

## **2.28. Water Supply and Sanitation**

**2.28.1.** Provision of drinking water to all habitations is one of the major objectives of the Tenth Five-Year Plan and this has also been pursued under the Bharat Nirman Programme with JNNURM funding. Tamil Nadu has no perennial rivers and geologically too, the State is mostly covered by hard rock formations where the availability of ground water is uncertain. The State has to depend on monsoon rains. The demand for water is on the increase because of fast urbanization.

### ***Chennai City***

**2.28.2.** The network of four surface water reservoirs namely Poondi, Cholavaram, Redhills and Chembarambakkam are the sources for the drinking water needs of Chennai City. These sources are entirely dependent on monsoon rains and Chennai faces scarcity of drinking water very often due to failure of the monsoon. In order to augment the City water supply, ground water sources from the three well fields of A.K. Basin viz. Minjur, Panjetty and Tamaraipakkam, which were developed by the Public Works Department in 1968, were taken over by Chennai Metropolitan Water Supply and Sewerage Board based on the recommendations of the UNDP study. Three more well fields were commissioned in the A.K. Basin, viz., Poondi, Kannigaipair, and Flood Plains in the year 1987. The supply of water to Chennai is maintained from the water available in the surface sources, water received from Kandaleru reservoir under Telugu Ganga Project and from the New Veeranam Project.

**2.28.3.** Although the monsoon season of 2005 and 2006 has resulted in a comfortable storage position in the city's drinking water resources, it is planned to take up the following measures to augment water availability for the city:

- ? Under the Chennai Water Supply Augmentation Project – II, it is planned to rehabilitate and construct check dams, by construction of 2 check dams across River Cooum and 2 across Adayar River in order to improve ground water level. It is also programmed to construct a

check dam across river Palar and supply 20 MLD of water to IT Corridor, South of Chennai.

- ? Setting up of 100 MLD sea water Desalination Plant at Minjur.
- ? Strengthening of distribution system.

**2.28.4.** A detailed project Report on improvement works for 4 water distribution stations and 5 water distribution zones has been prepared at the cost for Rs. 338.36 crore and submitted to GOI seeking funds from JNNURM Scheme.

### ***Rural Water Supply schemes***

**2.28.5.** Though schemes are implemented for many habitations with lesser service level, continuous failure of monsoon causes depletion of ground water resources and also degradation of water quality. Thus, many habitations which have been fully covered with water earlier, are becoming either partially covered or affected by water quality problem requiring new augmentation schemes. The frequent failure of the monsoon in earlier years had resulted in continuous drinking water scarcity and stress conditions in various parts of Tamil Nadu and poor ground water reserves.

**2.28.6.** A survey was carried out during 2003 as per the guidelines of the Government of India to assess the drinking water supply status in rural areas. According to the survey, there are 81,787 rural habitations of which only 29,067 habitations were fully covered with 40-lpcd supply and the rest are partially or not covered. During the 10<sup>th</sup> Plan period, it was programmed to cover all the partially covered and the quality affected habitations. 6,628 habitations were covered during the year 2002-03, 6,156 rural habitations were covered during the year 2003-04 further 6,500 rural habitations were covered during 2004-05, 7241 habitations which are having service level less than 10 lpcd have been taken up. during 2005-06. As per the status of the Rural water supply as on 1-4-2006, out of 81787 rural habitations, 55149 habitations were fully covered with 40-lpcd supply and the rest are partially covered or not covered at all. 7678 rural habitations were covered during 2006-07, which include 678 quality affected habitations. The target fixed for 2007-08 is 7500 rural habitations.

## **Urban Water Supply Schemes**

**2.28.7.** There are 718 towns (excluding Chennai Corporation) comprising 5 Corporations, 152 Municipalities, and 561 Town Panchayats in the State. Depending upon the available water supply service levels in terms of liters per capita per day (lpcd), the urban towns are classified into three categories namely Good (Corporations: 110 lpcd and above, Municipalities: 90 lpcd and above, Town Panchayats: 70 lpcd and above), Average (Corporations: 70-109 lpcd and above, Municipalities: 50-89 lpcd, Town Panchayats: 40-69 lpcd), and Poor (Corporations: less than 70 lpcd, Municipalities: less than 50 lpcd, Town Panchayats: less than 40 lpcd). The status of water supply in urban towns as on 1-4-2006 is as follows:

**Table : 2.13 Status of Water Supply in Urban towns**

<b>Civic Status</b>	<b>Good</b>	<b>Average</b>	<b>Poor</b>
Corporations	1	4	0
Municipalities	54	83	15
Town Panchayats	257	280	24
<b>Total</b>	<b>312</b>	<b>367</b>	<b>39</b>

**2.28.8.** The number of towns covered under water supply augmentation scheme from 2002-03 are as follows:

**Table : 2.14 Urban Water Supply - Physical Performance**

<b>Year</b>	<b>Number of towns covered</b>
2002-03	72
2003-04	60
2004-05	50
2005-06	70
2006-07	66

**2.28.9.** It is proposed to extend water supply to 65 uncovered urban local bodies in 2007-08.

**2.28.10.** Tamilnadu Water Supply and Drainage Board in association with Institute of Remote Sensing, Anna University carried out a recharge project and identified 13,357 suitable areas for construction of recharge structures, and provided recharge structures in 9765 locations.

**2.28.11.** 41 new schemes comprising 36 water supply schemes and 5 schemes for the construction of recharge structures has been taken up

under Tsunami Emergency Assisted Project (TEAP) with ADB assistance for providing permanent measures with safe and sustainable source for all the towns and habitations effected from the Tsunami.

**2.28.12.** A new programme "Tamil Nadu Rural Water Supply and Sanitation Programme (TNRWSSP) with a demand driven / cost sharing approach is proposed under funding from World Bank with tentative size of Rs.3000 crore. The Project is under discussion with the World Bank.

### ***Sewerage Schemes***

**2.28.13.** Out of 152 Municipalities and 6 Corporations in the state, only 15 Municipalities and 4 Corporations have partial under ground sewerage systems. Sewerage schemes are under implementation in the Municipal towns of Erode, Pallipalayam, Bhavani and Komarapalayam and in Trichirappalli Corporation which are located alongside of river Cauvery under the National River Action Plan. Further, new sewerage schemes under the National River Conservation Programme (NRCP) have been taken up in Tiruchirappalli, Madurai, Tirunelveli Corporations and Karur and Inam, Karur, Kumbakonam, Thanjavur and Mayiladuthurai Municipalities. In order to abate pollution in the River Palar, underground Sewerage Schemes for Ambur, Ranipet and Walajapet Municipalities have been formulated and proposals costing Rs.50 Crore have been posed to Government of India for support under the National River Conservation Programme.

**2.28.14.** The State Govt. has sanctioned underground sewerage schemes in 19 district head quarter towns. This scheme will also be taken up in uncovered towns under JNNURM and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) schemes recently launched by the Govt. of India.

### ***Tenth Five Year Plan Outlay / Expenditure***

**2.28.15.** The tenth five-year plan outlay for the Water supply and sanitation sector was fixed at Rs. 480000 lakh. Against this the expenditure incurred during the Tenth five year plan period is Rs.490671.16 lakh.

***Eleventh Five Year Plan (2007-2011) Approach:***

***Chennai Metropolitan Area:***

**2.28.16.** Chennai Metropolitan Area is poised for a rapid growth in economic activity on account of various initiatives taken by the government. Provision of adequate and safe supply of water and proper disposal of waste water is among the basic infrastructure facilities for any metropolitan city. Hence the aim of the Eleventh Five Year Plan is to provide water supply and sewerage system of matching international standards to the Chennai Metropolitan Area.

***Outside Chennai Metropolitan Area:***

**2.28.17.** One of the major objectives of the Eleventh Five Year Plan is to provide safe drinking water and sanitation facility to the rural and urban areas of the state. Priority will also be given for the sustainability of drinking water sources through ground water recharge.

**2.28.18.** It is the aim of the Eleventh Five Year Plan to ensure (a) daily supply in the Municipal and Corporation areas and to increase the hour of supply: (b) to rehabilitate the existing infrastructure by interlinking various schemes executed at different points of time and to increase supply coverage by identifying new sources, and (c) to complete the ongoing water supply schemes in a specific time frame.

**2.28.19.** In order to implement the above schemes, an outlay of Rs.4108.45 crore is contemplated for the Eleventh Plan.

***Plan Schemes for the Year 2007-08:***

**2.28.20.** The major on-going programmes / schemes proposed for the year 2007-08 outlined below.

**2.28.21.** Under Rural Water supply Programme, it has been programmed to provide water supply schemes to 7500 rural habitations through IPP & CWSS.

**2.28.22.** Under Urban Water supply Programme.,it has been programmed to provide water supply to 65 towns falling under the category of average and poor water supply status towns.

**2.28.23.** It is also programmed to take up 600 RWH structures in rural areas under Accelerated Rural Water Supply Programme & National Bank for Agriculture and Rural Development programme.

**2.28.24.** The agreed outlay of Rs. 573.89 crore is provided for the year 2007-08 for the sector Water Supply and Sanitation. The earmarked outlay for Scheduled Caste Sub Plan and Tribal Sub Plan are Rs.114.78 crore and Rs.22.38 crore respectively.