URBAN DEVELOPMENT

Urbanization is a concomitant of a combination of factors such as broad-based industrialization, growing real per capita income, division of labour, specialization, economies of scale, technological advancement, upgradation of skills, well-knit market network, emerging service sector, etc. Thus, urbanization is the outcome of 'economic' and 'demographic' growth process. Tamil Nadu occupies the number one slot in terms of degree

of urbanization among major States. An increasing urban population along with migration for want of employment opportunities from rural to urban areas has exerted undue pressure on various basic amenities. Consequently, drinking water, sewage, sanitation, housing and urban transport are woefully inadequate to meet the growing requirements of the inhabitants. The worst affected ones are the poor in urban areas. As more urban conglomerations grow without adequate infrastructure, the problems would be further Therefore, aggravated. the challenge before the Government is to guide the process of urbanization and to ensure that services viz., sanitation, water supply and basic housing are provided to urban residents.

Box No. 15.1 Urban Development - Vision 2023

It aims to create and promote urban infrastructure with an outlay of Rs.2.75 lakh crore during the 11 year period 2012-2023 and thereby facilitating regional and balanced development across the State. The Vision focuses its attention on:

- Providing affordable housing to economically weaker sections,
- Ensuring Universal access to 24 x 7 water supply and sanitation services,
- Achieving open defecation-free status in the urban areas by 2015,
- Introducing modernized solid waste management system and visualizing garbage free environment,
- Development of Chennai into mega polis,
- Development of ten world class cities,
- > Rehabilitation of 15 lakh families living in slums,
- Access to mass transit system for efficient urban transport,

Source: Vision 2023, Government of Tamil Nadu

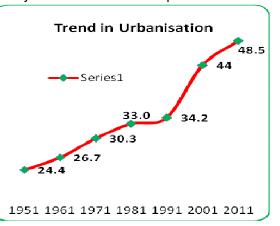
The Twelfth Five Year Plan aims to achieve "safe and affordable housing and also inclusive, sustainable and slum-free cities" in Tamil Nadu. In this way the Government of Tamil Nadu is very keen on converting the vicious circle of poverty into virtuous cycle of development in urban areas. The total fund earmarked for urban development during the Plan period is Rs. 54,408 crore which encompasses Rs.12,685 crore from the State and the anticipated flow of funds of Rs.17,971 crore from the Government of India and Rs.23,752 crore from other sources.

15.1 Urbanization and Growth Trends in Tamil Nadu:

As per 2011 Census the total urban population in the State was 34.92 million increasing from 27.48 million in 2001 Census. The process of urbanization is a natural process associated with growth. The degree of urbanization in Tamil Nadu has progressively on the increase over a long span of period. The proportion of urban population to total population of the State had steadily increased from 24.4 percent in 1951. With the

introduction of 74th Constitutional Amendment Act in 1994, all the Town Panchayats were brought under urban fold. As a result, there was a significant rise in the proportion of urban population to 44.0 percent in 2001. In 2011, it had further moved up to 48.5 percent. As per 2011 Census the average density of population in the State was 554 persons per sq k.m and in urban areas it was 3521 persons per sq k.m. Further, the growth rate of urban population in the State at 27.1 percent had outpaced the growth in rural population (6.6%) between 2001 and 2011 Censuses. The faster pace of urbanization along with higher concentration of population creates stress on the access to and guality of basic amenities. Apart from that the

| Table No.15.1 Urban Population in Tamil Nadu | | | | | |
|---|------------------------------|-----------------------------------|--------------------------------------|--|--|
| Year | No. of Towns ¹ | Urban Population (Millions) | Percentage to total Population | | |
| 1951 | 297 | 7.33 | 24.4 | | |
| 1961 | 339 | 8.99 | 26.7 | | |
| 1971 | 439 | 12.46 | 30.3 | | |
| 1981 | 434 | 15.95 | 33.0 | | |
| 1991 | 469 | 19.08 | 34.2 | | |
| 2001 | 832 | 27.48 | 44.0 | | |
| 2011 | 1,097 | 34.92 | 48.5 | | |
| Source: Director of Census Operations, Tamil Nadu. | | | | | |



accelerated pace of urbanization also results in significant spill over into peri-urban areas and therefore, these areas need to be included in urban planning. In this context, special land use strategy may be evolved to address urban expansion and out growth.

As per Census 2011, urbanization rate in 17 districts is below the State average (48.5%). Among these districts, Villupuram, Ariyalur, Dharmapuri, Pudukkottai, Thiruvannamalai, Thiruvarur, Krishnagiri and Nagapattinam are the least urbanized ones. Urbanization was higher than the State's average in the remaining 15 districts. Among them, Chennai, Kanniyakumari, Coimbatore. Thiruvallur, Kancheepuram, Tiruppur and Madurai are highly urbanized districts.

| Table No.15.2 Urbanization in Tamil Nadu | | | | | |
|--|--------------|-------------------------|--------------|--|--|
| District | Rate of | District | Rate of | | |
| Biotiliot | Urbanization | Biotriot | Urbanization | | |
| Chennai | 100.0 | Namakkal | 40.3 | | |
| Kanniyakumari | 82.3 | Dindigul | 37.4 | | |
| Coimbatore | 75.7 | Thanjavur | 35.4 | | |
| Thiruvallur | 65.1 | Cuddalore | 34.0 | | |
| Kancheepuram | 63.5 | Sivagangai | 30.8 | | |
| Tiruppur | 61.4 | Ramanathapuram | 30.3 | | |
| Madurai | 60.8 | Krishnagiri | 22.8 | | |
| The Nilgiris | 59.2 | Nagapattinam | 22.6 | | |
| Theni | 53.8 | Thiruvarur | 20.4 | | |
| Erode | 51.4 | Thiruvannamalai | 20.1 | | |
| Salem | 51.0 | Pudukkottai | 19.5 | | |
| Virudhunagar | 50.5 | Dharmapuri | 17.3 | | |
| Tuticorin | 50.1 | Perambalur | 17.2 | | |
| Tirunelveli | 49.4 | Villupuram | 15.0 | | |
| Tiruchirappalli | 49.2 | Ariyalur | 11.1 | | |
| Vellore | 43.2 | State | 48.5 | | |
| Karur | 40.8 | Source: Director of | Census | | |
| | | Operations, Tamil Nadu. | | | |

¹ According to Census, it includes Statutory towns (like Municipal Corporation, Municipality, Cantonment Board, Town Panchayats etc.,) and Census towns (having a minimum population of 5000, Density of population 400 persons per sq, k.m and 75 percent of the male working population engaged in non-agricultural pursuits).

15.1.1 Urban Population in Tamil Nadu and All India – 2011

| Table No.15.3 Urban Population in Tamil Nadu and India- 2011 Census (Millions) | | | | |
|---|--------|---------------|--|--|
| Category | India | Tamil Nadu | | |
| Urban Population | 377.11 | 34.9 | | |
| Share of Urban Population to Total | 31.2% | 48.5% | | |
| Child population in the age group 0-6 years | 43.19 | 3.51 | | |
| Scheduled caste Population | 47.53 | 4.96 | | |
| Scheduled Tribe Population | 10.46 | 0.13 | | |
| Literates | 280.84 | 27.34 | | |
| Sex Ratio | 929 | 1000 | | |
| Decade change 2001-2011 | 31.8% | 27.0% | | |
| Source: Director of Census Operations, Tamil Nadu. | | | | |

Tamil Nadu accounted for 9.3 percent of the total urban population in the country. The proportion of urban population in the State at 48.5 percent as per 2011 Census was significantly higher than that of all India (31.2%). Among the major States, Tamil Nadu ranks first in the proportion of urban population in the country. Other States which surpass the 40 percent mark are Kerala (47.7%), Maharashtra (45.2%) and Gujarat (42.6%). Least urbanization was noticed in Bihar (11.3%), Assam

(14.1%) and Orissa (16.7%) where the ratio was less than 20.0 percent.

The density of population living in urban areas of Tamil Nadu was 3521 persons per sq.km. The sex ratio (number of females per '000 males) in urban areas of Tamil Nadu at 1000 was comparatively well ahead of all India ratio of 929. The overall literacy rate for urban areas of Tamil Nadu in 2011 Census was 87.0 percent while for all India it was 84.1 percent. The proportion of Schedule Caste population in urban areas stood at 14.2 percent in Tamil Nadu against 12.6 percent at the National level, whereas the proportion of Schedule Tribe population stood at 0.4 percent and 2.8 percent respectively.

15.1.2 Urban Work Force:

Tamil Nadu accounted for 10.5 percent of the total urban workers at all India. The work participation rate (WPR -workers as percentage to total population) in urban areas of the State at 40.2 percent was higher than that of all India (35.3%) in 2011. Going by gender also, the WPR in the State was well ahead of all India. In both instances, the WPR of males was significantly higher than | Source: Director of Census Operation, Tamil Nadu.

| | l lub e u | | | |
|---------------|--|---|---|--|
| | Urban | WPR (%) | | |
| Country/State | | 2001 | 2011 | |
| Total | 133.15 | 32.3 | 35.3 | |
| Males | 105.1 | 50.6 | 53.8 | |
| Females | 28.04 | 11.9 | 15.4 | |
| Total | 14.02 | 37.5 | 40.2 | |
| Males | 10.22 | 55.8 | 58.5 | |
| Females | 3.8 | 18.9 | 21.8 | |
| | Total Males Females Total Males Females | (2011) Total 133.15 Males 105.1 Females 28.04 Total 14.02 Males 10.22 Females 3.8 | (2011) 2001 Total 133.15 32.3 Males 105.1 50.6 Females 28.04 11.9 Total 14.02 37.5 Males 10.22 55.8 | |

that of females. Between 2001 and 2011 Census the WPR in the State had improved from 37.5 percent to 40.2 percent, whereas at all India it was from 32.3 percent to 35.3 percent.

Tamil Nadu accounted for 10.8 percent of the total main workers and 8.6 percent of total marginal workers in urban areas in India. In the State the proportion of main workers to total workers at 90 percent in 2011 Census was marginally higher than the all India level (88%). The proportion of marginal workers to total urban workers in the State increased from 8.2 percent in 2001 Census to 10.1

| Table No.15.5 Classification of Workers in Urban Tamil Nadu (Millions) | | | | | |
|---|---------|-------|-------|-------|--|
| Catagory | Workers | | | | |
| Category | 2001 | % | 2011 | % | |
| 1. Workers | | | | | |
| a. Main workers | 9.47 | 91.8 | 12.60 | 89.9 | |
| b. Marginal Workers | 0.85 | 8.2 | 1.42 | 10.1 | |
| Total | 10.32 | 100.0 | 14.02 | 100.0 | |
| 2. Main Workers | | | | | |
| a. Cultivators | 0.34 | 3.3 | 0.36 | 2.6 | |
| b. Agricultural labourers | 1.10 | 10.7 | 1.20 | 8.6 | |
| c. Household Industry Workers | 0.65 | 6.3 | 0.66 | 4.7 | |
| d. Other workers | 8.23 | 79.7 | 11.80 | 84.1 | |
| Total | 10.32 | 100.0 | 14.02 | 100.0 | |
| Source: Director of Census Operation, Tamil Nadu. | | | | | |

percent in 2011 Census. It indicated that more marginal workers in urban areas were mostly

engaged in informal sector with low productivity. In the State as well as all India, among marginal workers the composition of workers those working for 3 to 6 months and less than 3 months were in the ratio of 85:15 in 2011 Census.

The four-fold classification of main workers at the State level indicates that 'other workers' accounted for a larger chunk. Between 2001 and 2011 Censuses the proportion of other workers to total main workers significantly increased from 79.7 percent to 84.1 percent. This was mainly due to the sizeable employment opportunities created in the manufacturing and service sectors. There was a decline in the proportion of agricultural labourers from 10.7 percent to 8.6 percent, household industry workers from 6.3 percent to 4.7 percent and cultivators from 3.3 percent to 2.6 percent.

15.2 Urban Local Bodies in Tamil Nadu:

Nadu has 12 Municipal Tamil Madurai, Corporations viz., Chennai, Coimbatore, Tiruchirappalli, Tirunelveli, Salem, Tiruppur, Erode, Vellore, Thoothukudi, Dindiaul and Thaniavur and 124 Municipalities. All these Urban Local Bodies, except Chennai are under the administrative

| Table No.15.7 Classification of Town Panchayats | | | | | |
|--|-----------------------------------|---------------------------|--|--|--|
| Grade | Annual Income (Rs. in lakh) | No. of Town Panchayats | | | |
| Special Grade | Above 20.00 | 12 | | | |
| Selection Grade | 16.00 – 20.00 | 222 | | | |
| Grade - I | 8.00 - 16.00 | 214 | | | |
| Grade - II | 4.00 - 8.00 | 80 | | | |
| Total 528 | | | | | |
| Source: Director Chennai-108. | rate of Town Pane | chayats, | | | |

| Grade | Annual income (in crores) | No. of Municipalities | | |
|-----------------|------------------------------|--------------------------|--|--|
| Special grade | Above 10.00 | 18 | | |
| Selection grade | 6.00 - 10.00 | 28 | | |
| First grade | 4.00 - 6.00 | 34 | | |
| Second grade | Below 4.00 | 44 | | |
| Total 124 | | | | |

control of the Commissioner of Municipal Administration. In addition, there are 528 Town Panchayats in the State under the control of the Director of Town Panchayats. Based on the annual income and population, the 124 Municipalities and 528 Town Panchayats were classified into different grades. Only 37.1 percent of the Municipalities in the State had an annual income of more than Rs.6.00 crore. A majority of 62.9 percent Municipalities had an

annual income of less than Rs.6.00 crore. In the case of Town Panchayats as many as 84.8 percent had an annual income more than Rs.8.00 lakhs and only a meagre 15.2 percent having less than Rs.8.00 lakh.

The State Government has so far constituted four State Finance Commissions to make recommendations on the devolution of resources to the local bodies and the recommendations are under implementation. Devolution from State finances forms a major part of the resources of local bodies. The recommendations of the 4th State Finance Commission has been accepted by the Government. The 3rd State Finance Commission recommended 10 percent of State's Own Tax Revenue (SOTR) may be devolved to the local bodies. The devolution of funds was shared vertically between the rural and urban local bodies in the ratio of 58:42. Of the total funds devolved to the urban local bodies (42%), the horizontal sharing between the Municipal Corporations, Municipalities and Town Panchayats was in the ratio of 30:41:29. The total devolution of funds by the State to urban local bodies witnessed an increase from Rs.2292.50 crore in 2011-12 to Rs.2798.59 crore in 2012-13 and a fall in 2013-14 to Rs.2717.32 crore.

15.2.1 The Way Forward:

The 74th Constitutional Amendment not only allows greater devolution of functions and resources to urban local bodies from the Centre and State but provides a significant

thrust to participatory planning process as citizen-centric accountability of Government and demographic control over public resources. But in most of the urban local bodies, the planning process is yet to be strengthened and made participatory. The basic urban services like public transport, affordable housing, piped water supply, sewage and solid waste management continue to elude a substantial portion of existing urban population. Managing this accelerated urbanization and the need to create vibrant sustainable and inclusive urban spaces, there is a need to prioritize planning and infrastructure provisioning efforts. It recognizes the need to frame perspective planning at an urban agglomeration level taking into account extended areas and peripheries of large Corporations and Municipalities. Initiatives have to be taken for the preparation of comprehensive Regional Plans for all Urban Agglomerations with a population greater than one lakh with a view to ensure to proper land use and uniform planned infrastructure development and make cities and towns future ready. The plan should be provided to the following:

- Mobility plan with special emphasis on making urban safe for vulnerable groups including women and children, pedestrian and cyclists,
- Urban sewerage and sanitation plan,
- Urban water plan,
- > Economic and commercial activity plan,
- > Infrastructure plan,
- > Affordable housing plan
- Environment conservation plan,
- Urban poverty reduction strategy and inclusionary zoning (old age homes, orphanages, working hostels, night shelters and so on),
- Plan for peri-urban area.

Lack of sufficient technical capacity across all levels of cadres of urban local bodies and elected representatives throws challenges on planning, monitoring, implementing and urban management. For enhancing their responsiveness, managerial and technical capabilities, periodic training, skill assessment and skill upgradation initiatives need to be undertaken. To meet the skill deficit in short term hiring consultants from private sector through a fast track process may be thought of.

Turning to revenue, the urban local bodies have not fully tapped their potential. Property tax collections are hampered by poor assessment methods, limited coverage, weak collection efficiency, loss on account of exemptions and poor enforcement. Apart from this user charges also remained low, most often lower than the operational cost for urban local bodies. As a result, the urban local bodies mostly depend on the funds from the State Government. In this context it is suggested that all taxes are regularly revised using scientific principles. Further, user charges may be levied for all measurable services where beneficiaries are easily identifiable. There should be a tiered structure of user charges. Higher levels of consumption should be charged a higher tariff.

15.3 Status of Household Amenities and Assets in Urban Areas:

A brief review is made of the initiatives taken by the Government to address the problems of creation of urban infrastructure, provision of affordable housing, supply of safe drinking water, solid waste disposal management, urban transportation, rehabilitation of slum population and eradication of urban poverty.

15.3.1 Housing Conditions:

As per the house listing of the Census of India 2011, the total number of houses in urban areas in Tamil Nadu was 8.93 millions. Of which 76.4 percent were in good condition, 22.4 percent were in livable condition and 1.2 percent in dilapidated condition. Of the total houses in urban areas, 56.7 percent had concrete roof, 24.2 percent with tiles, 8.2 percent with asbestos sheet and 7.3 percent with thatch. The increase in urban population has no doubt built pressure on housing demand particularly at the lower end viz., economically weaker sections and low income groups.

| Table No.15.9 Housing Stock Created by Different Agencies | | | |
|--|-----------------------------------|--|--|
| Agency | Physical achievement (Lakh) | | |
| Tamil Nadu Housing Board | 4.01 | | |
| Tamil Nadu Slum Clearance Board | 1.29 | | |
| Tamil Nadu Co-operative Housing Federation | 11.64 | | |
| Source: 12 th Five Year Plan Document, Government of Tamil Nadu. | | | |

| Table No.15.8 Profile of the Urban Houses in Tamil Nadu 2011 | | | |
|---|--------|--|--|
| Category | Urban | | |
| | Houses | | |
| Total Census Urban Houses (lakhs) | 89.29 | | |
| By Roof Material (%) | | | |
| Concrete | 56.7 | | |
| Tiles | 24.2 | | |
| Asbestos Sheet | 8.2 | | |
| Thatch | 7.3 | | |
| Others | 3.6 | | |
| Source: Director of Census Operations, Tamil Nadu | | | |

Tamil Nadu Housing Board, Tamil Nadu Slum Clearance Board and Housing Co-operative Societies are the major housing delivery agencies in Tamil Nadu in the public sector focusing on housing Economically Weaker Sections (EWS) and low and middle income groups. These agencies have so far created 16.94 lakh housing units. During 11th Plan period as against the target of 2.28 lakhs housing units, 0.58 lakh units were constructed by these agencies. The shortfall

against the target was due to delay in removal of encroachment, litigation, delay in obtaining land clearance and approval.

Under the Basic Services to the Urban Poor (BSUP) construction of 92,272 housing units and 3,852 infrastructure works were sanctioned in the mission cities Chennai, Madurai, Coimbatore and their 37 agglomeration towns at a total cost of Rs.2,339 crore during the period 2006-13. Of which 45,300 housing units and 3,717 infrastructure works were completed by the end of the March 2013. The remaining works are under progress. In the expanded areas of Chennai Corporation 1,674 housing units were taken up at a cost of Rs.10.65 crore under this scheme, of which 1331 were completed. Under infrastructure component against 594 works 504 works were completed. In 17 Town Panchayats 2,487 dwelling units at an estimated cost of Rs.41.61 crore were taken up, against which 2,057 were completed.

15.3.2 Issues and Challenges:

According to the Technical group constituted by the Ministry of Housing and Urban Poverty Alleviation estimates, the housing shortage in urban areas in Tamil Nadu was at 28.24 lakh in 2012 and accounted for about 15 percent of the total housing shortage in India which was estimated at 18.78 million units. Lack of purchasing power, security tenure of land, unavailability of flexible housing finance schemes, lack of awareness about new building technologies and paucity of public funds are the main challenges resulting in inadequate housing for the poor and economically weaker sections. Apart from this, the poor land-man ratio in the State has its own effect on the availability of land for housing.

15.3.3 The Way Forward:

To tackle this problem effectively creation/periodic updation of information relating to existing housing stocks, additions and shortages through involvement of Urban Local Bodies

is necessary so as to facilitate to develop and implement plans. To ensure planned development as well as to meet the needs of the lower income groups and to minimize undesirable speculation about the increase in land cost, the joint efforts of Tamil Nadu Housing Board and Tamil Nadu Slum Clearance Board may be encouraged. Priority may be assigned for development of housing in proximity to employment centre. Public private partnership may be encouraged to improve capacity of construction industry to deliver housing for economically weaker sections and low income groups. The promotion of housing units may also take care of the needs of various target groups such as working women, students, night shelters, employees, pavement dwellers etc and it may also take into account the provision of infrastructure services as well as addressing livelihood considerations. While promoting housing, care may be taken to save high value agricultural land. Delay in approval process not only acts as disincentive for flow of private capital, it makes assembly of lands more difficult besides time and cost coherent. In this context the simplification of the process of approval for projects of affordable housing is the only solution.

15.3.4 Urban Water Supply:

The State Government have accorded top most importance to ensure universal access to 24x7 water supply in Urban Local Bodies. It is estimated that access to water increases the productive working hours of the urban poor in general and women in particular by 1.5 to 2 hours. However, ensuring equitable and adequate supply of drinking water and its effective delivery is a major issue for urban local bodies.

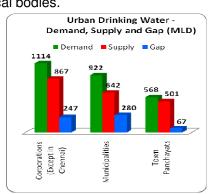
| Supply and | Supply and Gap – 2013-14 (MLD) | | | | |
|---|--------------------------------|--------|-----|--|--|
| Category | Demand | Supply | Gap | | |
| Municipal Corporation (Except in Chennai) | 1114 | 867 | 247 | | |
| Municipalities | 922 | 642 | 280 | | |
| Town Panchayats | 568 | 501 | 67 | | |
| Total | 2604 | 2010 | 594 | | |
| Source: Department of Municipal Administration and Water Supply, Chennai-5 and Directorate of Town Panchayats, Chennai-108. | | | | | |

Table No.15.10 Urban Water Supply, Demand,

The Urban Local Bodies are striving hard to meet the demand and supply gap in drinking water. As against the total demand of 2604 MLD of water in urban local bodies, the supply at 2010 MLD was short by 22.8 percent during 2013-14. Among the urban local bodies the short fall ranges between 11.8 percent (Town panchayats) and 30.36 percent in Municipalities.

Water supply projects are implemented in the State with assistance from Tamil Nadu Urban Development

| Table No.15.11 Status of Water Supply in Urban Local Bodies (other than Chennai Corporation) | | | | | |
|---|------|---------|------|-------|--|
| Local Body | Good | Average | Poor | Total | |
| Corporations* (Good >110 lpcd, Average 70-109 lpcd and Poor less than 70 lpcd) | 5 | 3 | 3 | 11 | |
| Municipalities (Good >90 lpcd, Average 40-89 lpcd and Poor less than 40 lpcd) | 44 | 78 | 2 | 124 | |
| Town Panchayats (Good >70 lpcd, Average 40-69 lpcd and Poor less than 40 lpcd) | 435 | 91 | 2 | 528 | |
| Poor less than 40 lpcd) Note: * Excluding Chennai Corporation, Source: 1.Tamil Nadu Water Supply and Drainage Board, Chennai-5, 2. Department of Municipal Administration and Water Supply, Chennai-5 and 3. Directorate of Town Panchayats, Chennai-108. | | | | | |



Fund, Urban Infrastructure and Governance – III and Urban Infrastructure Development

Scheme for Small and Medium Towns components of JnNURM and Japan International Cooperative Agency and KFW (German Development Bank) by agencies such as Tamil Nadu Water and Drainage Board Chennai Metropolitan and Water Supply and Sewerage Board. State Government funding has made been available since 2011-12 under the Chennai Mega City Development Mission and Integrated Urban Development Mission. Loan funding from other sources is also being taped through the Water Supply Pooled Fund. In Tamil Nadu, the percapita water service norms viz., 110 lpcd in Corporations, 90 lpcd in Municipalities and 70 lpcd in Town Panchayats are being adopted for water supply to habitants in urban local bodies. Only five Corporations, 35.4 percent of the Municipalities and 82.4 percent of the Town Panchayats in the State have fully adhered to the norms prescribed in supplying water to their habitants.

The Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) caters to the drinking water supply to the households in Chennai Corporation. Surface water sources

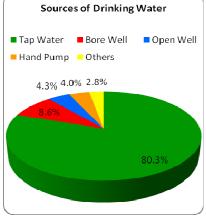
| Table No.15.12 Details of Water Supply Chennai Corporation | | | | | |
|--|--|--|--|--|--|
| Details of Water Supply Existing as on 2013-14 2010-2011 | | | | | |
| Operational area (sq.km) 184 426 | | | | | |
| Population (in lakh) 47.6 68.28 | | | | | |
| Water Supply (mld) 682 604 | | | | | |
| Length of water mains (Km) 2930 5275 | | | | | |
| Source: Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB), Chennai | | | | | |

remain the mainstay of water supply to Chennai city. It is supplemented by Telugu Ganga Project (Krishna water), desalination of sea water and ground water. The area of operation was 184 sq. kms. upto 2010-11, with a water supply of 682 million litres per day (MLD) to a population of 47.60 lakh at the rate of 143 litres per capita per day

(lpcd). An area of 242 sq. kms was added in 2012-13, to the existing area of 184 sq. kms to form a total area of 426 sq.kms covering a population of 68.28 lakh supplying 604 MLD of water at the rate of 88.47 lpcd. Thus, the increase in area and population has put pressure on water supply, thereby reducing the average quantity of supply by 54.53 lpcd. Of the total water supply 555.61 MLD (92%) is supplied to domestic consumers, 23.66 MLD (4%) of water to bulk consumers and 24.80 MLD (4%) of water is being supplied to industrial consumers. Towards augmenting water supply in Chennai Corporations various schemes viz., Chennai Mega City Development Mission, Water Supply Schemes under JnNURM, JICA have been implemented.

With regard to sources of drinking water, as high as 80.3 percent of the urban households had received tap water, of which 66.3 percent from treated sources and 14.0 from percent untreated sources in

| Table No.15.13 Profile of Urban Drinking Water – 2011 Census | | |
|---|---------|--|
| Total Census Urban Houses (Lakhs) | 89.29 | |
| Sources of the Drinking Water (| %) | |
| Tap Water | 80.3 | |
| Bore Well | 8.6 | |
| Open Wells | 4.3 | |
| Hand Pumps | 4.0 | |
| Others (River, Canal, Tank and String) | 2.8 | |
| Source: Director of Census Oper Tamil Nadu | ations, | |
| | | |



Tamil Nadu. The remaining 19.7 percent of urban households received water from other sources viz., bore well, open well, hand pump and other sources. At all India 70.6 percent of the urban households received tap water.

15.3.5 Challenges and Outlook:

The main challenge faced is that the available water resources in urban areas are finite and these are likely to get depleted to a large extent by the environmental degradation and climate change. Low public awareness about the overall scarcity and economic value of water results in its wastage. Further, the existence of illegal tap connections and leaking water supply from consumer connections reduces water availability and also poses a threat to demand management which should be central to all planning and action relating to water. A bulk of the urban consumers are without water meters and also a majority of the water meter installed were mal-functioning not correctly indicating the exact quantum of water used. Dedicated efforts to plug leakages and detect illegal connections are required in addition to demand management measures for achieving for sustainability and equity. This would help to save precious quantity of treated water and increase the quantum of water available for supply.

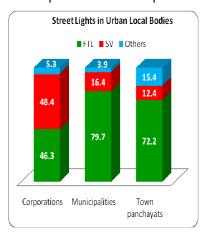
Revamping of the existing water supply network to ensure equitable distribution of water may also be taken up. The urban drinking water sources which capture rain or flood water from rivers and underground water aquifers need to be protected and nurtured. There is an urgent need to map ground water potential and include this source in water planning of the urban areas for its sustainable utilization.

Revival, rehabilitation and maintenance of Rain Water Harvesting structures is the need of the hour to sustain ground water aquifers. With a view to ensure drinking water quality, periodic testing may be conducted with the help of the local bodies and communities. Recycling and re-use of waste water is required to be scaled up in a planned way so as to ensure optimal utilization of this scarce resource by industries. In order to bring in an uninterrupted supply of water, water grids, similar in function to electricity grids, would be developed having common grids for both urban and rural drinking water to maximize economy.

15.3.6 Source of Lighting:

The street lights are also one of the basic amenities to be provided by the Urban Local Bodies for safe and secured life to the urban habitants. Total street lights functioning in all Urban Local Bodies in the State as of 2013-14 was 13.12 lakhs. Of which 41.7 percent was in Corporations, 30.6 percent in Municipalities and 27.7 percent in Town Panchayats.

| Table No.15.14 Street Lights in Urban Local Bodies 2013-14 (Lakhs) | | |
|--|-------|--|
| 1. Corporations | 5.47 | |
| a. Chennai Corporation | 2.15 | |
| b. Other Corporations | 3.32 | |
| 2. Municipalities | 4.02 | |
| Town Panchayats | 3.63 | |
| Total | 13.12 | |
| Source: 1. Corporation of Chennai, 2. Department of Municipal Administration and Water Supply, Chennai-5. 3. Directorate of Town Panchayats, Chennai-108. | | |



Irrespective of the urban local bodies, Sodium Vapour Lamps (SV) and Fluorescent Tubular Lamps (FTL) accounted for a major share in the street lights. It ranged between 84.6 percent in Town Panchayats and 96.1 percent in Municipalities. The combined share of Metal Halide Lamps and High Mast Lights in street lights in urban local bodies varied between 1.4 percent in Town Panchayats and 1.8 percent in Corporations. The proportion of energy efficient Compact Fluorescent Light (CFL), Light Emitting Diode (LED) and Solar Lights was highest at 14.0 percent in Town Panchayats and lowest at 2.5 percent in Municipalities.

The street lighting expenditure on electricity bill is about 25 to 30 percent of the total expenditure by Urban Local Bodies which is a heavy burden on the financial resources of the Urban Local Bodies. So, this necessitates the use of energy efficient lighting system as well as alternate source of energy. In this context, the Government laid much emphasis towards

popularizing 'CFL' and phasing out other type of high power consumption lights. These efforts may be intensified further. Further, the Urban Local Bodies can replace the existing lighting with more energy efficient lighting system like Light Emitting Diode (LED) and can

| Table No.15.15 Street Lights in Urban Local Bodies 2013-14 | | | |
|---|--------------|----------------|--------------------|
| | (Lakhs) | - | |
| Category | Corporations | Municipalities | Town Panchayats |
| Fluorescent Tubular Lamps (FTL) | 2.53 | 3.20 | 2.62 |
| Sodium Vapour Lamps (SV) | 2.63 | 0.66 | 0.45 |
| Metal Halide Lamps (MHL) | 0.09 | 0.05 | 0.04 |
| High Mass Lights (HML) | 0.01 | 0.01 | 0.01 |
| Compact Florescent Light (CFL) and others | 0.21 | 0.10 | 0.51 |
| Total | 5.47 | 4.02 | 3.63 |
| Source: 1. Department of Municipal Administration and Water Supply, Chennai-5. 2. Directorate of Town Panchayats, Chennai-108. | | | |

Among the Urban households, as high as 96.1 percent of the urban households in Tamil Nadu, had electricity connections for lighting purpose. Only 3.4 percent used kerosene for lighting. A minimum 0.3 percent of households did not have any lighting facilities.

also provide stand-alone solar lights that are self contained and not use electricity so as to reduce electricity bills and maintenance cost. The street lights in Urban Local Bodies may have the facility to automatically activate at the 'dusk' and turn off at the 'dawn'.

| Table No.15.16 Source of Lighting | | |
|---|-------|--|
| Total Census Urban Houses (Lakhs) | 89.29 | |
| Lighting (%) | | |
| Electricity | 96.1 | |
| Kerosene | 3.4 | |
| No lighting | 0.3 | |
| Others | 0.2 | |
| Source: Director of Census Operations, Tamil Nadu. | | |

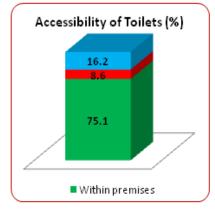
15.3.7 Sanitation:

Sanitation and safe disposal of human waste is a critical element of public health, directly impacting the well being of the people. Recognizing this and with the determination to make the State open defecation free by 2015 a massive programme of construction of public

| Table No.15.17 | Public Toilets 2013-14 (N | in Urban Local umber) | Bodies – |
|---|------------------------------|---------------------------|----------|
| Category | Upto 2012-13 | Constructed in 2013-14 | Total |
| 1. Corporations | | | |
| a. Chennai Corporation | 904 | 9 | 913 |
| b. Other Corporations | 1050 | 150 | 1200 |
| 2. Municipalities | 2843 | 614 | 3457 |
| Town Panchayats | 3199 | 174 | 3373 |
| Total | 7996 | 947 | 8943 |
| Source: 1. Corpor 2. Department o Supply, Chennai- 3. Directorate of 1 | f Municipal . 5. | Administration | |

With regard to the accessibility of toilet facilities a higher 75.1 percent of the urban households had this facility within their premises. Only 8.6 percent of the households had availed the services of public toilets. Still 16.2 percent of the urban households in the State had followed the practices of defecating in open places as against 13.0 percent at all India. The inadequacy of proper sanitation facilities and lack of proper maintenance of public and community toilets in urban areas were the reasons for continuation of the practice of open defecation. Further a

toilets was undertaken in Urban Local Bodies. Up to the end of the year 2012-13, totally 7,996 public toilets were constructed in Urban Local Bodies. In 2013-14 new public toilets numbering 947 were added to the already existing stock and taking the total to 8943 in Urban Local Bodies. Of the total number of public toilets located in urban local bodies 39 percent were in Municipalities, 37 percent in Town Panchayats and 24 percent in Corporations.



large number of public toilets were under repair. In order to ensure open defecation free status in urban areas hygiene education may be promoted in all schools. Sustained Information, Education and Communication (IEC) may also be taken up to sensitize the urban

| Table No.15.18 Status of Sanitation | | |
|---|-------|--|
| Total Census | | |
| Urban Houses | 89.29 | |
| (lakhs) | | |
| Toilet Facilities (%) | | |
| Within Premises | 75.1 | |
| Public Toilets | 8.6 | |
| Open Defecation | 16.2 | |
| Source: Director of Census Operations, Tamil Nadu. | | |

folk to correct behaviour practices. All public or community toilets in urban areas may be made functional by carrying out suitable repairs, ensuring uninterrupted water supply and electricity. The maintenance of the public or community toilets may have to be entrusted to the Community Based Organizations. Fringe areas of cities and colonies of economically weaker sections and slum dwellers should be covered with low cost sanitation facilities on community basis with pay and use system with adequate maintenance.

15.3.8 Drainage:

In respect of disposing waste water, 75 percent of the urban households had drainage connections. Of which 44.8 percent had access to closed drainage and 30.2 percent with open drainage. The remaining 25 percent of urban households in the State had disposed it in open place. This proportion at the all India was lesser at 18.0 percent. The open drainage networks were often developed on piece meal basis without proper planning, integration of main drains and plan for maintenance. Hence, they are often ineffective.

| Table No.15.19 Status of Drainage in Urban Areas of Tamil Nadu – 2011 Census | | |
|--|--------|--|
| Total Census Urban Houses (lakhs) | 89.29 | |
| Drainage (%) | | |
| Closed Drainage | 44.8 | |
| Open Drainage | 30.2 | |
| No Drainage | 25.0 | |
| Source: Director of Operations, Tamil Nadu. | Census | |

Used Fuel for Cooking

1%

69%

Firewood LPG Kerosene Others

18%

1**2**%

15.3.9 Source of Fuel:

According to the Census 2011, 68.7 percent of the urban households in the State had used Liquid Petroleum Gas (LPG) as source of fuel for cooking. Another 18.4 percent still depended upon firewood for

| Table No.15.20 Sources of Fuel in Urban Areas of Tamil Nadu – 2011 Census | | |
|---|-------|--|
| Total Census Urban Houses (lakhs) | 89.29 | |
| Fuel Used for Cooking (%) | | |
| Firewood | 18.4 | |
| LPG | 68.7 | |
| Kerosene | 11.5 | |
| Others | 1.4 | |
| Source: Director of Census Operations, Tamil Nadu. | | |

cooking and 11.5 percent used kerosene for cooking.

15.3.10 Solid Waste Management:

Solid Waste Management is one of the important obligatory functions of the urban local bodies as per 74th Constitutional Amendment. The ultimate goal of urban Solid Waste Management is to collect, treat, dispose of solid wastes generated by urban population in an environmentally friendly manner using the most economical means available towards maintaining a garbage free environment in urban areas. According to the XI-Five Year Plan, Government of India, the percapita waste generation in urban areas varies from 0.2 kg to 0.6 kg per day

| Generated in Urban Lo Nadu – 20 Urban Local Bodies | |
|---|----------------|
| 1. Corporations | 8615 |
| a. Chennai | 5004 |
| b. Others | 3611 |
| 2. Municipalities | 3686 |
| 3. Town Panchayats | 1789 |
| Total | 14090 |
| Source: 1. Corporation of Chennai-3 2. Municipal Administra Supply, Chennai- 5 3. Department of Town I Chennai - 108 | tion and Water |

depending upon the size of population. With the increase in population and changes in their lifestyle, there was an increase in the quantum of waste in the urban areas. The total

quantum of waste generated in urban local bodies of Tamil Nadu during 2013-14 was estimated at 14,090 tonnes per day. Of the total waste generated per day in urban local bodies in the State 61 percent was from Corporations, 26 percent from Municipalities and 13 percent from Town Panchayats. On an average, per capita waste generated in urban local bodies of the State was estimated at 400 grams.

At present for collection and transportation of solid waste in Chennai Corporation, 320 compacters, 37 haulage tipper trucks, 177 tipper lorries, 12 mechanical sweepers, 57 skid steer loaders and 21 front end loaders were deployed. Apart from that the Corporation had also deployed 17,026 sanitary workers. For effective clearance of waste a Short Message Service (SMS) reporting pattern of disposal of solid waste has been evolved for the field staff in the corporation. The existing landfill sites of Chennai Corporation at Kodungaiyur and Perungudi are more than three decades old and habitation clusters have emerged around these areas in due course of time. Therefore, the Corporation of Chennai has proposed for reclamation and scientific closure of these two dumping grounds. The Corporation of Chennai has taken action for setting up waste processing facilities at Minjur-Vallur and at Kuthambakkam for the processing of garbage generated at North Chennai and South Chennai respectively.

The Urban Local Bodies in the State had taken many initiatives to bring about improvements in solid waste management services. In 11 Corporations and 124 Municipalities to collect the primary collection and transportation of waste, 199 tipper lorries, 175 dumper placer vehicles, 71 compactors, 58 front end loaders, 12 sullage lorries, 4,528 push carts, 857 tricycles, 10,420 bins were in use. To effectively use available plastic waste to the maximum extent possible and to avoid environmental degradation laying of road by using plastic waste has been taken up in urban local bodies. During the last three years (2011-12 to 2013-14), 136 metric tonnes of plastic wastes have been utilized for laying 324.16 k.m length of road in Urban Local Bodies. A total sum of Rs.187.18 crore was allotted to Urban Local Bodies under Integrated Urban Development Mission to strengthen primary collection and transportation of municipal solid waste. A special Solid Waste Management Fund with a sum of Rs.100.00 crore was constituted during 2013-14 to finance solid waste management projects in weak urban local bodies. In Town Panchayats more than 4,100 vehicles were involved in primary collection and 1,100 vehicles were utilized for secondary collection of solid waste. Apart from that 7,273 sanitary workers and over 4,400 Self Help Group members were involved in effective implementation of solid waste management. In 69 Town Panchayats, BT roads using plastic waste to the length of 96.75 kilometers was laid in 2012-13. During 2012-13, to strengthen infrastructure facilities and purchase of vehicles in 46 Town Panchayats Rs.9.50 crore was sanctioned under Integrated Urban Development Mission. During 2013-14, a sum of Rs.15.59 crore was allotted for the above purpose.

15.3.11 Issues and Outlook:

The major issues that continue to confront solid waste management in urban areas are: absence of segregation of waste at source, lack of technical expertise, appropriate arrangements for scientific disposal, dearth of sanitary workers and indifference of the public towards waste management due to lack of awareness. Indiscriminate burning of waste by the public and sanitary workers in almost all urban local bodies has its own impact on environment. The following measures may be considered for effective implementation of solid waste management in Urban Local Bodies.

The recovery of recyclables is presently being done in an unorganized manner. This needs to be replaced with informal arrangements. Information, Communication and

Education (IEC) to educate households and staff as well as personnel engaged in collection and management of waste about the need for segregation at the source and improved sanitation is the most important element in success of solid waste management. This must be accorded due and adequate priority. Public Private Partnerships (PPP) may be explored for functions such as door-to-door collection, street sweeping, transportation and treatment so on. The major requirements for the effective solid waste management are mainly hinges on the availability of necessary lands for land-fills and for creation of waste processing site and composting yard. Further, most of the existing land-fills are not properly managed as per Solid Waste Management Rules. These core issues need to be properly addressed.

15.3.12 Road, Transport and Communication:

Road transport is considered to be the most cost effective and preferred mode of transport both for freight and passengers keeping in view its level of penetration into populated areas. Thus, it is vital to economic development and social integration of urban areas. The total length of roads in all urban local bodies in the State was 46,992.37 kilometers as of 2013-14. Of which, 61 percent were in Corporations and Municipalities. The remaining 39 percent was in

| Table No.15.22 Urban Roads in Tamil Nadu – 2013-14 | | |
|--|--------------|--|
| Urban Local Bodies | Length (kms) | |
| Chennai Corporation | 5318.67 | |
| 11 Corporations + Municipalities | 23349.80 | |
| Town Panchayats | 18323.90 | |
| Total | 46992.37 | |
| Source: 1. Web site Chennai Corporation, 2. Policy Note 2013-14, Municipal Administration and Water Supply Department | | |

Town Panchayats. The share of roads in urban local bodies to total length of roads in the State during 2013-14 was 17.3 percent.

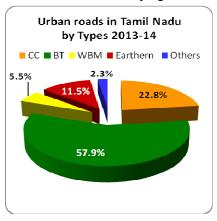
Going by type of road in Urban Local Bodies, as high as 57.9 percent of the road length was Black Topped (BT), 22.8 percent Cement Concrete road (CC), 11.5 percent Earthen road, 5.5 percent WBM road and 2.3 percent other road. Among the urban local bodies, the ratio of BT road to total length of road was the highest in Corporations and Municipalities and the ratios of CC, Earthen and WBM roads were higher in Town Panchayats.

| Table No.15.23 Urban Roads by Types 2013-14 (k.m) | | | |
|--|---------------------------------------|--------------------|----------|
| Types of Roads | Corporations and Municipalities | Town Panchayats | Total |
| Cement Concrete | 6175.02 | 4531.82 | 10706.84 |
| Black Topped | 18312.52 | 8901.26 | 27213.78 |
| Water Bound Mecadam (WBM) | 1377.64 | 1233.35 | 2610.99 |
| Earthen | 2513.08 | 2871.60 | 5384.68 |
| Others | 290.21 | 785.87 | 1076.08 |
| Total | 28668.47 | 18323.90 | 46992.37 |
| Source: 1. Website Chennai Corporation, 2. Policy Note 2013-14 Municipal Administration and Water Supply | | | |

Department.

resulting inefficient service delivery and additional expenditure. Further the encroachment of the street hawkers reduces the width of the motorable roads in urban areas posing a serious threat to transportation calls for restoration of the full width of motorable roads. These problems need to be properly addressed so as to emphasize longevity and maintenance. For ensuring safety, pedestrian pavements are to be properly laid and maintained. To ensure quality in laying of road, vigorous

At present, there was lack of co-ordination in laying roads in urban areas and shifting of utilities of different types viz., underground cable electric lines, water pipe lines, sewerage line and telecommunication lines rendered in most cases of roads unusable often within months of laying which



quality control measures are to be followed, backed by independent quality checks and measurements. While laying roads a clause for five year maintenance may be included so as to enable the contractors to maintain the roads for the subsequent five years. To improve and repair the roads in urban areas Tamil Nadu Urban Road Infrastructure Programme, Integrated Urban Development Mission, NABARD assisted RIDF are implemented in the State.

Urbanization leads to overcrowding of public transport services particularly during peak hours. As a result, there is a massive shift towards personalized transport especially cars and two wheelers and also proliferation of various types of intermediate public transport modes such as auto-rickshaws and taxies. This has resulted in traffic congestion, parking difficulties and involves longer waiting period during peak hours. This may be overcome by providing adequate parking space for all residents and users following proper regulations decongestion of crowded areas and promoting non-motorized vehicles by creating facility for safe using.

Affordable and effective communication services are the key to rapid economic and social development of urban areas. With the increase in the participation of private sector, the expansion of telecom sector is remarkable at affordable prices. The urban households in the State have better accessibility of tele-communication network. As per 2011 Census, 84.1 percent of the urban households in the State had telephone connections. It was significantly higher than that of the ratio in rural areas (66.3%) and as well for the State (74.9%). It was also higher than the all India (82%). Among the southern States, the State occupied the third place, the first and second being Kerala (91.5%) and Karnataka (84.8%) respectively. With regard to the proportion of urban households having televisions, Tamil Nadu with 88.7 percent stood first among the

southern States and well ahead of the all India.

15.4 Slum Population in Tamil Nadu:

Most of the slums are situated in vulnerable locations like river margins, water logged areas, road margins etc. Slums are a hot bed of commission of crimes, squalid housing conditions, dearth of basic amenities like education. health care, safe drinking water, roads and communication, lack of employment opportunities and featured by absence of rationality in cognition. The growth of slums is due to the concentration of low profile economic activities and emergence of informal sector in urban

| Table No.15.24 Accessibility of Telephone |
|---|
| in Urban Households of the State (%) |

| States | 2001 | 2011 | |
|--------------------------------|--------|--------|--|
| Sidles | Census | Census | |
| Andhra Pradesh | 22.7 | 80.4 | |
| Karnataka | 26.1 | 84.8 | |
| Kerala | 29.3 | 91.5 | |
| Tamil Nadu | 19.9 | 84.1 | |
| All India | 23.0 | 82.0 | |
| Source: Census Operation 2011, | | | |
| | | | |

Government of India.

| Table No.15.25 Accessibility of Television in | | | |
|---|--------|--------|--|
| Urban Households of the State (%) | | | |
| States | 2001 | 2011 | |
| | Census | Census | |
| Andhra Pradesh | 62.3 | 78.6 | |
| Karnataka | 66.5 | 78.6 | |
| Kerala | 58.5 | 82.2 | |
| Tamil Nadu | 60.7 | 88.7 | |
| All India 64.3 76.7 | | | |
| Source: Census Operation 2011, | | | |
| Government of India. | | | |

Box No.15.2 Identification of Slums

• Notified Slums:

All notified areas in a town or city notified as 'Slum' by State, UT Administration or Local Government under any Act including a 'Slum Act'.

• Recognized Slum:

All areas recognized as 'Slum' by State, UT Administration or Local Government, Housing and Slum Boards, which may have not been formally notified as slum under any act.

• Identified Slums:

A compact area of at least 300 population or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities (Identified).

Source: Primary Census Abstract for Slum, 2011 Office of the Registrar General & Census Commissioner, India

areas, coupled with rural-to-urban migration. The informal sector attracts casual labour and petty traders from rural areas whose productivities are relatively low. The socio-economic conditions of people coming under informal sector are deplorable causing increase in slum population with least basic amenities.

According to 2011 Census, of the total urban households numbering 8.93 millions in the State, 1.5 millions (16.3%) were located in slums. Tamil Nadu accounted for 11.0 percent of the total slum households at all India. There was a steady increase in the total population of the State. The increase was from 2.7 million in 1981 to 5.8 million in 2011. Tamil Nadu's share in total slum population in all India was 9.0 percent. Of them 44 percent were in notified slums, 34 percent in recognised

| Table No.15.26 Growth of Slum Population – 1981-2011 | | | | |
|--|----------------------|------|---------|--|
| Year | Population (Lakh) | | Percent | |
| | Urban | Slum | | |
| 1981 | 159.5 | 26.8 | 16.8 | |
| 1991 | 190.8 35.7 | | 18.7 | |
| 2001 | 233.1 43.6 18.7 | | | |
| 2011 | 349.2 58.0 16.6 | | | |
| Source: Compendium of Environment Statistics, 2001 and Census of India, 2011 | | | | |

slums and 22 percent in identified slums. The corresponding ratios at all India were 34 percent, 31 percent and 35 percent. The proportion of slum population to urban population in the State was 16.6 percent. The average size of slum households in the State as of 2011 worked out to 4.0 which was lower than the all India 5.0. The sex ratio in slums in Tamil Nadu was favourable at 1007. Of the total slum population, the proportion of SC was 32.0 percent and ST 0.5 percent. The work participation rate in the slums at 40.9 percent was lower than that of the State (45.6%).

Of the total 1.5 million slum households in Tamil Nadu, 69 percent were in good condition whereas the proportion at the all India was lower at 58 percent. About 67 percent of the slum households had received drinking water from treated source whereas the ratios at all India lower at 65.0 percent. The proportion of household having the access of toilet facility was lower at Tamil Nadu (61.0%) as compared to all India (65.0%). The proportion of slum

| Table No.15.27 Profile of Slum Households 2011 Census | | | | | |
|---|-------|-------------|------------------------------|-------|-------|
| Category | Tamil | All | | Tamil | All |
| | Nadu | India | Category | Nadu | India |
| 1. Total Census | | | | | |
| Slum Households | 1.5 | 13.7 | 4. Lighting (%) | | |
| (million) | | | | | |
| 2. Housing (%) | | | a. Electricity | 93.0 | 91.0 |
| a. Good | 69.0 | 58.0 | b. Kerosene | 6.0 | 8.0 |
| b. Livable | 29.0 | 38.0 | c. No lighting | 1.0 | 1.0 |
| c. Dilapidated | 2.0 | 4.0 | 6. Drainage (%) | | |
| 3. Drinking Water (%) | | | a. Drainage 71.0 81 | | 81.0 |
| a. From Treated | 67.0 | 65.0 | b. No drainage | 29.0 | 19.0 |
| Source | 07.0 | 05.0 | | 29.0 | 19.0 |
| b. From un-treated | 22.0 | 05.0 | 7. Fuel Used for cooking (%) | | (0/) |
| Source | 33.0 | 35.0 | | | (%) |
| 5. Toilet Facilities (%) | | a. Firewood | 24.0 | 26.0 | |
| a. Within premises | 61.0 | 65.0 | b. LPG | 55.0 | 51.0 |
| b. Using Public | 16.0 | 15.0 | c. Kerosene | 19.0 | 14.0 |
| Toilets | 10.0 | 15.0 | | 19.0 | 14.0 |
| c. Open Defecation | 23.0 | 19.0 | d. Others | 2.0 | 9.0 |
| Source: HH-Series Slum Tables, Census of India 2011. | | | | | |

households defecating in open was higher in Tamil Nadu (23%) as against the all India (19%). A higher proportion of slum households in Tamil Nadu (29%) did not have access to drainage facility to dispose waste water as compared to all India (19.0%). Turning to the source of energy for slum households, as high as 93.0 percent had electricity connections and the ratio at the all India was 91.0 percent. With regard to the fuel used for cooking, 55.0 percent of the slum households in Tamil Nadu used Liquid Petroleum Gas whereas it was 51.0 percent all India. The proportion of slum households using firewood was higher at all India (26.0%) than in Tamil Nadu (24.0%).

The Government is trying to make urban areas slum-free by undertaking the work of constructing 92,272 tenements at a cost of Rs.2,339 crore in Chennai, Madurai and Coimbatore under Jawaharlal Nehru National Urban Renewal Mission (JnNURM). Works are slated for completion by 2015. It is proposed to develop the remaining slums in 11 Municipal Corporations by constructing one lakh houses under Rajiv Awas Yojana (RAY) to make the urban areas slum free before 2017. It is also proposed to construct 2,15,283 tenements in Municipal Towns and Town Panchayats in a phased manner. To ensure holistic slum development by providing adequate shelter and basic infrastructure facilities to slum dwellers of identified urban areas under the Integrated Housing Slum Development Programme (IHSDP). Construction of 37,715 housing units and 2,233 infrastructure works were taken up at a total cost of Rs.566 crores during the period 2005-12. Of which 31,343 (83%) housing units and 2,112 (95%) infrastructure works were completed and remaining works were in progress.

15.4.1 The Way Forward:

In spite of the fact that the Government has initiated multifarious schemes and programmes tailored to the needs of the slum dwellers, slums remain a soft underbelly of urban landscape. Some of the measures that are required to be pursed and strengthened further for slum development are:

- Creating and updating database on slums, City-wise perspective and slum development plans,
- > Augmenting and facilitating access to services for slum dwellers,
- > Granting tenure security to slum dwellers by suitable enactment,
- Insitu upgradation and resettlement options through a transparent process for slum improvement,
- Using land as a resource for housing and shelter development for slum dwellers and increasing the accessibility improvements and maintenance of basic amenities in an integrated manner.

15.5 Urban Poverty:

Poverty is symptomatic of inadequate economic growth, unemployment, inequitable distribution of income and population growth. The urban poverty ratio in the State declined from 19.7 percent in 2004-05 to 6.5 percent in 2011-12. In both the years, the ratio of urban poverty in the State was well below the National level. Between 2004-05 and 2011-12, the reduction in urban poverty ratio was 13.2 percentage points. It is higher than the all India 11.8 percentage points. Only in Andhra Pradesh,

| Table No.15.28 Urban Poverty Ratios in Major States (Head Count Ratio) (%) | | | |
|--|---------|---------|--|
| State | 2004-05 | 2011-12 | Difference between 2004-05 and 2011-12 |
| Kerala | 18.4 | 5.0 | 13.4 |
| Andhra Pradesh | 23.4 | 5.8 | 17.6 |
| Tamil Nadu | 19.7 | 6.5 | 13.2 |
| Maharashtra | 25.6 | 9.1 | 16.5 |
| Punjab | 18.7 | 9.2 | 9.5 |
| Gujarat | 20.1 | 10.1 | 10.0 |
| Haryana | 22.4 | 10.3 | 12.1 |
| Rajasthan | 29.7 | 10.7 | 19.0 |
| West Bengal | 24.4 | 14.7 | 9.7 |
| Karnataka | 25.9 | 15.3 | 10.6 |
| Orissa | 37.6 | 17.3 | 20.3 |
| Madhya Pradesh | 35.1 | 21.0 | 14.1 |
| Uttar Pradesh | 34.1 | 26.1 | 8.0 |
| Bihar | 43.7 | 31.2 | 12.5 |
| All India | 25.5 | 13.7 | 11.8 |
| Source: 1. Press Note on Poverty Estimates, 2009-10, Union Planning Commission, July 2012. 2. Press Note on Poverty Estimates, 2011-12, Union Planning Commission, July 2013. | | | |

Kerala, Madhya Pradesh, Maharashtra, Rajasthan and Orissa the decline in poverty ratio between these two years was higher than the State. During 2011-12, the State had ranked third lowest in the incidence of poverty among the major States.

The principal factor that could be adduced for the rapid decline in poverty ratio in the State was adoption of a three-pronged approach: promotion of economic growth, promotion of human development and targeted programmes of poverty alleviation to address the multidimensional nature of poverty. The Public Distribution System has also provided a safety net for the poor and food security. The Swarna Jayanthi Shahari Rozgar Yojana (SJSRY) aims at urban poverty alleviation by providing gainful employment to the urban unemployed through setting up of micro enterprise ventures, provisioning of wage employment to the below poverty line urban poor and promoting self-managed community structures like Neighbourhood Groups (NHGs), Neighbourhood Committees (NHCs) and Community Development Societies (CDSs) in the State through its five components in all urban local bodies. Under Urban Self Employment component of the scheme 24,550 urban poor beneficiaries were benefited with gainful self employment ventures by way of sanction of individual loans to nationalized banks till 2013-14.

Under Skill Training for Employment Promotion amongst Urban Poor (STEP-UP) a component of the scheme skill development training was imparted to 1,51,021 urban youths and 49,772 had been placed. In yet another component of the scheme viz., Urban Women Self-Help Programme (UWSP) totally 19,649 self-help groups were assisted to take up gainful economic activities. In the fourth component viz., Urban Wage Employment Programme (UWEP), 2.74 lakh man days were created in Municipalities and Corporations. In Town Panchayats 624 beneficiaries were provided with wage employment. Under the last component viz., Urban Community Development Network 80,956 NHGs, 9,364 NHCs and 780 CDSs had been formed. In Town Panchayats Rs.4.49 crore was spent towards enhancing the capacity building of the Community Development Societies. With a aim to focus livelihood security for the urban poor by enhancing their capabilities and providing employment opportunities, housing and basic amenities, universal access to health and education, ensuring social mobilization and special homes to vulnerable groups with special emphasis towards women destitute and differently abled persons Tamil Nadu Urban Livelihood Mission (TNULM) was launched during 2012-13. The allocation of Rs. 200 crore was made in each year for the implementation of the scheme in 2012-13 and 2013-14.

15.5.1 The Way Forward:

The following multi-pronged strategy is required to ensure sustained urban poverty alleviation:

- > Accelerate the rate of job creation in urban areas,
- Impart relevant skills to urban poor,
- > Generate self-employment opportunities for urban poor wherever viable,
- Proactive and mandatory creation/allocation of spaces within city boundaries to ensure livelihood opportunities to the urban poor,
- > Provide basic services to the urban poor, especially through rehabilitation of slums,
- > Ensure financial inclusion of urban poor,
- > Ensure legislative inclusion of urban poor,
- Shift the urban poor from the informal sector to the formal one and extend the provisions of social security.