are of 190 km. length and the open drain covers 656 km. on both the sides of the streets. In the new areas, there is no drainage system.

The storm water flows by gravity and almost the entire area of the city is covered by drainage system. As the climate here is normally dry, corporation has not given much importance to this facility. The drainage system was executed by TWAD Board.

# Solid Waste Management

All the parts of the city are covered in the management of solid wastes. The waste generated per day is 565 tonnes. But the average collection in a day varies from 130 tonnes to 150 tonnes.

The collection of solid waste is carried out by a mix of bullock carts and open body lorries from streets to sub-depots. Carts are replaced by tricycles. The collection extent for the smaller vehicles is upto 1.5 km. whereas the trucks cover about 5 to 10 km. a day. From sub-depots to compost yards, the transport is by tipper lorries, prime movers and trailors.

On a normal day, around 48 vehicles, including 30 on hire, are used. Tipper lorries number to 5, tipper tractors of 20 are utilised for collection of the waste. When required, extra vehicles are hired. Issue in this operation is the availability of drivers to run the vehicles.

Disposal of wastes is by open dumping. The wastes are not segregated into organic and inorganic categories. A part of the solid waste is composted by the pit system. The site of disposal is on MTP road and is spread over 14 ha. This site is at a distance of 11 km. from MTP road. Vacancies for a number of posts remain unfilled.

The entire solid waste management is revamped by setting up of modern workshop at a cost of Rs.1.5 million increasing the number of trips made by conservancy vehicles.

Various steps have been taken to remove the solid wastes. They are

- i) Special cleaning of market areas during the night has been introduced.
- ii) Conservancy charges have been levied and collected from hotels and Kalyanamandapams.
- iii) A modern transfer station has been constructed.
- iv) Proposals for purchase of equipment for bulk transportation of garbage have been finalised.
- v) Proposals for setting up incinerator plant for scientific disposal of hospital waste have been mooted and is under implementation.

# Road

Traffic congestion occurs normally at Peria Kadai Veethi, Oppanakara street, Bodanur road upto Athupalam, Gandhipuram near City bus stand. The road network consists of 578 km. of tarred roads, 70 km. of gravel roads and 63.92 km. of highways. Town buses cover 10 km. of road length.

# **Street Lights**

Street lights are maintained by the electrical engineering wing. In all, about 16,439 lights are provided by the following types:

Sodium Vapour: 1,197

Mercury vapour: 1,467

Tube lights: 13,781

Total 16,439

The distance between the light posts on average is 38 metres against the norm of 33 metres. The number of lights provided are 26 per km. against a norm of 33 per km.

# **EDUCATIONAL FACILITIES**

A number of technical and higher educational institutions have been established mainly along the Avanashi road and Mettupalayam road.

Within the local planning area, the Agricultural University and Bharathiyar University along Maruthamalai road, and Government College of Technology along Thadagam road are the major institutions of learning. One Medical College, PSG College of Technology, Government Polytechnic and Coimbatore Institute of Technology, besides other educational institutions are also located along the Avanashi road, Ramakrishna Mission Institutions, Government Industrial Training Institutes, Kongunadu Arts College and a Women Polytechnic lie on the Mettupalayam road.

Government Arts College, Forest College and Government Polytechnic for women, and Home Science College for women are situated in the central parts of the city. The Tamil College is located at Perur along Siruvani road. In addition, a number of new technical institutions and arts colleges have started coming up beyond the city limits, mainly along the Palghat and Sathy roads.

High school level institutions are largely in the private sector. But the middle and primary school institutions are run by the corporation. There are a number of unrecognised schools which are coming up all over the city. Higher educational institutions and the student strength as of 1993-94 are listed in Table 2.1.

Table 2.1: Educational Facilities in Coimbatore, 1993-94

Type of Institution	Nos.	Strength of Students
1. Arts & Science Colleges	8	9402
2. Medical Colleges	2	1227
3. Law College	1	557
4. Engineering Institutions	10	6476
5. Post-Graduate Centres	2	-
6. Teacher Training Colleges	4	756
7. College for special education	2	1528
8. Research Institutes	1	-
9. University	1	_
10. Forest College	1	-
Total	33	19946

#### **MEDICAL FACILITIES**

Of the 66 medical institutions in the city and the surrounding area within the LPA, the Government Hospital is the largest which is attached to the Coimbatore Medical College near the railway station in the heart of the city. E.S.I. Hospital is also fairly large, with 525 beds. The hospitals and dispensaries run by the government and local bodies numbering 66 have as much as 1,640 beds as detailed out in Table 2.2.

Besides, the corporation is maintaining 9 Maternity and Child Welfare Centres at various places in the city. There are 32 private medical institutions within the Local Planning Area.

#### RECREATION FACILITIES

Within the city, there are parks and playgrounds as also recreation clubs covering 90 ha. of land. The municipal corporation maintains 12 parks in the city, largest among them being the V.O.C. park spread over an area of 20 ha. The botanical gardens adjoining the Agricultural University attracts large crowds from far and near. This city having been located on the transport

arterials, and also having an airport is found suitable for tourists. In the surrounding areas, there are historical places including the wild life sanctuary at Maruthamalai.

Table 2.2: Medical Facilities in Coimbatore

S.No.	Classification	No.	Bed Strength
1.	Government Institutions		
	(CMC Hospital)	1	951
	G.H. Thondamutheer	1	12
	G.H. Sulur	1	6
	ESI Dispensary at Singanallur	1	525
	Other ESI Dispensaries	20	50
2.	Local Body organisation		
	Dispensaries	6	96
3.	Primary Health Centres	4	*
4.	Voluntary Institutions (G.K.N.K.Hospital)		
		1	*
5.	Approved private Nursing Home and Hospitals	22.50	
		32	*
	Total	66	1640

<sup>\*</sup> Data not available.

#### OTHER FACILITIES

There are five daily markets run by the municipality. In the heart of the oldest part of the city, whole-sale and retail business, and warehousing activities are carried out. Commercial uses occupy 5.7 per cent of the total developed area of the city.

The collectorate and corporation buildings are located in the centre of the city. And other public offices are located at various places in the city. However, many public offices are functioning in private buildings in the residential areas.

#### III. FINANCING AND COST RECOVERY OF URBAN SERVICES

#### FINANCIAL PERFORMANCE OF COIMBATORE MUNICIPAL CORPORATION

## **Overall Receipts and Expenditure**

For the purpose of analysing the financial health of the city municipal corporation, the actual receipts and expenditure under revenue accounts and capital accounts during the last three financial years, i.e., 1993-94, 1994-95 and 1995-96, are considered. Among the corporations, save Chennai, Coimbatore corporation is a financially healthier local body compared to others. The revenue receipts have been registering an increase of about 50 per cent every year over the preceding year. The capital receipts keep obviously fluctuating as per the demand, and registered a fall in 1994-95 over 1993-94 but observed a big jump in the following year. The overall position of receipts is progressive (Table 3.1).

On the expenditure side, the revenue expenditure is progressive with 15-25 per cent increase a year over the preceding year, whereas the capital expenditure shows significant increase from 50-85 per cent over the previous year. On the whole, the financial performance is progressive as may be seen from Table 3.1.

Table 3.1: Overall Receipts and Expenditure, 1993-94 to 1995-96, Coimbatore Corporation

(in million Rs.)

Accounts	199	3-94	199	4-95	199	95-96	Increase over 19		Increase over 1	1994-95 995-96
	Rec.	Exp.	Rec.	Exp.	Rec.	Exp.	Rec.	Exp.	Rec.	Exp.
Revenue	292.20	262.10	431.50	301.70	684.00	377.20	476.70	151.10	585.00	250.10
Capital	84.90	195.80	77.50	298.00	132.70	549.30	-87.20	521.60	712.60	843.40
Total	377.10	457.90	509.00	599.70	816.70	926.50	349.80	309.70	604.50	544.90

Note:

i) Excluding deposits and advances

ii) Receipts

iii) Expenditure

## Actual Receipts and Expenditure Under Revenue and Capital Accounts

Under the general fund, the revenue receipts relate to taxes and fees, grants and contribution, income from properties, and miscellaneous items, while the capital receipts include income from properties, loans, deposits and advances.

Under water supply and drainage fund, the revenue is from the receipts of the user charges, as the capital receipts comprise, receipts from users and deposits and advances. Income from special services, remunerative services and also from endowments has been nil during the study years. The major capital income comes from receipts for provision of water supply and drainage facilities, followed by income from properties. In this corporation, deposits and advances remain almost insignificant in terms of income. The revenue income registered a significant increase year after year, to go up from Rs.292.2 million in 1993-94 to Rs.431.5 million in 1994-95 and to Rs.684 million in 1995-96 as the capital receipts dipped to Rs.77.5 million in 1994-95 from Rs.84.9 million in 1993-94, but to reach Rs.132.7 million in 1995-96 (Table 3.2).

Table 3.2 provides the actual receipts and expenditure under revenue and capital accounts of the corporation during 1993-94 to 1995-96. Under general fund revenue expenditure, the major items are the obligatory services followed closely by public works, and general administration whereas, capital expenditure consists of deposits, advances, public works, general administration and loan repayments.

Water supply and drainage fund revenue is spent on water supply and drainage maintenance as the major part of the capital expenditure also goes to the works relating to water supply and drainage.

The expenditure under revenue and capital accounts in both the funds kept progessively going up. The total expenditure under capital and revenue categories together increased from Rs.457.9 million in 1993-94, to Rs.599.7 million in 1994-95 and to Rs.926.5 million in 1995-96 (Table 3.3).

Table 3.2: Actual Receipts Under Various Heads - Coimbatore

									(in million Rs.)
Receipts		1993-94			1994-95			1995-96	
sudiana.	Ordinary	Capital	Total	Ordinary	Capital	Total	Ordinary	Capital	Total
Taxes and Fees									
Collected by Corporation	81.07		81.07	132.15		132.15	145.16		145.16
Other Agencies	97.52		97.52	119.68		119.68	166.18		
Fees	17.46		17.46	21.29		21.29	30.35		186.18
Grants and Contribution	6.04		6.04	28.65		28.65	86.59		30.35
Income from Properties	31.35	30.88	62.24	17.81	4.53	22.34	19.34	1.71	86.59
Income from Special Services									21.05
Remunerative Services									
Miscellaneous				5.51		5.51	6.53		6.53
Endowments									
Loans		5.74	5.74					35.00	35.00
Deposits		77.34	77.34		114.95	114.95		194.30	194.30
Advances		43.96	43.96		48.10	48.10		54.00	54.00
Transfer of Funds from G.F. to Capital A/C					88.95	88.95		238.93	238.93
Total General	238.96	157.92	396.88	326.11	256.53	582.64	454.35	523.94	978.29
Water Supply and Drainage Account									
Receipts	53.26	54.01	107.27	105.43	72.96	178.39	209.64	131.00	340.64
Deposits & Advances		3.44	3.47		2.29	2.29		4.00	4.00
Total	53.26	57.46	110.72	105.43	75.25	180.68	209.64	135.00	344.64
Grand Total	292.22	215.38	507.60	431.54	331.78	763.32	683.98	638.95	1322.93
Total excluding Deposits & Advances	292.22	84.89	377.12	431.54	77.49	509.03	683.98	132.71	816.69

Source: Coimbatore Municipal Corporation.

Table 3.3: Actual Expenditure under Various Heads, Coimbatore

:		1993-94			1994-95			m) 1995-96	(in million Ks.)
Expenditure	Ordinary	Capital	Total	Ordinary	Capital	Total	Ordinary	Capital	Total
General Administration	54.92	25.21	80.13	73.18	10.50	83.68	09.88	11.50	100.09
Public Works	62.94	37.83	100.77	40.30	59.43	99.73	56.26	182.70	238.96
Education	09.0		0.60	4.51	5.00	9.51	2.93	5.00	7.93
Town Planning	2.12	0.39	2.51	4.70	0.61	5.31	4.50	2.50	7.00
Obligatory Services	75.73	1.02	76.75	105.82	13.41	119.23	106.17	37.23	143.40
Discretionary Services	4.96		4.96	6.97		86.9	7.93		7.93
Remunerative Services									
Loan Repayments		13.35	13.35		7.00	7.00		6.50	6.50
Deposits		47.59	47.59		80.25	80.25		65.22	65.22
Advances		45.78	45.78		63.20	63.20		62.40	62.40
Transfers to Capital Account				88.95		88.95	238.93		238.93
Transfers to Water Supply Account				45.45		45.45	50.00		50.00
Transfers to Education Tax				25.25		25.25	27.80		27.80
Transfers to Library Cess				18.20		18.20	20.00		20.00
Total Expenditure General	201.27	171.17	372.43	413.34	239.40	652.74	603.12	373.05	976.17
Water Supply and Drainage Fund									
Expenditure	98.09	70.44	131.29	66.25	121.76	188.01	110.82	238.60	349.43
Deposits & Advances		2.16	2.16		1.73	1.73		2.60	2.60
Total	98.09	72.59	133.46	66.25	123.49	189.74	110.82	241.20	352.03
Grand Total	262.13	243.77	505.89	479.59	362.89	842.48	713.94	614.26	1328.20
Grand Total excluding Deposits and Advances	262.13	195.82	457.95	301.74	297.96	599.70	377.21	549.26	926.47
source: Coimbatore Municipal Corporation.									

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## Proportion of Various Items in Income and Expenditure under Revenue and Capital Accounts

Table 3.4 vividly reveals that the major contribution to revenue income comes from the taxes to an extent of 52-67 per cent during the three years under study, though it has been declining from 67 per cent in 1993-94 to 52 per cent in 1995-96, as the grants and contribution went up consistently from 2 per cent in 1993-94 to 12.7 per cent in 1995-96. The entire income under the water supply and drainage fund in revenue accounts comes from receipts as user charges, and it has been registering a steady increase in its proportion from 18 per cent in 1993-94 to 30.6 per cent in 1995-96 of the total revenue receipts.

Under the capital accounts, the income is by way of deposits to an extent of one-third of the total capital income, followed by receipts for provision of water supply and drainage services, and advances. The contribution of advances has registered a declining trend as also the deposits, and receipts for water supply and drainage. In 1994-95 and 1995-96, there was a heavy transfer to an extent of 27 per cent and 37 per cent respectively of the total capital income from general fund to capital account (Table 3.5).

As regards under the revenue accounts, obligatory services top (15-29%) the list of items followed by water supply and drainage works (14-23%), general administration (12-21%) and public works (8-24%). All these items show a fast decline over the three years. But during 1994-95 and 1995-96, the transfers to capital account have been significant being 18.5 per cent and 33.5 per cent of the total expenditure under revenue accounts respectively. During these two years, transfers also took place to water supply account, to education tax and also to library cess, in a falling trend. Major expenditure under capital accounts is seen to have occurred under items such as deposits, advances, water supply and drainage works, and public works. Capital expenditure for water supply works and public works keep increasing steadily in their proportions of the total expenditure, to reach 39 per cent and 30 per cent respectively in 1995-96.

## Growth Rates of Income and Expenditure Under Revenue and Capital Accounts

By far the best progress is seen in receipts as user charges from water supply and drainage services except grants and contribution which registered 375 per cent and 202 per cent increase in 1994-95 over 1993-94 and in 1995-96 over 1994-95. Growth rate in taxes collected by corporation has drastically fallen from 63 per cent to 10 per cent during the years as the tax collections by other agencies picked up in growth rate from 23-56 per cent in the two years, i.e., 1994-95 and 1995-96, over the previous years.

Income by Proportion of Various Heads under Revenue and Capital Accounts, Coimbatore Table 3.4

Daninte	R	Revenue Account	ıt		Capital Account	
Receipts	1993-94	1994-95	1995-96	1993-94	1994-95	1995-96
Taxes and Fees						
Collected by Corporation	27.74	30.62	21.22			
Other Agencies	33.37	27.73	27.22			
Fees	5.98	4.93	4.44			
Grants and Contribution	2.07	6.64	12.66			
Income from Properties	10.73	4.13	2.83	14.34	1.37	0.27
Income from Special Services						
Remunerative Services						
Miscellaneous	1.89	1.51	86.0			
Endowments						
Loans				2.66		5.48
Deposits				35.91	34.65	28.06
Advances				20.41	14.50	79.7
Transfer of Funds from G.F. to Capital A/C					26.81	37.40
Total General	81.77	75.57	69.35	73.32	77.32	78.87
Water Supply and Drainage Account						
Receipts	18.23	24.43	30.65	25.08	21.99	20.50
Deposits & Advances				1.60	69.0	0.63
Total	18.23	24.43	30.65	26.68	22.68	21.13
Grand Total			W s gr			
Total excluding Deposits & Advances	100.00	100.00	100.00	100.00	100.00	100.00

Source: Coimbatore Municipal Corporation.

Expenditure by Proportion of Various Heads under Revenue and Capital Accounts, Coimbatore Table 3.5

Denondiform		Revenue Account			Capital Account	
expending	1993-94	1994-95	1995-96	1993-94	1994-95	96-2661
General Administration	20.95	15.26	12.41	10.34	2.89	1.87
Public Works	24.01	8.40	7.88	15.52	16.38	29.74
Education	0.23	0.94	0.41		1.38	0.81
Town Planning	0.81	0.98	0.63	0.16	0.17	0.41
Obligatory Services	28.89	22.06	14.87	0.42	3.70	90.9
Discretionary Services	1.89	1.45	1.11			
Remunerative Services						
Loan Repayments				5.48	1.93	1.06
Deposits				19.52	22.11	10.62
Advances				18.78	17.42	10.16
Transfers to Capital Account		18.55	33.47			
Transfers to Water Supply Account		9.48	7.00			
Transfers to Education Tax		5.26	3.89			
Transfers to Library Cess		3.79	2.80			
Total Expenditure General	76.78	86.19	84.48	70.22	65.97	60.73
Water Supply and Drainage Fund						
Expenditure	23.22	13.81	15.52	28.89	33.55	38.84
Deposits & Advances				0.89	0.48	0.42
Total	23.22	13.81	15.52	29.78	34.03	39.27
Grand Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Coimbatore Municipal Corporation.

But on the capital accounts side, the growth rates in capital income from properties and loan have drastically fallen by (-) 85 per cent and (-) in 62 per cent, and the receipts as user charges for water supply and drainage services have registered faster growth rates, i.e., 35 per cent in 1994-95 over 1993-94 and 80 per cent in 1995-96 over 1994-95. The grand total of capital income has, however, showed a much faster growth rate from (-) 8.7 to 71 per cent during the two years over the previous years, as seen earlier. (Table 3.6).

Under the expenditure side in revenue accounts, the trend is varied as also under capital account. Grand total expenditure on revenue account side shows an increasing rate of growth though in general fund, the total expenditure shows a falling rate of increase opposed to that in capital accounts (Table 3.7).

#### LOAN REPAYMENT

The loan repayment liabilities have been on the decline since 1993-94. In the beginning of 1993-94, the loan amount was Rs.28.28 million which came down to Rs.13.35 million by the end of that year and Rs.6.51 million by the end of 1995-96. It was estimated that for 1996-97 also the loan repayment will remain the same as there was no proposal to avail any further loan from agencies like HUDCO, MUDF or TNUDP.

Table 3.6: Growth Rates of Income under Revenue and Capital Accounts, Coimbatore

	Reve	enue	Ca	pital
Receipts	1994-95 on 1993-94 (%)	1995-96 on 1994-95 (%)	1994-95 on 1993-94 (%)	1995-96 on 1994-95 (%)
Taxes and Fees				
Collected by Corporation	63.02	9.84		
Other Agencies	22.72	55.56		
Fees	21.92	42.58	2.00	
Grants and Contribution	374.23	202.25		
Income from Properties	-43.21	8.61	-85.33	-62.25
Income from Special Services				
Remunerative Services				
Miscellaneous	18.55	3.06		
Endowments				
Loans			-100.00	
Deposits			48.63	55.98
Advances			9.43	1.87
Transfer of Funds from G.F. to Capital A/C				168.61
Total General	36.47	45.46	62.44	96.44
Water Supply and Drainage Account				
Receipts	97.94	98.84	35.08	79.55
Deposits & Advances			-33.47	74.52
<b>Fotal</b>	97.94	98.84	30.97	79.40
Grand Total	47.67	58.50	54.05	92.58
Γotal excluding Deposits & Advances	47.67	58.50	-8.72	71.26

Source: Coimbatore Municipal Corporation.

Table 3.7: Growth Rates of Expenditure under Revenue and Capital Accounts, Coimbatore

	Rev	enue	C	apital
Expenditure	1994-95 on 1993-94 (%)	1995-96 on 1994- 95 (%)	1994-95 on 1993-94 (%)	1995-96 on 1994- 95 (%)
General Administration	33.27	21.06	-58.35	9.52
Public Works	-35.97	39.60	57.12	207.41
Education	650.42	-34.92	1000 1000	
Town Planning	121.80	-4.26	57.22	309.84
Obligatory Services	39.74	0.33	1213.42	177.66
Discretionary Services	40.63	13.62		
Remunerative Services				
Loan Repayments			-45.78	-7.09
Deposits			68.64	-18.73
Advances			38.05	-1.27
Transfers to Capital Account		168.61		
Transfers to Water Supply Account		10.01		
Transfers to Education Tax		10.10		
Transfers to Library Cess		9.89		
Total Expenditure General	105.37	45.91	39.86	55.83
Water Supply and Drainage Fund				
Expenditure	8.86	67.28	72.86	95.97
Deposits & Advances			-20.02	50.29
Total	8.86	67.28	70.09	95.33
Grand Total	82.96	48.86	48.87	69.27
Grand Total excluding Deposits and Advances	15.11	25.01	52.16	84.34

Source: Coimbatore Municipal Corporation.

#### PRICING MECHANISM AND COST RECOVERY METHODS

## Receipts

Under the receipts, property tax, profession tax, advertisement tax and tax on vehicles and animals are the items of revenue collected by the corporation directly. The quinquennial revision of property tax was taken up from 1st April 1993. Education tax which forms part of property tax is shown under genral fund accounts to meet the expenditure relating to the elementary education. Similary, separate set of accounts are being maintained for the water supply and drainage funds, the probable collection of water tax and drainage tax that form major component of property tax with effect from 1986-87, delay caused in the tentative transfer of water charges receipts is transferable to the water supply and drainage account. In the absence of preparation of demand, collection and balance (D.C.B.) statement for property tax to the water supply fund account every month, final adjustments will be made after the finalisation of the D.C.B. in the revenue section. Heavy accumulation of deficit under general fund accounts has increased the liability with corresponding short of funds in the water supply and drainage fund account which consequently could not liquidate the heavy commitment of outstanding loans obtained during the past several years. Hence, every month a certain amount based on the approximate collection of water tax and drainage tax is being transferred from the general fund account to the water supply in the year 1996 - 97 besides finding out ways and means to pay the arrears in easy instalments after striking the D.C.B. statement.

The library cess collected along with property tax and to be remitted to the local library authority ultimately, is shown under deposit in the absence of D.C.B. statement for all revenue items. However, in order to avoid accumulations, a certain amount is periodically remitted to the local library authority based on the approximate collection of library cess. This amount also will be fully settled in easy instalments after the striking of D.C.B.

## Property Tax

In the general fund of the revenue of municipal corporation, property tax continues to be the mainstay. The rates being levied for property tax are as follows:

Prop	perty Tax	
1.	Tax for General Purpose	6%
2.	Water Tax	11/20/0
3.	Drainage Tax	9%
4.	Education Tax	21/20/0
	Total	18%
	10131	10/0

#### Added areas

## Old Singanallur Municipality

1.	Tax for General Purpose	6%
2.	Water Tax	61/20/0
3.	Lighting Tax	-
4.	Education Tax	21/20/0
5.	Scavenging tax	-
	Total	15%

The following pattern is observed among the town panchayats:

(in per cent)

Town Panchayats	General Purpose	Water Tax	Education Tax	Total
1. Ganapathy	6	2½	2½	11
2. Telungupalayam	6	1½	2½	10
3. Kumarapalayam	6	4	2½	12½
4. Sanganoor	6	21/2	21/2	11
5. Velankurichi	6	2½	21/2	11
6. Coimbatore Rural	6	2½	21/2	11

The tax on lands has been levied on the basis of the capital value at 1 per cent per half yearly.

## Professional Tax

The professional tax is levied as per Section 3 of Schedule of the Tamil Nadu tax on professions, trades, callings and employment, and as per municipal corporations' councils' resolution, from time to time. However, the government issues certain amendments to the said Act and accordingly the corporation fixes on the demands. Introduction of the new Act for assessment and collection of professional tax came into effect from 1st April 1992 and this, incidentally results additional revenues to the local bodies.

## Tax on Vehicles/Animals/Carts

The levy and collection and tax on carts, tax on vehicles and animals is nominal. The rates for vehicles are as under.

i. Four wheeled carts: Rs.10.00 half yearly

ii. Iron carts, double bullocks, single bullock and hand carts: Rs.6.00 half yearly.

iii. Iron carts, double bullocks, rubber tyred carts, double bullocks, single bullocks and hand carts: Rs.5.00

iv. Jatkas: Rs.5.00

The rates for animals are given below:

 v.
 Bull
 : Rs.2.00

 vi.
 Dog
 : Rs.2.00

 vii.
 Horse
 : Rs.8.00

## Library Cess

Library cess is collected on the tax on general purposes of property tax at 10 paise on every rupee per half year, and paid to the district library authority.

### Advertisement Tax

In order to augment the revenue under the head, action has been initiated on all advertisements projecting into the public street and to levy advertisement tax. Effective steps have also been taken to remove unauthorised hoarding and advertisements.

# Entertainment and Duty on Transfer of Properties

The receipts under these heads are based on the average receipts of previous years.

### Fees

This is from dangerous trades, licence fees, encroachment fees, building licences, debris charges, market, carts stand, slaughter houses and central and town bus stand. The council attempts to increase the rate of building licence fees for commercial purpose from time to time, and lastly, the fees were increased with effect from 1.4.91.

## Grants and contributions

- (i) The amounts spent by the corporation for secondary education are to be reimbursed by the government. However, so far the corporation has not received any amount.
- (ii) The corporation is entitled under section 37 of the Elementary Education Act, 1920 to the extent of 50 per cent of the education tax collected during the period 1986-90. Only a provisional subsidy was received so far. There is no possibility to get the grant under section 33 of the Act year here after.
- (iii) As per G.O.M.S. No.1194, Finance (pension) of 15.11.1990, the pensionary benefits to the retired teachers are borne by the corporation from its funds which will however be reimbursed periodically by the Government on pro-rata basis.

The government will also sanction grants for anti-mosquito measures.

### **Expenditure**

The items under expenditure are already listed in the previous chapter.

### General Administration

Under this major head of account, provision for items of administrative expenditure including pay and allowances of the Commissioner, P.A. to Commissioner, and Chief Revenue Officer, Town Planning Officer, (Civil) staff and expenses incidental to collection work, travel expenses, postal charges, telephone expenses, printing charges, cost of maintaining conveyance, fuel and charges and all other items incidental to administration is made. Similar provisions under special provident fund cum gratuity scheme and for bonus with respect of employees in different pay slabs for special adhoc bonus and management contribution to group insurance scheme are made. Necessary provision is made for the payment of pensionary benefits to the retired employees, and for pension and leave salary contribution in respect of officers serving in the corporation on foreign service terms.

The World Bank extends financial assistance to a large extent and in turn, the T.W.A.D. Board, and again insists that computerisation should be done immediately in the corporation. Hence, introducing computers and computerisation of accounts are being implemented. The amount spent for this purpose has to be shared by the general and water supply and drainage fund.

#### i. Pension

As per G.O. Ms.No.1194 Finance (Pension) Department dated 15.11.90 the government has issued orders for the payment of pensionary benefits to the teaching and non-teaching staff of the corporation which in turn would be reimbursed by the government to the extent of liability to be borne by the government based on the length of service.

## ii. Contribution under Group Insurance Scheme

In G.O. Ms. No.10 Finance (Pension) dated 12.1.78, the government introduced a common group insurance scheme for the employees of local bodies with effect from 1.1.78 as per G.O.Ms. No.225 Finance (Pension) dated 17.3.78, G.O. Ms.No.952 Finance (Pension) dated 1.10.86, G.O.Ms.No.66 Finance (Pension) dated 19.1.90. The corporation has to remit at the rate of Rs.48/- per annum per employee from 1/78 to 2/85, and at Rs.96/- per annum with effect from 3/85 to 6/89 and, at Rs.180/- per annum per employee with effect from 7/89 as management contribution which has been remitted to the government upto December '95.

# iii. Contribution to Local Planning Authority

According to the standing orders of the government, 1 per cent of the total ordinary receipt under all accounts has to be remitted to the local planning authority. But this contribution has not been regularly paid. The local planning authority is now pressing for the payment. The total amount payable for the period from 1982-83 to December '94 worked out to around Rs.712.98 million in the beginning of 1996-97. It has been decided to clear the arrears on monthly part payment. The question of increasing the quantum of payment may however be considered as and when the financial position of the corporation improves in course of time.

# iv. Contribution to Nehru Rozgar Yojana

To relieve unemployment, to provide shelter to the poor, and to commence small scale industries, etc. a new scheme "Nehru Rozgar Yojana" has been introduced by the government. Under the scheme, the corporation has to contribute 10 per cent of the allocation.

### v. Election

The election to the Coimbatore corporation since its formation on 01.05.1981 has not been held. Election to the corporation was conducted during this year, i.e., 1996-97. The corporation had to bear the expenditure of the corporation election.

# vi. Public Works and Roads (Major works)

The corporation maintains roads, streets and lanes, to a total length of 684 km. as indicated below in Table 3.8 :

Table 3.8 Length of Roads in Coimbatore

Road Type	Length (in Km.)
BT and Cement Concrete Road	499.00
Metal Road	70.00
Earthen and Unmetalled Road	70.00
Others	9.00
New Formation of B.T. Road	35.50
Total	683.50

# vii. Contribution towards the maintenance of highway roads

Every year the highways department is demanding 25 per cent of expenditure incurred by them on maintaining highways roads that pass through our city limit. No amount has been remitted due to paucity of funds.

## viii. Buildings

The corporation has to bear the cost of construction of quarters for the staff, construction of division office, etc. Maintenance of these categories of buildings also has to be undertaken by the corporation.

### Medical

In order to keep the city clean and also maintain the environmental hygiene, the Corporation constructs new community toilets with adequate necessary facilities and also maintains the existing ones.

#### Others

The corporation also constructs and maintains secondary and elementary schools, Kalaiyarangam, Kalyanamandapam, and provide additional facilities in addition to construction of stalls in the market, shopping complexes, etc.

In addition, provision for payment of salary to town planning staff and also for maintenance of street lights is made.

#### Obligatory Services

#### i. Public health

Renovation of pay and use toilets, public conveniences and improvement of burial grounds, the basic amenities are undertaken by the corporation. Conservancy expenditure constitutes a major chunk as also the expenditure to control mosquitoes menace under anti-malaria scheme of the corporation's expenditure. Necessary provision is also made for the establishment charges and contingencies of various sections like anti-malaria scheme, birth and death, manufacture of compost, hospital and dispensary, maternity and child welfare scheme, etc.

### Discretionary Services

The corporation under this head maintains parks and gardens, rest houses, Kalyanamandapam, markets, zoo, bus stands, etc.

## Repayment of Loans

Under loans, provision is made year after year for the payment of annuities and interest of all loans.

### **Deposits**

Education tax is collected as one of the components of property tax under elementary education act. Due to non-finalisation of demands collection, balance for years together, the correctness of the education tax collected would not be tested. Therefore, an approximate collection at 2.5 per cent out of the total collection is credited to the account and transferred to elementary education fund account.

# Water Supply and Drainage Tax

Since separate account is maintained for this item, these taxes are to be remitted to that account. This could not be done, as a (DCB) is not ready. Tentatively, 9.5 per cent of the amount realised towards the property tax is credited to the deposits account. Refunds are made as and when funds are available. Provision towards staff welfare measures are being made every year to meet mainly festival advance, travelling advance, marriage advance, home building advance, education advance, etc.

## General

Since the entire liability to water supply drainage fund, library cess, education tax and other item, where not entirely transferred, financial position in general fund account is only seemingly sound.

### Other Activities

Under Nehru Rozgar Yojana, 3 schemes are taken up, namely,i) Scheme of urban micro enterprises (SUME); ii) Scheme of housing and shelter upgradation (SHASHU); and iii) Training and infrastructure (Under SUME).

Under SUME, repair and installation of water sources, construction of public toilets, individual toilets, community halls, dust bins, soak pits, water tanks drainage, etc., are being taken up.

Loan assistance is also granted and a subsidy of 25 per cent and 75 per cent of the loan is to be repaid to the people below poverty line in the city. The subsidy is being shared by the Government of India, State Government and municipal corporations in 50:40:10 proportions.

# IV. CRITICAL AREAS FOR REFORM AND INVESTMENT

The revised budget estimate for 1996-97 shows a closing balance of more than Rs. 20 million in deficit with the total expenditure amounting to Rs. 942.3 million as against the total receipts of Rs. 936.4 million. The municipal corporation proposes to modernise the system of functioning with updated technology equipment like computers, etc.

#### PROJECTS IDENTIFIED IN THE MASTER PLAN

#### Roads

As the city is by and large an industrial one, mobility of people from one to the other is more, and so immediate measures need be taken to adequately cope with the situation. In order to remove the bottlenecks to a satisfactory level of traffic and transportation services particularly in the central parts of the city where the internal traffic from all other roads pass through, 24 metre by-pass roads are suggested for implementation.

The proposed alignment of by-pass road has been suitably realigned by taking into consideration the existing trend of development. The volume of traffic on all the major arterial roads namely Mettupalayam road, Avanashi road, Trichy road and Pollachi road are very high. To relieve the roads of the high traffic volume, the master plan has proposed inner and outer ring roads connecting all the above major roads.

Master plan also proposed three truck terminals at Mettupalayam road, Avanashi road and Podanur road.

Within the local planning area, service roads with a green strip to a width of 7.5 m is proposed on either side of the corridor.

## Water Supply

The major source of water for Coimbatore corporation is Siruvani. This scheme was completed in the year 1983. Under this scheme, 101.4 mld. of water has been made available to Coimbatore satellite towns and wayside villages. The Siruvani scheme comprises full scale treatment plant and master service reservoir at Bharati park, storage reservoirs and distribution system in Coimbatore corporation area. Under Siruvani scheme, 85.62 mld. of water is being supplied to Coimbatore corporation.

The growing development of Coimbatore, and inclusion of areas into the Corporation limits have increased the problem of water supply in general which becomes severe during summer season. To cope up with this, the state government has administratively sanctioned for Rs.707.5 million (revised estimate is Rs.917.5 million) of which the share of Coimbatore is Rs.427.7 million for providing water to Coimbatore local planning and rural areas with Pillur reservoir as source.

## Zonalisation for Water Supply

Coimbatore corporation is divided into two district zones, western and eastern. But the situation is not the same in both the district. While the western zone has a more or less adequate distribution network and storage reservoir capacity the eastern zone has a poor distribution network and a less storage capacity of just 6.5 million litres as against a requirement of 14.6 million litres (at 30% of water need as stored requirement).

## Salient Features of Existing Water Supply Scheme

a. Source : Siruvani River

b. Total Yield in MLD : 85.00
c. Transmission Length : 40.00 km.
d. Distribution Network : 562.00 km.

e. Storage Reservoir Capacity : 27.87

(in million litres)

Note: According to TWAD Board, the present carrying capacity of the distribution system is 20 mld.

## Completed Project

As part of Pillur water supply scheme, only a bulk supply of 65.97 mld. has been earmarked with the investment of Rs.517.5 million after capitalising interest as share of Coimbatore corporation and there was no provision for storage reservoir or distribution system. Because, at the time of formulation of the water supply scheme in 1983-84, it was assumed that the existing storage reservoir and distribution network would meet the requirement. With further growth, the problem of distribution and need for storage reservoir has become acute in the eastern zone.

The above problem is also evident from the number of connections pending with the city corporation, and till recently, there was a ban on new connections. The present water connections

against the approved properties, cover only about 42 per cent, and there are about 10,000 more units which are located in the unapproved layouts. Hence, there is a high demand for water connections. There are over 150 unapproved layouts in the city.

Due to poor distribution network in the eastern zone, and storage reservoir, Coimbatore corporation is unable to meet the demand. Hence, there is a need to revamp the distribution system and add storage reservoir capacity in the eastern zone, and too some extent in the western zone where there is already inadequacy. As can be seen, the gap in western zone is to the extent of 3.3 million litres, and it is 15.6 million litres in the eastern zone.

# **Project Components**

The salient features of the Pillur water supply scheme are given below:

a.	Source	į	Pillur Reservoir
b.	Project Cost	:	Rs.917.5 million
c.	Share of Coimbatore	:	Rs.427.7 million
d.	Cost after Capitalising Interest	:	Rs.517.5 million
e.	Total Yield	:	131.25 MLD
f.	Share of Coimbatore	:	65.97 MLD
g.	Transmission Length	•	40.06 Km.
h.	Treatment Plant		
	Location	:	Veliangadu
	Distance from Source	:	3.85 Km.
	Capacity	1	131.25 MLD

# i. Proposed Distribution systems

-	Target Area, Master	:	Eastern Zone
	Reservoir Location		R.K.Puram
-	Capacity	:	3 million litres
-	Branch feeder main	:	31.65 km.
-	Service Reservoir	;	16 million litres

# PROJECTS IDENTIFIED BY LOCAL PLANNING AUTHORITY

The Local Planning Authority has identified the following projects:

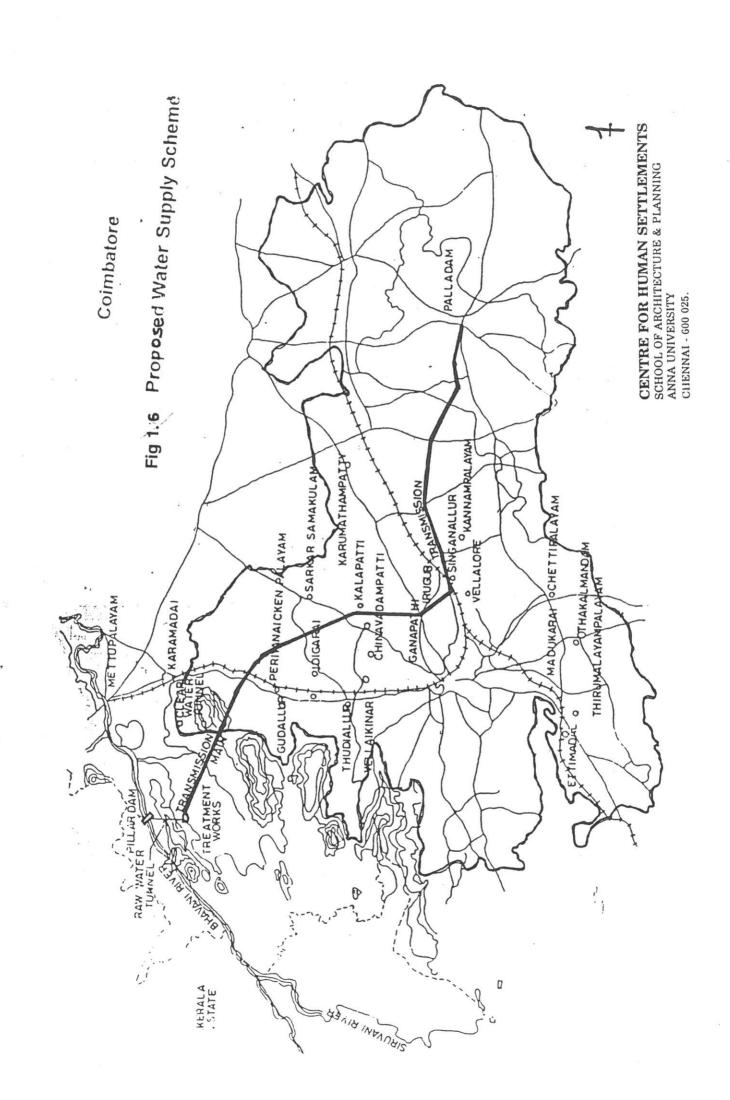
I.	Remunerative	Cost Estimate (in million Rs.) 1993-94
	Shopping cum Parking at Big Bazaar	12.23
	Shopping at Diwan Bahadur Road	19.99
	Working Women's Hostel	9.00
	Shopping at Avinashi Road	2.69
	Construction of Bus Stand	7.41
	Sub Total	51.33
II.	Non-remunerative	
	Multistoryed Parking at T.K.Market	9.09
III.	Services	209.83
	Total	270.25

## OTHER PROJECTS

# **Integrated Low Cost Sanitation Scheme (ILCS)**

There is also a proposal to implement an Integrated Low Cost Sanitation Programme for which a project report is also prepared. The project cost is around Rs.100 million. Thus, the requirement for the known future projects excluding water supply and roads is around Rs 370 million.

The Ministry of rural development and local administration announced on 26th March 1997 in the Assembly that an amount of Rs.25 million for laying of roads in the new developed areas of the Coimbatore corporation and another 150 million for provision of storm water drains would become available in the ensuing year.



## **ANNEXURE**

# COMPONENTS OF RECEIPTS AND EXPENDITURE IN ULBS OF TAMIL NADU

### Corporation

# Revenue Receipts

- Own Tax Revenue: Tax on general purposes, water tax, drainage tax, education tax, library cess, professional tax, tax on advertisement, tax on vehicles and carriages.
- ii) Assigned revenue: Surcharge on stamp duty, entertainment tax.
- iii) Fees under Public Resorts Act, D and O trade licence fees, installation licence fees, encroachment fees, building licence fees, penalties, cart stand, bus stand, regular markets, weekly markets, shops and shopping complex, slaughter houses, kalyanamandapam, guest house, travellers bungalow, pay and use toilets/baths, water charges, sale of solid waste manure/wastes, sewage farms, magisterial fees, income from Food Adulteration act, clearance of cell pool and septic tank, income from investments, interest-bank, deposits, lapsed deposits, recovery of charges for services.
- iv) Grants in aid from state grant for general purpose, grant for specific purpose, noon-meal centres, education.

# Capital Receipts

- i) **Loan from government/institution:** For water supply, for road works and other items.
- ii) Grant in aid from government: Water supply, roads.
- iii) Special assistance from state government: Grant for drought relief works.

### Revenue Expenditure

- i) General supervision and collection.
- ii) Public works: Maintenance works-road, buildings, properties, establishment and administration.

- iii) Water supply and drainage: Maintenance works C.C. charges replacements and renewals, drainage establishment and administrations.
- iv) Town planning.
- v) Education.
- vi) Obligatory Service: Lighting, CC Charges, public health-Antimalaria, sanitation-solid waste, fairs and festivals, medical relief hospitals and dispensaries, maternity and child welfare, slaughter houses, all other obligatory services.
- vii) Discretionary services: Public amenities, market, cart stand, bus stand, all other discretionary services.
- viii) All remunerative services.

## Capital Expenditure

- i) Public works (Major): Roads, bridges/subways buildings and properties, water supply.
- ii) Education including noon-meal centres.
- iii) Obligatory services: Lighting, solid waste management, slaughter houses.
- iv) Discretionary services: Public amenities like radio, markets, cars and other vehicles.
- v) Special assistance from state government: Flood relief works, special scheme with grants and others.

## Municipalities and Town Panchayats

#### Revenue Receipts

- i) Own tax revenue property tax: Tax on general purposes, scavenging tax, lighting tax, water tax, drainage tax, education tax, library cess, profession tax, tax on carriages and animals, tax on carts/vehicles, tax on agricultural land, pilgrim tax.
- ii) Assigned revenue: Surcharge on stamp duty, additional surcharge on sale tax, local cess.

- iii) Others: Entertainment tax, toll compensation, lease on mines and minerals.
- iv) Non tax revenue: Fees under Public Resorts Act, D and O trade licence fees, installation licence fees, encroachment fees, building licence fees, advertisement fees on lamp posts and walls, hoarding and cutouts, fairs and festivals, warrant and distraint fees, penalties, tourist bus fees and other fees.
- v) Income from properties: Lands and buildings, parks, traveller's bungalow, hire of plant and machineries, avenue trees produce, markets, shops/shopping complex, slaughter houses, bus/cart and vehicle stands, kalyana mandapam community hall, lodge/restaurant/ hotels, boat club, stadium/playground, fishery rental, cinema house, ferries, pay and use latrines, other items.
- vi) Income from special services: Lighting, medical institutions, water supply and drainage, sewage farms, sale of rubbish/garbage, sale of solid waste/manures, town planning, income from burial grounds, income from food, magisterial fines.
- vii) Other miscellaneous receipts: Income from investments, interest from L.F. deposits, lapsed deposits, recovery of charges for service, any other miscellaneous.
- viii) **Grants in aid from state:** Grant for general purpose, grant for specific purpose, roads, public health, medical noon-meal centres, education incentive grants, small savings incentive, house tax matching grant, compensation grants.

# Capital Receipts

- i) **Loan from government/Institution :** For roads, for buildings, for water supply, drainage, Specific schemes, other items 1, other items 2, other items.
- ii) **Grant-in-aid from government :** For road works, for buildings, for water supply, drainage, specific schemes 1, schemes 2, self sufficiency scheme, other items.
- iii) Assistance from centrally sponsored schemes: Nehru rozgar yojana, low cost sanitation, IDSMT, IUDP, TNUDP, IPPV, Jawahar Velai-Vaaippu, other schemes, EAS, IJVVT, UBS for poor, decentralised district plan.
- iv) Special Assistance from state government grant for accelerated slum improvement: Grant for integrated programme, grant for specific schemes, grant for school buildings, grant for flood relief works, grant for drought relief works, half grant half loan, grant loan, full loan assistance.

- v) Contributions
- vi) Transfers from general funds

## Revenue Expenditure

- i) General supervision and collection
- ii) Public works maintenance works: Road, buildings and properties, all other establishment and administration.
- iii) Water supply and drainage maintenance works: Water supply, CC charges, replacements and renewals, drainage, other items of establishment.
- iv) Town planning
- v) Education
- vi) Obligatory services: Lighting, CC charges, maintenance and replacements, public health, anti-malaria, epidemics, rural and burning grounds, others; Sanitation, solid waste, garbage clearance, private scavenging, fairs and festivals, others; Medical relief, hospitals and dispensaries, maternity and child welfare, slaughter houses, all other obligatory services.
- vii) **Discretionary services**: Public amenities, market cart and bus stand, all other discretionary services.
- viii) All remunerative services

## Capital Expenditure

- i) Public Works (Major works): Roads, bridges/subways, drains, buildings and properties.
- ii) Education
- iii) Town Planning
- iv) **On obligatory services :** Lighting, public health, sanitation, medical relief, slaughter house, all other obligatory services.

- v) On discretionary services: Public amenities like radio, market cart and other vehicles, all other discretionary services.
- vi) All remunerative services
- vii) Centrally sponsored scheme: Nehru rozgar yojana, low cost sanitation, IDSMT, IUDP, TNUDP, IPPV, Jawahar Velai-Vaaippu, other schemes, EAS, IJVVT, UBS for poor, decentralised district plan.
- viii) Special Assistance from state government: Accelerated slum improvement, integrated development BW, special schemes with grant, scheme 1, scheme 2, school buildings with grant, flood relief works with grant, drought relief works with grant, works on half grant, works on full loan basis, self sufficiency scheme.