

## DEMAND No. 34

### MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT

#### Policy Note - 2012-2013

## 1. Introduction

Tamil Nadu is one of the most rapidly industrialising and urbanising states in India, with 48.45% of its population living in urban areas. Tamil Nadu will continue to lead the country in urban growth over the next decade also. The projected growth rate of the urban population for Tamil Nadu by the year 2030 has been estimated as 67%, which will be the highest in the Country. In this scenario, there will be many major policy and managerial challenges in coping with the increased urban infrastructure and access to basic civic services required by the burgeoning population. Capacity building, accessing funds for infrastructure development, employing new, relevant green technologies will be the key to meet these challenges.

**The vision of the Hon'ble Chief Minister** is to make Tamil Nadu '**numero uno**' among the Indian States. '**Vision Tamil Nadu 2023**' document recently unveiled by the Hon'ble Chief Minister envisages the improvement of urban infrastructure, with a focus on the development of ten World Class Cities in Tamil Nadu. These cities in turn will become the nuclei and engines of economic growth, thereby facilitating regional and balanced development across the State. **The Hon'ble Chief Minister's vision** is to provide piped and pressurized **24x7 water supply** to all the citizens and ensure that 100% of them have access to safe sanitation including **open defecation free and garbage free** environment.

**The Hon'ble Chief Minister of Tamil Nadu**, during her tenures as the Chief Minister of Tamil Nadu has taken several bold and innovative steps that have brought about revolutionary changes in the entire approach to deal with the problems of urbanization. **The Hon'ble Chief Minister** launched the historical **Rain Water Harvesting** movement in the State in the year 2001. Necessary

Legislative measures were taken to make installation of Rain Water Harvesting Structures mandatory in all buildings. A massive IEC campaign was undertaken to make the general public aware of the benefits of Rain Water Harvesting. These measures reaped rich dividends, and the ground water level across the State showed a significant rise during the period 2001 – 2006. The thrust on Rain Water Harvesting has now been revived and measures geared up to rejuvenate Rain Water Harvesting structures and to install new structures.

**The Hon'ble Chief Minister** has taken farsighted and innovative decisions to augment and stabilize the drinking water requirements of Chennai City. The implementation of the '**New Veeranam Project**' in record time in 2004 brought tremendous relief to a water stressed Chennai City. **The Hon'ble Chief Minister** also directed the establishment of a Reverse Osmosis Desalination Plant at Minjur in 2003 to further drought proof Chennai, which had traditionally depended only on monsoon rains.

**The Hon'ble Chief Minister** has now directed that the existing reservoir capacity of Chennai City be augmented by 4.20 TMC ft. at a cost of ₹1,851 crore. The preliminary work on the formation of the new reservoir in Thervaikandigai in Thiruvallur District has already commenced. Steps have also been initiated by the Chennai Metropolitan Water Supply and Sewerage Board to establish one more Desalination Plant of 400 MLD capacity at Nemmeli.

**The Hon'ble Chief Minister** has emphasized the need for re-cycling of waste water which can be utilized for industrial purposes. This will relieve the pressure on the overall availability of water for drinking purposes. The Chennai Metropolitan Water Supply and Sewerage Board is in the process of putting up a 45 MLD Tertiary Treated Reverse Osmosis Plant in Koyambedu. More such projects will be implemented under the PPP mode for recycling sewage to meet industrial needs.

The inadequacy of proper sanitation facilities in many of our cities and towns, and lack of

proper maintenance of public and community toilets lead to the practice of open defecation. To eradicate this, **the Hon'ble Chief Minister** has charted out a two pronged strategy viz., implementation of Under Ground Sewerage Schemes in all the Urban Local Bodies of the State in a phased manner and making Tamil Nadu an Open Defecation free State by the year 2015. This two pronged strategy will ensure that the health of the urban population in the state is protected and at the same time, pollution of land and water resources in the State is mitigated.

Cities are the most powerful engines of growth. They contribute as much as 70% of the State's GDP. **The Hon'ble Chief Minister** has announced two path-breaking funding schemes for Urban Infrastructure Development - the Chennai Mega City Development Mission (**CMCDM**) for Chennai and suburban areas and the Integrated Urban Development Mission (**IUDM**) for all other Corporations, Municipalities and Town Panchayats, to supplement the available funds under various schemes. Accordingly, a sum of ₹500 crore was provided for the Chennai Mega City Development

Mission and ₹750 crore for the Integrated Urban Development Mission in the year 2011-12. Under these missions, existing schemes are dovetailed to improve the standards of basic infrastructure like roads, street lights, drinking water, sewerage and sanitation, storm water drains, solid waste management, improvement of bus stands, parking places etc., in an integrated manner. The additional resources provided under the Chennai Mega City Development Mission and the Integrated Urban Development Mission have given the much needed thrust to the development of basic amenities in urban areas and also stimulated economic growth through planned urbanization. In the year 2012-2013 an amount of **₹500 crore** has been provided under the Chennai Mega City Development Mission and **₹750.00 crore** for the Integrated Urban Development Mission.

**The Hon'ble Chief Minister has laid special emphasis on quality and durability of urban roads and advocated the technological innovation of using plastic waste along with bitumen for laying roads.** All the ULBs in the

State have embarked on a programme by which roads will be laid utilizing plastic wastes, thus ensuring a safe and cost effective solution to the environmental pollution caused by throwaway plastic wastes.

Tamil Nadu, conducted elections to all the local bodies in October 2011. In order to build the capacity of the elected representatives to handle the affairs of the ULBs, Orientation Training Programmes are being organized for them so as to ensure a people oriented, responsive and transparent governance.

The expansion of the Corporations and Municipalities has posed a major challenge to the ULBs in the improvement of the service levels in the expanded areas. A re-assessment has been made about the amenities to be provided in the expanded areas and the Government have sanctioned additional funds to undertake infrastructure and development works in the expanded areas.

The Municipal Administration and Water Supply Department is responsible for the development of urban areas in the State and for ensuring provision of water supply to all the areas of the State. The Corporation of Chennai, the Commissionerate of Municipal Administration and the Directorate of Town Panchayats are integral part of this Department in achieving the objectives set forth by the Government. The Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) and Tamil Nadu Water Supply and Drainage Board (TWAD Board) are responsible for the provision of Water Supply and Underground Sewerage facilities. The New Tiruppur Area Development Corporation Limited (NTADCL) caters to the Water Supply and industrial water needs of Tiruppur and nearby areas.

Apart from these, the Tamil Nadu Urban Development Fund (TNUDF) and Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited (TUFIDCO) are the two urban financial intermediaries which are the pioneers and trendsetters in the field of urban finance and are guiding the Urban Local Bodies in assessing the

financial viability of projects and help in developing the Urban Infrastructure. These agencies also coordinate in channelizing funds from Government of India, External Agencies and financial markets for the development of Urban Infrastructure. The expertise of institutions like the Tamil Nadu Urban Infrastructure and Financial Services Limited (TNUIFSL) and the Tamil Nadu Urban Finance and Infrastructure Development Corporation (TUFIDCO) will be fully utilized to provide necessary consultancy based support services to the urban local bodies to improve their technical capability for implementing bigger and more complex projects.

The Municipal Administration and Water Supply Department is thus fully committed to implement progressive schemes for the creation of urban infrastructure, improved civic governance, delivery of civic services and making the cities and towns in the State safe, clean and livable. By doing so, this Department will strive hard to make the **Hon'ble Chief Minister's Vision for Tamil Nadu, "to become India's most prosperous and progressive State with no poverty, and where**

**its people enjoy all the basic services of a modern society and live in harmonious engagement with the environment and with the rest of the World",** a tangible reality.

## 2. Commissionerate of Municipal Administration

The Commissionerate of Municipal Administration is the nodal Department for coordinating and supervising the functions of all Municipalities and Municipal Corporations except the Corporation of Chennai. The Commissionerate of Municipal Administration is headed by the Commissioner of Municipal Administration and assisted by Additional Directors, Joint Directors and 7 Regional Directors of Municipal Administration (one RDMA each for Chengalpattu, Vellore, Salem, Tiruppur, Thanjavur, Madurai and Tirunelveli regions)

There are 9 Municipal Corporations (excluding Chennai) viz., Madurai, Coimbatore, Tiruchirappalli, Tirunelveli, Salem, Tiruppur, Erode, Vellore and Thoothukudi and 125 Municipalities under the administrative control of the Commissioner of Municipal Administration. The Municipalities in the State have been classified into different grades based on their annual income. The details are as follows:

Sl. No	Grade	Annual income (₹ in crore )	No. of Municipalities
1	Special Grade	Above 10.00	17
2	Selection Grade	6.00-10.00	31
3	First Grade	4.00-6.00	33
4	Second Grade	Below 4.00	44
<b>Total</b>			<b>125</b>

### 2.1 Expansion of Urban Local Bodies

The rapid increase in the economic and industrial activities, population growth, varied employment opportunities in the non-agricultural sectors and rise in per capita income has resulted in rapid growth in the Urban Agglomeration areas. Taking this into account, the Government has issued orders expanding certain Corporations and Municipalities by including the nearby Municipalities/ Town Panchayats/ Village Panchayats, so as to bridge the gap between the delivery and service levels in the suburban and urban areas. These expansions were undertaken to ensure the uniform development of the peripheries of rapidly urbanizing cities/towns.

The expansion of 7 Municipal Corporations under the administrative control of the Commissioner of Municipal Administration (Coimbatore, Madurai, Tiruchirappalli, Tiruppur, Vellore, Erode and Thoothukudi) and 8 Municipalities (Kancheepuram, Tirupathur, Villupuram, Hosur, Namakkal, Karur, Pudukkottai and Nagercoil) with the adjoining Municipalities /Town Panchayats/Village Panchayats are as detailed below:

## Expansion of Municipal Corporation

Sl. No.	Expanded Corporation	No. of Local Bodies added			Population (2001)		Area (In sq.km)	
		Municipality	Town Panchayat	Village Panchayat	Before expansion	After expansion	Before expansion	After expansion
1	2	3	4	5	6	7	8	9
1.	Coimbatore	3	7	1	9,30,882	12,62,122	105.60	265.36
2.	Madurai	3	3	11	9,28,869	12,30,015	51.82	147.99
3.	Tiruchirappalli	0	1	4	7,52,066	7,96,644	146.90	167.23
4.	Tiruppur	2	0	8	3,44,543	5,48,773	27.19	159.37
5.	Erode	4	2	5	1,50,541	4,05,345	8.35	109.52
6.	Vellore	2	6	9	1,77,230	4,23,425	11.65	87.91
7.	Thoothukudi	0	0	5	2,16,054	3,20,466	13.47	90.64

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## Expansion of Municipalities

Sl. No	Expanded Municipality	No. of Local Bodies added			Population (2001)		Area (In sq.km)	
		Municipality	Town Panchayat	Village Panchayat	Before expansion	After expansion	Before expansion	After expansion
1	2	3	4	5	6	7	8	9
1.	Kancheepuram	0	1	3	1,53,140	1,97,288	11.72	36.14
2.	Tirupathur	0	0	1	60,876	74,253	4.66	9.79
3.	Villupuram	0	0	5	95,455	1,20,021	8.36	33.13
4.	Hosur	0	1	4	84,394	1,51,426	11.71	72.41
5.	Namakkal	0	0	9	53,055	91,691	10.24	55.24
6.	Karur	2	0	1	76,336	1,68,448	6.03	53.26
7.	Pudukkottai	0	0	1	1,09,217	1,26,824	12.95	21.95

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8.	Nagercoil	0	1	4	2,08,179	2,36,274	24.27	49.10
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The expansion of the Corporations and Municipalities has posed a major challenge to the ULBs in the improvement of basic amenities. A re-assessment has been made about the basic amenities to be provided and the Government has sanctioned additional funds to undertake developmental works in basic infrastructure such as Water Supply, Roads, Street lights, Under Ground Sewerage Scheme, Sanitation etc. Further, under the Flagship scheme announced by the Government viz., the Integrated Urban Development Mission, 40% of the sanctioned amount has been allocated to the expanded areas.

## 2.2 Ordinary Elections to Urban Local Bodies, 2011 (Corporations / Municipalities)

As mandated by the 74<sup>th</sup> Constitutional Amendment Act, the elections to the ULBs were conducted in the State during October 2011. The Delimitation of the expanded Urban Local Bodies into divisions / wards were taken up and reservations for SC/ST, not less than 1/3<sup>rd</sup> reservation for women were followed. **The Mayors of Corporations and Chairpersons of the Municipalities were elected directly by the**

**people instead of indirect elections.** The new councils consequently assumed office on 25.10.2011.

The details of reservation of seats of Mayors, Chairpersons and Ward Councillors are given below:

Office	General	SC (General)	SC (Women)	ST (Women)	Women (General)	Total
Corporation Mayor	6	0	1	0	3	10(*)
Municipal Chairperson	73	10	6	1	35	125
Corporation Division Councillor	490	54	31	0	245	820
Municipal Ward Councillor	2,190	274	196	4	1,033	3,697

(\*) Including Chennai Corporation

It may be observed that there is a remarkable increase in the elected women candidates in the 2011 Urban Local Body elections (Municipal Corporations except Chennai and Municipalities). Of the total number of 4,652 seats/offices, nearly 40% of the elected members

are women. Further, this was **the first time that Electronic Voting Machines (EVMs) were used in the Urban Local Body elections in Tamil Nadu.**

### **2.3 Infrastructure Development**

Creating and maintaining urban infrastructure is one of the greatest challenges to the ULBs. The Government accords the topmost priority to the creation of quality and efficient infrastructure. Infrastructure works in Urban Local Bodies are taken up by accessing financial assistance from Central/ State Government and external funding agencies like World Bank assisted Tamil Nadu Urban Development Project-III (TNUDP-III), German Development Bank (KfW), Japan International Cooperation Agency (JICA).

#### **2.3.1 Integrated Urban Development Mission**

**This Government has launched two special programmes for urban infrastructure development – the Chennai Mega City Development Mission for Chennai and its suburban areas and the Integrated Urban**

**Development Mission for all other Corporations, Municipalities and Town Panchayats** to supplement the available funds under various schemes. A sum of ₹500 crore has been provided for the Chennai Mega City Development Mission and ₹750 crore for the Integrated Urban Development Mission

**Under the Integrated Urban Development Mission, ₹500 crore has been allocated to the Municipal Corporations (except Chennai) and Municipalities.** Under IUDM, existing schemes are dovetailed to improve the standards of basic infrastructure in the Urban Local Bodies like roads, street lights, drinking water, sewerage, sanitation, storm water drains, solid waste management, improvement of bus stands and parks, etc., in an integrated manner. The sector-wise breakup of projects undertaken during 2011-12 under IUDM is shown below:

<b>Sl. No.</b>	<b>Sector</b>	<b>No. of ULBs</b>	<b>Amount sanctioned for 2011-2012 (₹in crore)</b>
1	Under Ground Sewerage Scheme	19	30.50

2	Water Supply	47	58.80
3	Roads	67	145.11
4	Storm Water drains	123	88.96
5	Solid Waste Management	126	124.54
6	Street Lights	73	52.57
7	Others	2	6.00
	<b>Total</b>		<b>506.48</b>

Projects identified and prioritized in respect of Corporations and Municipalities for the year 2011-2012 are as follows: -

- The expanded Urban Local Bodies have been given priority by providing 40% of the total funds allotted under IUDM for the provision of basic amenities in the added areas.
- Water supply has been given top priority
- In accordance with the policy of the Government of providing UGSS for all towns in the State, 18 Municipalities and 1 Corporation have been included for provision of UGSS.
- All Urban Local Bodies have been given substantial allocations under Solid Waste Management, which is a priority area of the Government.

- Other basic amenities like provision of roads, street lights and storm water drains have also been included as thrust areas. Emphasis has been given for the restoration of roads affected by the laying of sewer lines.

**To continue the Mission, an amount of ₹750 crore has been allocated for the year 2012-13 for Corporations (except Chennai), Municipalities and Town Panchayats**

#### **2.4 Water Supply**

Access to and provision of safe drinking water to every household in the ULBs has been one of the primary concerns of the Government. Ensuring equitable and adequate supply of drinking water and its effective delivery is a major challenge for the ULBs.

To achieve the above primary objective, the Government has initiated various water supply projects under TNUDP III, UIG and UIDSSMT (JnNURM), JICA and KfW. Parastatal agencies such as the TWAD Board and the CMWSS Board have also taken up the implementation of water supply schemes.

Apart from the Parastatal agencies, certain Corporations and Municipalities have started implementation of major water supply schemes on their own.

Steps have been taken to augment the Water Supply System with financial assistance from various funding agencies as given below: -

SI. No	Name of Projects	No. of Schemes	Project Cost (₹in crore)
i	Tamil Nadu Urban Development Project III	16	392.57
ii	Urban Infrastructure and Governance (JnNURM)	8	468.05
iii	UIDSSMT (JnNURM)	26	361.16
iv	Japan International Cooperation Agency (JICA)	5	283.71
v	German Bank for Development (KfW)	8	187.55
	<b>Total</b>	<b>63</b>	<b>1693.04</b>

Under TNUDP III, 16 schemes have been taken up at a total cost of ₹392.57 crore, of which 15 schemes have been completed and the water supply scheme in Salem Corporation, at an estimate cost of ₹283.09 crore, is under progress.

Under the Urban Infrastructure and Governance (UIG/ JnNURM), water supply works have been taken up in Madurai (Including merged Municipalities- Thirupparankundram, Anaiyur, Avaniyapuram) and Coimbatore Corporations and in Tambaram, Avadi, and Thirumangalam Municipalities at a cost of ₹468.05 crore and is being implemented by the TWAD Board, CMWSSB and the Urban Local Bodies.

Under the UIDSSMT (JnNURM), water supply improvement schemes have been taken up in Tirupathur, Valparai, Aranthangi, Arakkonam, Tiruttani, Karur, Devakottai, Maraimalainagar, Ramanathapuram, Paramakudi, Keelakarai, Sivagangai, Rameswaram, Vickramasingapuram, Namakkal, Gudalur, Srivilliputhur, Rasipuram, Oddanchatram, Villupuram, Thanjavur, Mettur, Palladam, Chidambaram, Vellakoil Municipalities and Erode Corporation at a total cost of ₹361.16 crore. The works are in various stages of progress.

During 2012-13, it is proposed to implement water supply improvement schemes in Attur, Kayalpattinam, Karaikudi, Dharapuram, Tiruchengode, Vandavasi by the ULBs and in

Kovilpatti and Cumbum Municipalities by the TWAD Board at a total estimated cost of ₹189.22 crore with financial assistance from UIDSSMT (JnNURM)

With financial assistance from the Japan International Cooperation Agency (JICA), 5 water supply improvement schemes have been taken up in Tiruchirappalli Corporation and Palani, Coonoor, Edapadi and Devakottai Municipalities at a cost of ₹283.71 crore.

Under the KfW fund, water supply improvement schemes are already underway in Tirunelveli Corporation at an estimated cost of ₹22.22 crore and in the Municipalities of Karur (including merged Municipalities- Inamkarur and Thanthoni), Kadayanallur, Udhagamandalam, Tiruvannamalai, Pallipalayam at a total cost of ₹165.33 crore.

Apart from these major projects, the TWAD Board is implementing the following water supply schemes in Corporations and Municipalities

- a) Combined Water Supply Scheme with the Cauvery as the source, covering Vellore City Municipal Corporation and 11 Municipalities

namely Ambur, Arcot, Arakkonam, Gudiyatham, Ranipet, Tiruppattur, Vaniyambadi, Walajapet, Jolarpet, Melvisharam and Pernampet Municipalities,

- b) The Hogenakkal Water Supply and Fluorosis Mitigation Project covering 3 Municipalities namely Dharmapuri, Krishnagiri and Hosur.
- c) Under the UIDSSMT scheme, a Combined Water Supply Scheme (CWSS) covering Palladam Municipality is under implementation.

#### **2.4.1 Efficient Water Management System**

The Government has accorded top priority to the improvement of the Water Management Systems in Corporations and Municipalities. The following measures have been taken: -

- Implementing modern control and monitoring systems with the provision of Supervisory Control and Data Acquisition System (SCADA) to continuously monitor the transfer of data on water flow, performance and efficiency of pumps and motors, physical and chemical quality parameters of water, etc.
- Replacing the inefficient motors and pumps to improve the efficiency of the pumping system in water supply,

- Revamping the existing water supply network to ensure equitable distribution of water.
- a) Implementation of the SCADA system has been taken up in Tirunelveli, Madurai and Coimbatore Corporations at a total cost of ₹16.96 crore
- b) For the improvement of the efficiency of the pumping system in the water supply schemes, an amount of ₹6.94 crore has been allotted under the Infrastructure Gap Filling fund during the year 2011-2012. Under this scheme, replacement of old motors and pumpsets in 20 ULBs viz. Cuddalore, Nellikuppam, Panruti, Virudhachalam, Chidambaram, Tiruvallur, Tambaram, Krishnagiri, Karur, Thiruvannamalai, Vaniyambadi, Melvisharam, Gudiyatham, Theni-Allinagaram, Kumbakonam, Nagercoil, Aruppukottai, Sivakasi, Srivilliputhur and Gobichettipalayam Municipalities has been taken up.
- c) For improvement of water supply works, an amount of ₹3.64 crore has been allotted to Vellore and Salem Corporations under O&M

Gap Filling fund and ₹6.54 crore has been allotted to Thoothukudi Corporation for water supply improvement works under the Infrastructure Gap Filling fund during the year 2011-2012.

In order to revamp and improve the existing water supply system in 52 Municipalities, Detailed Project Reports (DPR) are being prepared under the Project Preparation Fund.

#### 2.4.2 Rain Water Harvesting

The path-breaking Rain Water Harvesting Programme was launched in 2001 under the visionary leadership of the **Hon'ble Chief Minister of Tamil Nadu**. The vigorous implementation of this scheme during 2001 - 2006 had reaped rich dividends in enhancing ground water table.

On the directions of the **Hon'ble Chief Minister**, necessary amendments were made in the Tamil Nadu District Municipalities Act, 1920, the Tamil Nadu District Municipalities Building Rules, 1972, The Multi- Storied and Public Buildings Rules, 1973 and the Madurai City Municipal Corporation

Building (Water Conservation) Rules, 2002 to make rain water harvesting structures in all buildings mandatory. As a result, rain water harvesting structures have been created throughout the State. This intensive programme had helped the ground water table to rise substantially and had led to better recharge of underground aquifer during the period 2001-2006.

In accordance with Government policy, the Urban Local Bodies have now initiated various measures for the rehabilitation of the rain water harvesting structures. Further, wherever rain water harvesting structures in Urban Local Bodies are under repair, the ULBs have been asked to restore the structures. The awareness programme for Rain Water Harvesting is being continued in all ULBs. An action plan has been drawn by Urban Local Bodies for the Revival, Rehabilitation and Maintenance of Rain Water Harvesting structures.

## **2.5 Under Ground Sewerage Scheme (UGSS)**

The State Government has accorded priority to the implementation of sewerage schemes, with proper sewerage treatment plants in all the Urban Local Bodies in a phased manner, in order to

provide better sanitation. The main objective of implementing UGSS is to reduce the health risks and to eradicate ground water contamination, thereby improving the health and sanitary conditions of the people.

Accordingly, necessary action has been initiated and Detailed Project Report preparation has been taken up by the Tamil Nadu Water Supply and Drainage Board, the Chennai Metropolitan Water Supply and Sewerage Board and the Urban Local Bodies. **117 DPRs for Municipalities at an estimated cost of Rs.7,100 crore and 3 DPRs for Corporations (Tiruchirappalli, Coimbatore and Thoothukudi) at an estimated cost of ₹1,570 crore have been prepared by the TWAD Board.**

Since conventional installation and rehabilitation methods of open trench construction cause significant disruption of services, it has been proposed to explore new technologies like, **Trenchless Technology, Pre-fabricated Inspection Chambers and innovative piping materials in UGS schemes.**

### 2.5.1 Ongoing Under Ground Sewerage Schemes

The Government has proposed to implement UGSS in a phased manner in the Corporations and Municipalities with necessary financial assistance under various schemes like TNUDP-III, Urban Infrastructure and Governance (UIG/JnNURM), Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT/JnNURM), and KfW.

- Under TNUDP-III, UGSS have been taken up in 22 Towns at a cost of ₹928.31 crore. The UGSS have been completed in Udthagamandalam, Chinnamanur and Pallavapuram Municipality at a cost of ₹95.57 crore. Works in other towns are in various stages of implementation.
- Under UIG of JnNURM, 4 Towns (Madurai and Coimbatore Corporations, Avadi and Tambaram Municipalities) were taken up for UGSS implementation at a total cost of ₹925.49 crore and the works are under various stages of implementation.
- Under UIDSSMT of JnNURM, 3 Towns (Ariyalur, Udumalaipet and Maraimalainagar) were taken up for UGSS implementation at a

total cost of ₹86.32 crore, of which the works in Maraimalai Nagar have been completed. A scheme for providing UGSS to Nagercoil Municipality Phase-I at a cost of ₹76.04 crore has also been proposed under UIDSSMT.

- Under the KfW fund, UGSS works in Erode Corporation and Villupuram Municipality have been taken up at a cost of ₹244.89 crore and the works are in various stages of implementation.
- Detailed Project Reports for preparation of UGSS in the uncovered areas of Tiruchirappalli – Srirangam Phase-I is under preparation. The works are to be taken up at a cost of ₹24.00 crore.

During the year 2011-12, action has been initiated for providing UGSS to 19 Urban Local Bodies at an estimated cost of ₹2213 crore with gap funding from the Integrated Urban Development Mission.

To mechanise the operation and maintenance of UGSS, the Government has sanctioned the procurement of jet rodding and desilting machines in 3 Corporations (Vellore, Thoothukudi and Tiruchirappalli) and 17 Municipalities (Kancheepuram, Cuddalore,



Tiruvallur, Villupuram, Tiruvannamalai, Krishnagiri, Dharmapuri, Namakkal, Perambalur, Ariyalur, Tiruvarur, Pudukkottai, Dindigul, Theni-Allinagaram, Ramanathapuram, Sivaganagai and Virudhunagar) at a cost of ₹8.68 crore under Part II Scheme for the year 2011-12.

## **2.6 Sanitation**

### **2.6.1. Eradication of Open Defecation**

Sanitation and safe disposal of human waste is a critical element of public health, directly impacting the well being of the people. The absence of adequate number of toilets linked to Under Ground sewerage scheme, absence of sufficient and well maintained public / community toilets and the age old practice of open defecation is posing serious sanitation problems and health hazards. Recognising this, the Government has announced two important initiatives in the sanitation sector viz., coverage of all Towns by UGSS and the total elimination of open defecation by 2015.

The critical elements of this strategy are an aggressive IEC campaign to discourage open

defecation and the provision of toilets which will be constructed and well maintained by the Urban Local Bodies with community participation.

The Government has issued guidelines/ instructions to identify the places for the construction of public toilets. A detailed survey has been taken up by the Urban Local Bodies to assess the requirement of public and community toilets to be constructed, repaired or refurbished with provision of water supply and electricity. While constructing new toilets, special initiatives are being taken like new designs, e-toilets, waterless urinals to conserve water.

A sum of ₹14.30 crore has been sanctioned for this programme during the year 2011-12. **The programme will be continued during 2012-13, with an outlay of ₹50.00 crore. A massive awareness campaign will also be launched to educate the people regarding the hazards of open defecation.**

### **2.6.2 Welfare Schemes for Differently Abled**

This Government is committed to the welfare of the differently abled. Barrier free

accessibility for the differently abled has been given special emphasis. Steps are being taken to ensure the provision of a barrier free environment in multi-storied and public buildings, through provision of ramps, elevators of sufficient size, hand rails, special toilets, exclusive reservation of car parking, etc. for the differently abled persons.

**This Government under the able leadership of the Hon'ble Chief Minister in her earlier regime had amended the Development Control Rules of Chennai Metropolitan Area to ensure provision of a barrier free environment for differently abled persons. In order to extend this facility to other Corporations, Municipalities and other areas, action has been initiated to amend the relevant Acts.**

Construction of well designed differently abled friendly toilets has been taken up by the Corporations and Municipalities, considering the specific needs of differently abled people. These toilets have been designed based on inputs from the Spastic Society of India and the National Institute of Design, Ahmedabad.

Construction of 81 units of toilets for the differently abled have been taken up at a cost of ₹2.68 crore in 9 Municipal Corporations under Part II scheme during the year 2011-12 as given below: -

Sl.No.	Name of the Corporation	No. of units identified	Estimated cost (₹ in crore)
1	Madurai	7	0.14
2	Coimbatore	12	0.28
3	Salem	11	0.36
4	Tiruchirappalli	20	1.00
5	Tirunelveli	6	0.20
6	Tiruppur	8	0.28
7	Erode	4	0.11
8	Vellore	8	0.16
9	Thoothukudi	5	0.14
	<b>Total</b>	<b>81</b>	<b>2.68</b>

The works are at various stages of implementation. It is proposed to extend the scheme to the Municipalities also.

## **2.7 Solid Waste Management**

Municipal Solid Waste Management (MSWM) is one of the essential services rendered by the Urban Local Bodies in the state to keep the

Cities/Towns Clean and Green. Due to rapid urbanisation and change in the lifestyle of the public, there is a considerable increase in the quantity of waste as well as variations in the characteristics of waste. The collection, transportation, treatment and disposal of waste pose a major challenge to the ULBs.

The ULBs have taken efforts to make improvements to Solid Waste Management services in accordance with the "Municipal Solid Waste (Management & Handling) Rules, 2000". Government accords the highest priority to the implementation of the solid waste management programme in all the ULBs. The ULBs in the state have already taken many good initiatives to bring about improvements in the Solid Waste Management services. For example, the Corporations of Madurai, Coimbatore, Salem and Namakkal Municipality have already established waste processing and disposal facilities through the PPP mode under the JnNURM and other sources of funding.

The Commissionerate of Municipal Administration, is taking steps to access the best

practices and technologies adopted in other parts of the country and abroad in Solid Waste Management.

This Government has given a major thrust to strengthen the Primary/Secondary Collection and Secondary transportation of Solid Waste in the ULBs and an amount ₹124.54 Crore has been allotted under the Integrated Urban Development Mission (IUDM) during 2011-12 for this purpose. These efforts will be intensified further in 2012-13.

**In 2012-13, it is proposed to implement a "Waste to Energy" Project in the Public Private Partnership (PPP) mode in Tirunelveli Corporation. All the Urban Local Bodies will practice source segregation of solid waste into degradable and non-degradable components in a phased manner. The Government will soon announce an Integrated Solid Waste Management Policy.**

## **2.8 Roads**

Roads form a major component in the infrastructure of an Urban Local Body. The endeavour of the ULBs is to provide safe motorable

roads designed and built for the primary use by vehicles as well as to provide safe environment for pedestrian traffic. ULBs are responsible for all aspects of road works, including formation, relaying, maintaining, restoration of the damaged roads etc. Corporations and Municipalities maintain a total length of 18,112 Kms of roads. Owing to the expansion of certain ULBs, the total length of roads has increased to 21,282 Kms. This includes 4,350 Kms of CC roads, 13,207 Kms of BT roads, 1,266 Kms of WBM roads, 2,344 Kms of Earthen roads and 115 Kms of other type of roads like cut-stone pavement, paver block etc.

During the year 2011-12, road laying works were taken up under the following funds:-

- Tamil Nadu Urban Road Infrastructure Fund
- Environment Protection and Renewable Energy Development Fund

#### **2.8.1 Tamil Nadu Urban Road Infrastructure Fund**

During 2011-12, restoration of about 585 kms of roads damaged due to laying of sewer lines, water mains and natural calamities has been taken

up at a total cost of ₹220.36 crore in 6 Corporations and 29 Municipalities, under the Tamil Nadu Urban Road Infrastructure Fund.

Under the Integrated Urban Development Mission (IUDM) during 2011-12, road works have been taken up to a length of 464 kms in 67 ULBs at a cost of ₹145.11 crore.

#### **2.8.2 Environment Protection and Renewable Energy Development Fund**

Plastic waste and its disposal poses a major threat to the environment. This Government have placed great importance on the effective use of plastic waste to reduce the environmental degradation caused by plastic.

In order to ensure a plastic free environment, road laying in Municipalities and Corporations is being done based on plastic waste technology. During the year 2011-12, the ULBs have given a major thrust to this method of road laying and a majority of the roads taken up have utilized plastic waste.

The Government vide G.O.(Ms) No. 207, Environment and Forest (EC-2) Department, dated 28.12.2011 have sanctioned a sum of ₹80.00 lakhs for setting up Plastic Waste Collection centres with Shredding Machines of required capacities and facilities for handling and packaging of shredded plastics in 10 ULBs.

The collection centres equipped with Shredding Machines and packaging facilities are being established. Self Help Groups have been engaged in the activities relating to collection, segregation and transport of plastic waste. Further, the relaying of 186.80 kms of roads using plastic waste have been taken up for implementation at an estimated cost of ₹29.83 crore during 2011-2012, of which a sum of ₹13.89 crore has been sanctioned as grant vide G.O. Ms. No. 1, Environment and Forests (EC-2) Department, dated 02.01.2012 under the Environment Protection and Renewable Energy Development Fund

## **2.9 Street Lights**

Street lighting is a basic amenity and one of the most important responsibilities of a local body.

Presently, there are about 7,25,000 Street lights, of which 5,20,000 are Fluorescent Tube Lights (FTL) and 1,80,000 are Sodium Vapour Lamps (SVL). Street lighting expenditure forms 25-30 % of the electricity bill of the urban local bodies, which is a heavy burden on the financial resources of the ULBs. The implementation of uniform measures to increase energy efficiency and to reduce maintenance cost as well as to simultaneously deliver better service to the public, reduce carbon emissions is a major priority for all ULBs.

The following Energy Saving Measures (ESM) are proposed in order to achieve the above objectives:

- i) Replacing FTL with energy efficient lights such as LEDs and Solar LED lights.
- ii) Dimming of street lights during late night hours with Individual Lamp Monitoring as per Standards.
- iii) GIS Mapping of all streetlights in a ULB and to set guidelines for the installation of new poles and luminaries.

The Government has sanctioned a sum of ₹52.57 crore during the year 2011-2012 under the Integrated Urban Development Mission (IUDM) for street lighting. The implementation of Energy Saving Measures will be continued in the year 2012-2013.

## **2.10 Improvements to School Infrastructure**

The Government attaches great importance for the development of infrastructure in the schools. The Corporations and Municipalities have undertaken infrastructure improvements such as construction of additional class rooms, provision of labs, additional computers, provision of water facility, furniture, toilets, cycle sheds, electrification, construction of compound wall etc., in the municipal schools, and also modernising the existing school buildings which are maintained by ULBs.

Creation and improvements to school infrastructure are mainly taken up from the funds collected by ULBs through the Education Tax in addition to the funds available under General Fund of urban local bodies.

During 2011-2012, 341 works have been taken up covering 320 schools at an estimated cost of ₹25.38 crore in 74 local bodies. Improvements and repairs to Anganwadi Centres are being taken up under the Education Fund available with ULBs in consultation with the District Collectors.

## **2.11 Special Infrastructure Programme**

### **2.11.1 Modern Gasifier Crematorium**

As a measure to protect the environment, in preference to cremation by direct wood burning, construction of crematorium based on Gasifier technology have been taken up in the urban local bodies. This reduces the use of firewood by more than 50%.

During the year 2011-2012, under the Infrastructure Gap Filling Fund and O & M Gap Filling Fund, the following 13 Urban Local Bodies have taken up the construction of Modern Gasifier Crematorium at a total estimated cost of ₹8.81 crore.

Sl.No.	Name of the Urban Local Bodies	Estimated Cost (₹ in crore)
1	Coimbatore Corporation	1.50
2	Thoothukudi Corporation	0.51
3	Arakkonam Municipality	0.60
4	Gudiyatham Municipality	0.60
5	Kallakurichi Municipality	0.50
6	Attur Municipality	0.90
7	Idappadi Municipality	0.70
8	Dharapuram Municipality	0.60
9	Kangayam Municipality	0.60
10	Kurichi Municipality	0.60
11	Vellakoil Municipality	0.60
12	Gudalur Municipality	0.60
13	Aranthangi Municipality	0.50
	<b>Total</b>	<b>8.81</b>

It is proposed to take up 13 Modern Gasifier Crematorium works at an estimated cost of **₹10.00** crore in the year 2012-13, under the Infrastructure Gap Filling Fund and O&M Gap Filling Fund.

### 2.11.2 Modern Slaughter Houses

In order to facilitate hygienic slaughtering of animals, it has been decided to construct modern slaughter houses in all the Urban Local Bodies. To promote the modernization of slaughter houses and to make them environmental friendly and more

hygienic, the construction of 9 Modern Slaughter houses has been taken up in 6 ULBs at an estimated cost of **₹4.00** crore under the Infrastructure and O&M Gap Filling Fund 2011-2012, as detailed below: -

Sl. No.	Name of the Urban Local Bodies	No. of Units	Estimated Cost (₹ in crore)
1	Tirunelveli Corporation	3	2.50
2	Thoothukudi Corporation	2	0.40
3	Walajapet Municipality	1	0.30
4	Kangayam Municipality	1	0.28
5	Ariyalur Municipality	1	0.25
6	Thuvakudi Municipality	1	0.27
	<b>Total</b>	<b>9</b>	<b>4.00</b>

It is also proposed to take up 15 more Modern Slaughter Houses at an estimated cost of **₹8.00** crore in the year 2012-2013, under the Infrastructure and O&M Gap Filling Fund.

### 2.11.3 Renovation of Buckle Odai in Thoothukudi Corporation

To prevent inundation during rains in the Corporation area of Thoothukudi, the refurbishment of "Buckle Odai" has been taken up in phases. Out of a total length of 7.28 kms, 5.30 kms have been

taken up for improvement at a cost of ₹18.78 crore, under various schemes. During the year 2011-12, the remaining stretch of 1.98 km has been taken up for improvement at a cost of ₹7.00 crore.

#### **2.11.4 Natural Calamities – Relief and Restoration**

Cuddalore and Villupuram Districts were affected by 'Thane Cyclone' on 30.12.2011, resulting in heavy damage to Public assets and Municipal Infrastructure such as roads, water supply, Street lights etc. The Municipalities took herculean efforts in co-ordination with the District Administration to restore normalcy in the cyclone affected areas.

To immediately restore water supply in the affected Municipalities, Water lorries were arranged through the Chennai Metropolitan Water Supply and Sewerage Board and from the neighbouring Municipalities of Salem and Tiruchirappalli Districts. Nearly 60 lorries were pressed into service and water supply was given through lorries within 24 hours. Further, as electrical installations were damaged, more than 35 heavy duty generators were hired to operate water supply systems. The

major head works were all energised within 48 hours and water supply was restored in the affected Municipalities of the two districts.

Sanitary staff and workers from 16 Municipalities of the neighbouring districts were mobilized to attend to sanitation aspects, chlorination of water, removal of debris and garbage. This ensured that there was no outbreak of diseases in the affected areas. Street lights which were damaged in the Municipalities were repaired and replaced immediately. The Municipalities took up restoration of damaged roads on priority basis. The entire operation of restoration of civic services in the affected Municipalities of the two districts was done on a war footing.

A total sum of ₹27.44 crore has been sanctioned by the Government for the relief and restoration measures for the Municipalities in the 2 Districts as follows:

<b>Sl.No.</b>	<b>Works</b>	<b>Allotment (₹ in crore)</b>
1	Restoration of Roads	22.46
2	Water Supply	0.90
3	Street lighting	4.08
	<b>Total</b>	<b>27.44</b>



### 2.11.5 Part - II Schemes

The Government sanctioned a grant of ₹12.00 crore for the year 2011-12 under the Part II Schemes for various works in the Urban Local Bodies.

Sl. No	Description of Work	Amount (₹ in crore)
1	Construction of additional Office buildings for Regional Director of Municipal Administration, Madurai at a cost of ₹60.00 lakh and Tirunelveli at a cost of ₹75.00 lakhs	1.35
2	Construction of New Office building for Regional Director of Municipal Administration, Thanjavur	0.60
3	Construction of 81 units of disabled friendly toilets for the differently abled people in the public places in the all Corporations (except Chennai)	1.37
4	Purchase of De-silting and Jet-Rodding machines for 3 Corporations and 17 Municipalities for Under Ground Sewerage Scheme	8.68
<b>Total</b>		<b>12.00</b>

### 2.12 Infrastructure Gap Filling Fund and O& M Gap Filling Fund

During the year 2011-12, under Infrastructure Gap Filling Fund and the Operation and Maintenance Gap Filling Fund, a sum of ₹51.44 crore and ₹33.37 crore respectively has been allotted to take up the following works: -

(₹. In crore)

Sector		No. of ULBs	No. of works taken	Estimate cost	Grant Amount allotted
<b>Infrastructure Gap filling fund</b>					
1	Water supply	5	5	25.60	24.16
2	UGSS	2	2	9.08	9.08
3	Storm water drainage	1	1	5.40	3.00
4	Improvement of Bus stand	1	1	0.61	0.50
5	Sanitary workers quarters	3	3	4.30	2.00
6	Gasifier crematoria	12	12	8.31	5.14
7	Slaughter House	6	9	4.00	1.56
8	Lining of canal	1	1	7.00	6.00
<b>Total</b>		<b>31</b>	<b>34</b>	<b>64.30</b>	<b>51.44</b>

<b>O&amp;M Gap Filling Fund</b>					
1	Water supply	32	32	29.07	26.89
2	Storm water drain	1	1	5.00	5.00
3	Improvement of market / shandy	2	2	3.24	1.28
4	Gasifier crematoria	1	1	0.50	0.20
	<b>Total</b>	<b>36</b>	<b>36</b>	<b>37.81</b>	<b>33.37</b>

## 2.13. Centrally Sponsored Schemes

### 2.13.1 Jawaharlal Nehru National Urban Renewal Mission (JnNURM)

The Jawaharlal Nehru National Urban Renewal Mission envisages an integrated approach to infrastructure development in the Mission Cities and their suburbs. In Tamil Nadu, Chennai, Madurai and Coimbatore are the Mission Cities. The development works are taken up under the following Sub Missions and Programmes: -

- (I) a. Sub-Mission on Urban Infrastructure and Governance (UIG).
- b. Sub-Mission on Basic Services to the Urban Poor (BSUP),

(II) Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), and

(III) Integrated Housing and Slum Development Programme (IHSDP)

### 2.13.2 Urban Infrastructure and Governance (UIG)

#### Details of the works taken up under UIG

Sl. No	Name of the scheme	No of ULBs	Sanctioned amount (₹ in crore)	Number of projects	
				Taken up	Completed
1	Water supply	8	468.05	8	4
2	Construction of Check dams	1	9.15	1	1
3	Storm Water Drains	2	528.31	2	0
4	Solid Waste Management	3	215.01	3	0
5	Under Ground Sewerage Schemes	4	925.49	4	0
	<b>Total</b>	<b>18</b>	<b>2,146.01</b>	<b>18</b>	<b>5</b>

### 2.13.3 Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)

The UIDSSMT Scheme is being implemented in ULBs, which are not covered under the Urban Infrastructure & Governance (UIG). The admissible

components under the scheme include all core urban infrastructure development projects such as water supply, sewerage and solid waste management, construction and improvement of drains/storm water drains, Upgradation of roads, parking lots/spaces on Public Private Partnership mode, development of heritage areas and the preservation of water bodies.

**Details of the works taken up under the UIDSSMT:**

Sl. No	Name of the scheme	No. of ULBs	Sanctioned amount (₹ in crore)	Number of projects	
				Taken up	Completed
1	Water Supply	34	550.38	34	20
2	Roads & Drains	16	69.41	467	466
3	Under Ground Sewerage Scheme	4	146.60	4	1
4	Solid Waste Management	1	3.58	1	1
	<b>Total</b>	<b>55</b>	<b>769.97</b>	<b>506</b>	<b>488</b>

**2.14 Housing for Urban Poor**

The prime objective of the Government is to provide access to safe, healthy, affordable and

sustainable housing for the urban poor. The Government of India under JnNURM launched the following two projects, viz.,

- Basic Services to the Urban Poor (BSUP) – In the Mission cities of Chennai, Madurai and Coimbatore and its agglomeration towns
- Integrated Housing and Slum Development Programme (IHSDP) – in all other towns

The BSUP projects aim at the provision of basic services to the urban poor including security of land tenure, improved housing at affordable prices and water supply while ensuring the convergence of existing services of the Government such as health, education, social security etc.,

The IHSDP projects aim at the holistic development of slums by providing adequate shelter and basic infrastructure facilities to the slum dwellers.

The Government of India has approved the project for a sum of ₹2,327.32 crore with central assistance of ₹1,107.80 crore under BSUP, and approved ₹515.88 crore, with central assistance of ₹349.38 crore under IHSDP.



The allocation, details of completed projects and the expenditure incurred in the State are given below:

(₹ In crore)

Name of the Scheme	Allocation for Tamil Nadu	GOI Share	No. of Projects sanctioned	Project Cost	No. of Projects completed	Expenditure as on 1.2.2012
Basic Services to the Urban Poor (BSUP)	1,107.80	1,107.80	51	2,327.32	2	957.70
Integrated Housing and Slum Development Programme (IHSDP)	349.38	349.38	84	515.88	9	315.71
<b>Total</b>	<b>1,457.18</b>	<b>1,457.18</b>	<b>135</b>	<b>2,843.20</b>	<b>11</b>	<b>1,273.41</b>

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**Basic Services to the Urban Poor (BSUP)** is being implemented in 3 Mission cities namely Chennai, Madurai and Coimbatore and its 37 agglomeration Towns.

The details of the projects implemented by various agencies are as follows: -

Name of the Implementing Agency	No. of projects	Project cost (₹ in crore)	Housing units			Infrastructure works		
			Sanctioned	Completed	In Progress	Sanctioned	Completed	In Progress
TNSCB	6	1,208.54	35,270	13118	4,288	13	3	6
<b>CMA</b>	<b>23</b>	<b>852.55</b>	<b>49,860</b>	<b>14728</b>	<b>13,125</b>	<b>923</b>	<b>652</b>	<b>170</b>
DTP	15	43.16	3,144	1642	706	186	176	10
Chennai Corporation including added areas	7	223.07	3,044	2087	957	2,199	1,994	205
<b>Total</b>	<b>51</b>	<b>2,327.32</b>	<b>91,318</b>	<b>31,575</b>	<b>19,076</b>	<b>3,321</b>	<b>2,825</b>	<b>391</b>

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**Integrated Housing and Slum Development Programme (IHSDP)** is being implemented in 82 Towns comprising of Corporations, Municipalities and Town Panchayats.

The details of the projects implemented by various agencies are as follows: -

Name of the Implementing Agency	No. of projects	Project cost (₹ in crore)	Housing units			Infrastructure works		
			Sanctioned	Completed	Progress	Sanctioned	Completed	Progress
CMA	58	436.34	31,603	19,562	7,342	1,705	1,468	176
DTP	25	59.45	4,542	3,659	883	276	268	8
TNSCB	1	20.09	1,443	1443	0	-	-	-
<b>Total</b>	<b>84</b>	<b>515.88</b>	<b>37,588</b>	<b>24,664</b>	<b>8,225</b>	<b>1,981</b>	<b>1,736</b>	<b>184</b>

## 2.15 Urban Poverty Alleviation Programme

### 2.15.1 Swarna Jayanti Shahari Rozgar Yojana (SJSRY)

Swarna Jayanti Shahari Rozgar Yojana (SJSRY) aims to provide gainful employment to the urban unemployed and under-employed through the setting up of micro enterprise ventures and provision of wage employment to the below poverty line (BPL) urban poor. It also aims to promote self managed community structures like Neighbourhood Group (NHG), Neighbourhood Committee (NHC) and Community Development Society (CDS). These objectives are implemented through the urban local bodies and community structures, for strengthening the community organisations and the local bodies. The scheme is implemented through share funding between the Central and State Government in the ratio of 75 : 25 respectively.

The Scheme has five major components: -

- i. Urban Self Employment Programme (USEP)
- ii. Skill Training for Employment Promotion amongst Urban Poor (STEP-UP)

- iii. Urban Women Self-Help Programme (UWSP)
- iv. Urban Wage Employment Programme (UWEP)
- v. Urban Community Development Network (UCDN)

For the year 2011-12, an amount of **₹84.61 crore was** sanctioned for implementing the scheme in all Urban Local Bodies.

- **Under the Urban Self Employment component (USEP)** assistance is provided to **5,004** urban poor beneficiaries for setting up gainful self employment ventures and **204** beneficiaries have been identified for benefit through Micro enterprises (Loan and Subsidy).
- **Under STEP-UP** Programme, skill development training is imparted to urban poor for Job employment and self employment. During 2011-12, **23,798** beneficiaries were imparted skill development training with **75% placement assurance**.
- Under Urban Women Self-help Programme (UWSP), **7,251 women** have been assisted in joint enterprises and thrift and credit activities (T&CS).

- Under Urban Wage Employment Programme (**UWEP**), **3.25 lakh man days** work have been created at a cost of **₹12.20 crore** .
- Under Urban Community Development Network (**UCDN**), Community Structures are formed on a 3-tier basis, viz, Neighbourhood Group (**NHG**), Neighbourhood Committee (**NHC**) and Community Development Society (**CDS**).

So far **80,956 NHGs, 9,364 NHCs** and **780 CDSs** have been formed and functioning effectively. Capacity building, training and awareness creation has been imparted at a cost of **₹6.10 crore**.

### **2.15.2 Urban Statistics for Human Resource and Assessments (USHA)**

The aim of Urban Statistics for Human Resource and Assessments (USHA) is to undertake planning, policy making, project design, formulation, implementation, monitoring and evaluation in the context of programmes relating to urban poverty and slums.

In the first phase, a slum survey has been conducted in **34 ULBs** having a population of more than 1, 00,000 covering **1,963 slums and 4,13,000 slum households**. Further, in the second phase, it is proposed to cover **60 ULBs**, each with a population ranging between 40,000 to 1,00,000, at an overall estimated cost of **₹2.62 crore**.

### **2.15.3 Tamil Nadu Urban Livelihood Mission**

The Government will launch the Tamil Nadu Urban Livelihood Mission in 2012-2013. This Programme will focus on livelihood security for the urban poor by providing skill and employment opportunities, housing and basic amenities, universal access to health and education, social mobilisation and special homes for vulnerable groups like street children and urban homeless, etc., It will lay special emphasis on inclusive policies involving women, destitute and differently abled persons by dovetailing ongoing sectoral programmes. An amount of **₹200 crore** has been provided for the current financial year for the Mission.



## 2.16 Urban Finance

### 2.16.1 State Finance Commission

In accordance with Article 243 Y of the Indian Constitution, the Finance Commission constituted under Article 243-I shall also review the financial position of the Municipalities and make recommendations towards-

- (i) the distribution between the State and the Municipalities of the net proceeds of taxes, duties, tolls and fees leviable by the State which may be divided between them and the allocation between the Municipalities at all levels of their respective shares of such proceeds.
- (ii) the determination of taxes, duties, tolls and fees which may be assigned to, or appropriated by the Municipalities
- (iii) the grants-in-aid to the Municipalities from the consolidated Fund of the State
- (iv) the measures needed to improve the financial position of the Municipalities; and
- (v) any other matter referred to the Finance Commission in the interests of sound finance of the Municipalities.

The recommendations of the Third State Finance Commission have covered the period 2007-2012. Based on the recommendations of the Third State Finance Commission, the vertical sharing ratio of the funds from State Owned Tax Revenue (SOTR) between rural and urban local bodies has been fixed based on population ratio i.e., 58:42. Further, out of 42% share of urban local bodies in the devolution grant, horizontal sharing between the Municipal Corporations, Municipalities and Town Panchayats are done based on the population in the ratio of 30:41:29 respectively.

The percentage of devolution from State's Own Tax Revenue (SOTR) to local bodies from the years 2007-2008 to 2011-2012 is as follows: -

Year	Devolution Percentage (%)	Amount ₹in Crore (*)
2007-2008	9	775.91
2008-2009	9	838.35
2009-2010	9.5	937.42
2010-2011	10	1,374.87
2011-2012	10	1,627.68

(\*)Amount devolved to Corporations and Municipalities.

Source: State Budget Documents

The Fourth State Finance Commission, which is responsible for making recommendations

on the manner and quantum of assistance and devolution due to local bodies, has submitted its report and the same is under consideration of the Government. Pending its acceptance, the Government has adopted the previous year's pattern in deciding on the method of devolution.

**The amount of Devolution due to Corporations and Municipalities has been increased to ₹1,987 crore in the Budget Estimates 2012-13.**

#### **2.16.2 13<sup>TH</sup> Central Finance Commission's Recommendations**

As per the recommendations of the 13<sup>th</sup> Central Finance Commission, the Union Government has sanctioned grants to all urban local bodies in the State of Tamil Nadu for the period from 2010-11 to 2014-15. The General Basic Grant and the Performance Grant devolved to the Urban Local Bodies is as follows: -

(₹ in Crore)

1.	General Basic Grant	₹1,550.97
2.	General Performance Grant	₹820.25
	Total	₹2,371.22

**A sum of ₹ 361.98 crore has been provided in the Budget Estimates 2012-13.**

#### **2.16.3 State Level Property Tax Board**

The Urban Local bodies have not been able to fully tap their potential for raising their own revenue from property tax. To correct this lacuna, and in accordance with Thirteenth Finance Commission's recommendations, **this Government will constitute a State Level Property Tax Board. This Board will review the present property tax system and will make suggestions for proper valuation of properties and due assessment.**

#### **2.17 Externally Aided Projects**

##### **2.17.1 Tamil Nadu Urban Development Project-III (TNUDP-III)**

The Government of Tamil Nadu is implementing the TNUDP III Project with the assistance of World Bank with a financial outlay of ₹1,996.40 crore for a period of five years (upto 31.03.2012) as a follow up to the TNUDP II with an aim to:

- develop TNUDF as a financial intermediary to provide financing for infrastructure to Corporations and Municipalities on a sustainable basis
- strengthen urban reforms and consolidate the achievements under TNUDP II in institutional strengthening and capacity building

The Government in 2005 accorded administrative approval for implementation of this World Bank assisted Tamil Nadu Urban Development Project III. The components of this project are as follows:

- **Institutional Development Component:**

- Capacity Building of Municipal Staff
- Information and Communication Technology
- ULB Debt Monitoring Cell
- Project Preparation Facility
- Project Management, Incremental Operating Costs

- **Urban Investment through TNUDF**

- Loans to Corporations and Municipalities
- Capital Grants to Corporations and Municipalities
- Project Development Advisory Facility.

## **2.17.2 Capacity Building under TNUDP-III**

The capacity building component is intended for building up the capacity of the officials, staff and elected representatives of the Corporations and Municipalities through continued training programmes and enhancing their responsive, managerial and technical capabilities. The Institutional Development Component is implemented by the Commissioner of Municipal Administration.

During the year 2012-2013, it is proposed to conduct 58 training programmes including Orientation programmes for newly elected representatives at a cost of ₹2.28 crore and also to undertake exposure visits to the other cities in India.

## **2.17.3 e-Governance implementation in Corporations and Municipalities**

All the Corporations and Municipalities have been provided with hardware and software for implementing e-governance activities. As on date, 16 modules have been computerized in the Corporations and Municipalities. Separate websites

have been created and hosted for the individual Corporations and Municipalities. Based on the instructions of the Government, e-tendering for all works above ₹ 10 lakh has been adopted. The Application Software Audit and the Information System Security Audit has been implemented in all the urban local bodies.

It is proposed to introduce an e-office system which is a workflow based system in CMA office that replaces the existing manual handling of files with a more efficient electronic system.

#### **2.17.4 Urban Investment Component – Funded through TNUFSL**

Under Urban Investment component, 101 projects have been taken up at a cost of ₹ 1892.47 crore of which 74 projects have been completed and 27 projects are under various stages of implementation.

#### **2.18 German Development Bank (KfW) assisted Projects**

In order to provide water supply and sewerage facilities in urban towns a financial assistance of ₹500 crore (Euro 77 Million) was obtained from German Bank for Development

(KfW), with a project execution period of 5 years from 2008.

13 projects at a total cost of ₹500.08 crore have been taken up for implementation and 3 projects have been completed and others are in various stages of progress.

#### **2.19 Japan International Cooperation Agency (JICA) assisted Project**

In order to provide water supply in urban towns a financial assistance of ₹ 345.00 crore (Japanese Yen 9,824 Million) was obtained from Japan International Cooperation Agency (JICA) with a project execution period of 5 years from 2008.

6 projects with a total project cost of ₹ 338.71 crore have been taken up for implementation and are in various stages of progress.

#### **2.20 Tamil Nadu Institute of Urban Studies (TNIUS)**

The Tamil Nadu Institute of Urban Studies, Coimbatore was established in the year 1981. The main objective is to impart training to personnel of ULBs, to conduct research studies and undertake

consultancy services in fields relating to urban administration and development. The Institute is run with the annual contribution of the Corporations, Municipalities and Town Panchayats.

The TNIUS has conducted various training programmes like orientation courses for Elected Representatives and officials. In a step forward, the TNIUS with Bharathiyar University, commenced a Post Graduate Diploma Course in Urban Financial Accounting and Management for which twenty-two officials have been deputed and a Post Graduate Diploma in Solid Waste Management for which twenty-three officials have been deputed in the year 2011-12. During 2012-13, it is proposed to develop the TNIUS into a Centre of Excellence for Urban Administration and Development.

## **2.21 Madurai Corporation**

Madurai Corporation has been expanded encompassing 3 Municipalities, 3 Town Panchayats and 11 Village Panchayats. After the expansion, its population increased from 9,28,869 to 12,30,015 and its area increased from 51.82 sq.km to 147.99 sq.km.

During 2011-2012, the following projects were taken up for implementation.

- Under Tamil Nadu Urban Road Infrastructure Fund, a sum of ₹3.50 crore was sanctioned to restore roads to a length of 22.13 Kms damaged due to implementation of various schemes like UGSS and Water supply etc., and a sum of ₹9.51 crore was sanctioned to restore roads to a length of 18.02 Kms damaged due to heavy rainfall.
- 14 works including the Pathway around Meenakshi Park, beautification of Villakkuthoon, Old Fort and Arulmigu Mariamman Theppakulam and Thirumalai Naicker Mahal were taken up for implementation, at a cost ₹15.21 crore under Tourism Development Scheme.

- Under Infra O & M Gap filling Fund, an amount of ₹5.83 crore was allotted to Madurai Corporation to improve important Bus Stands like Periyar Bus Stand and Integrated Mattuthavani Bus Stand. These works have been completed.
- Under IUDM, ₹10.00 crore has been sanctioned for Energy Saving street lighting system, ₹15.00 crore for improvement of roads and ₹10.00 crore towards Solid Waste Management has been sanctioned.

Madurai is one among the 3 Mission Cities of Tamil Nadu under JnNURM. Under the UIG component of JnNURM, 5 Major infrastructure works have been taken up, out of which 2 works have been completed and the other 3 works are under various stage of implementation.

**Considering the poor infrastructure in Madurai City which has suffered total neglect in the past five years, the Government has announced a special package of ₹250 crore for the comprehensive infrastructure improvement of Madurai Corporation as a onetime grant in the current financial year.**

## 2.22 Coimbatore Corporation

Coimbatore Corporation has been expanded to include 3 Municipalities, 7 Town Panchayats and a Village Panchayat. After the expansion, its population increased from 9,30,882 to 12,62,122 and its area increased from 105.6 sq.km to 265.36 sq.km.

During 2011-12, the following projects were taken up:

- Under Tamil Nadu Urban Road Infrastructure Fund, road restoration of 50 kms damaged due to the implementation of various schemes like UGSS and Water supply etc., at a cost of ₹14.53 crore.
- Under Integrated Urban Development Mission,
  - ₹5.41 crore was sanctioned to restore roads to a length of 23.85 Kms.
  - ₹13.00 crore for Solid Waste Management activities including procurement of additional vehicles, refuse compactors, bins and excavators to cater to the added areas.

- ₹5.00 crore was sanctioned for taking up Storm Water Drains in the added areas.
- Provision of energy efficient street lights in the added areas at an estimated cost of ₹1.40 crore.

Coimbatore is one among the 3 Mission Cities in Tamil Nadu under JnNURM. Under UIG component of JnNURM, four major infrastructure works have been taken up and one work completed.

**The completed Pillur-II Water Supply Scheme has been commissioned by the Hon'ble Chief Minister on 24.1.2012.**

### **2.23 Tiruchirappalli Corporation**

Tiruchirappalli Corporation has been expanded by including a Town Panchayat and 4 Village Panchayats. After the expansion, its population increased from 7,52,066 to 7,96,644 and its area increased from 146.9 sq.km to 167.23 sq.km.

During 2011-12, the following infrastructure projects have been taken up for implementation for which an amount of ₹22.00 crore has been sanctioned under Integrated Urban Development Mission: -

- Improvements to head works at Kambarasanpettai and Iyyalamman Padithurai at a cost of ₹3.25 crore.
- UGSS in the uncovered areas of Trichy-Srirangam at an estimated cost of ₹24.00 crore.
- Procurement of primary and secondary collection vehicles for Solid Waste Management at an estimated cost of ₹2.98 crore.
- Formation of Black Topped Roads to a length of 31.60 km in the added areas at an estimated cost of ₹5.41 crore
- Construction of Storm Water Drains to a length of 50.45 km in the added areas of the Corporation at an estimated cost of ₹6.09 crore.
- Provision of energy efficient street lights in the added areas at an estimated cost of ₹1.00 crore.

## 2.24 Salem Corporation

Three major infrastructure projects have been taken up for implementation with financial assistance under TNUDP III, viz.

- Dedicated Water Supply Scheme at a cost of ₹283.09 crore
- UGS Scheme at a cost of ₹149.39 crore
- Thirumanimutharu River Improvement and Vellakuttai Odai Improvement at a cost of ₹31.50 crore

During 2011-12, the following infrastructure projects have been taken up for implementation for which an amount of ₹2.94 crore has been sanctioned under Integrated Urban Development Mission:-

- Improvements to head works at Raman Tower at a cost of ₹1.00 crore.
- Procurement of primary and secondary collection vehicles for Solid Waste Management at an estimated cost of ₹1.00 crore.

- Formation of Black Topped Roads to a length of 0.592 km at an estimated cost of ₹ 0.94 crore

Under Tamil Nadu Urban Road Infrastructure Fund, road works to a length of 33.02 Km have been taken up at an estimated cost of ₹12.76 crore.

## 2.25 Tirunelveli Corporation

During 2011-12, the following projects were taken up for implementation,

- Water Supply Scheme at an estimated cost of ₹22.22 crore to cover part of Thatchanallur and Melapalayam Zones under KfW funding
- Construction of 16 Public toilets have been taken up at a cost of ₹0.35 crore
- Relaying of Roads using Plastic waste taken up at a cost of ₹0.21 crore
- ₹ 3.00 crore has been allotted as a gap funding for Solid Waste Management under Integrated Urban Development Mission-2011-12.



**It is proposed to implement a “Waste to Energy” Project in the Public Private Partnership (PPP) mode in Tirunelveli Corporation during 2012-13**

### **2.26 Erode Corporation**

Erode Corporation has been expanded by including 4 Municipalities, 2 Town Panchayats and 5 Village Panchayats. After the expansion, its population increased from 1,50,541 to 4,05,345 and its area increased from 8.35 sq.km to 109.52 sq.km.

The implementation of UGSS at a cost of ₹209.22 crore is under progress which has been taken up under KfW funding.

During 2011-12, the following infrastructure projects have been taken up for implementation for which an amount of ₹15.00 crore has been sanctioned under Integrated Urban Development Mission: -

- Formation of Black Topped Roads to a length of 16.45 km including the added areas at an estimated cost of ₹5.31 crore

- Procurement of primary and secondary collection vehicles, improvements to compost yard for Solid Waste Management at an estimated cost of ₹5.00 crore.
- Provision of energy efficient street lights in the added areas at an estimated cost of ₹5.00 crore.

Under Tamil Nadu Urban Road Infrastructure Fund, road works to a length of 54.29 Km have been taken up at a cost of ₹22.42 crore.

### **2.27 Tiruppur Corporation**

Tiruppur Corporation has been expanded by including 2 Municipalities and 8 Village Panchayats. After the expansion, its population increased from 3,44,543 to 5,48,773 and its area increased from 27.19 sq.km to 159.37 sq.km.

During 2011-12, the following infrastructure projects have been taken up for implementation for which an amount of ₹16.00 crore has been sanctioned under Integrated Urban Development Mission: -

- Water Supply Improvement works such as providing feeder main to Krishna Nagar, Muthanampalayam and Nallur areas, distribution mains to Avinashi Road, provision of gensets at Perichipalayam Booster Station at a total cost of ₹2.18 crore.
- Procurement of primary and secondary collection vehicles for Solid Waste Management at an estimated cost of ₹2.53 crore.
- Formation of Black Topped Roads to a length of 8.645 km in the added areas at an estimated cost of ₹5.05 crore
- Construction of Storm Water Drains to a length of 14.50 km including added areas of the Corporation at an estimated cost of ₹5.30 crore.
- Provision of energy efficient street lights including the added areas at an estimated cost of ₹2.50 crore.

## 2.28 Vellore Corporation

Vellore Corporation has been expanded to include 2 Municipalities, 6 Town Panchayats and 9

Village Panchayats. After the expansion, its population increased from 1,77,230 to 4,23,425 and its area increased from 11.65 sq.km to 87.91 sq.km.

The implementation of Under Ground Sewerage Scheme is in progress at an estimated cost of ₹40.49 crore under TNUDP-III.

During 2011-12, the following infrastructure projects have been taken up for implementation for which an amount of ₹20.00 crore has been sanctioned under Integrated Urban Development Mission: -

- Improvements to head works including construction of Infiltration Well at Palar and Thirumani, Borewells in added areas at a cost of ₹6.00 crore.
- Procurement of primary and secondary collection vehicles, improvements to compost yard for Solid Waste Management at an estimated cost of ₹4.00 crore.
- Formation of Black Topped Roads to a length of 15.41 km including the added areas at an estimated cost of ₹5.10 crore

- Construction of Storm Water Drains to a length of 2.95 km in the added areas of the Corporation at an estimated cost of ₹3.00 crore.
- Provision of energy efficient street lights including the added areas at an estimated cost of ₹2.00 crore.

Under Tamil Nadu Urban Road Infrastructure Fund, roads damaged due to the implementation of various schemes were taken up covering a total length of 15.57 Kms at an estimated cost of ₹6.62 crore.

## 2.29 Thoothukudi Corporation

Thoothukudi Corporation has been expanded to include 5 Village Panchayats. After the expansion, its population increased from 2,16,054 to 3,20,466 and its area increased from 13.47 sq.km to 90.66 sq.km.

The implementation of Under Ground Sewerage Scheme is in progress at an estimated cost of ₹95.00 crore under TNUDP-III.

During 2011-12, the following infrastructure projects have been taken up for implementation for which an amount of ₹16.50 crore has been sanctioned under Integrated Urban Development Mission: -

- Procurement of primary and secondary collection vehicles for Solid Waste Management at an estimated cost of ₹3.76 crore.
- Formation of Black Topped Roads to a length of 15.10 km including the added areas at an estimated cost of ₹5.00 crore.
- Construction of Storm Water Drains to a length of 4.30 km at an estimated cost of ₹2.00 crore.
- Provision of energy efficient street lights including the added areas at an estimated cost of ₹0.93 crore.
- As gap funding under IUDM, a sum of ₹3.80 crore for the proposed works under Water Supply Scheme and ₹1.00 for the Construction of Integrated Bus Stand has been allotted.

Under Tamil Nadu Urban Road Infrastructure Fund, road works were taken up to a length of 35.39 Kms at an estimated cost of ₹ 13.75 crore.

To prevent inundation during rains, the balance stretch of 1.98 km of Buckle Odai has been taken up for renovation at a cost of ₹7.00 crore.

### **3. Corporation of Chennai**

The Corporation of Chennai is 324 years old. It derives its statutory authority from the Chennai City Municipal Corporation Act 1919, for its administration. With a view to uniformly develop the suburban areas of Chennai Corporation, the City has been expanded from 174 Sq.km to 426 Sq.km, by the inclusion of 42 Local bodies. Consequently, the number of divisions of the Corporation has been increased from 155 to 200. Also, the zones have been redefined and the number of zones has been increased from 10 to 15. Ordinary election to the expanded city with 200 divisions was held in October 2011 and the elected Council has assumed office on 25.10.2011. The newly added areas are comprised in the 8 new zones, viz., Thiruvottiyur, Manali, Madhavaram, Ambattur, Valasaravakkam, Alandur, Perungudi and Sholinganallur. Following this, a massive exercise has been undertaken to bring into the records of the Corporation, the buildings, assets and civic infrastructure of the erstwhile 42 local bodies which have been included

within the Corporation and this exercise is nearing completion.

For Public and Administrative convenience, the expanded City with 15 Zones has now been divided into 3 Regions, with each Region consisting of 5 Zones. The Northern Region consists of Zones 1 to 5 with 63 wards. The Central Region consists of Zones 6 to 10 with 79 wards. The Southern Region consists of Zones 11 to 15 with 58 wards. The employees of the erstwhile 42 local bodies which have been included in Chennai Corporation have been given the option of joining the Corporation service and those who have preferred to do so are now being absorbed as employees of Chennai Corporation with due inter-se seniority as per rules.

### **3.1 Vision of the Hon'ble Chief Minister - Chennai Mega City Development Mission**

**The Hon'ble Chief Minister's vision is to develop Chennai City as a world class city with infrastructure of international standards. The Hon'ble Chief Minister has announced a path breaking scheme for Infrastructure**

**development in Chennai City – Chennai Mega City Development Mission (CMCDM).** Under this special scheme, Government have provided a sum of ₹500 crore to develop core infrastructure like Roads, Storm water drains, Street lights, foot paths etc., The funds under the Chennai Mega City Development Mission (CMCDM) are also utilized for the provision of integrated water supply and sewerage systems for core city and expanded areas.

Under the Chennai Mega City Development Mission (CMCDM), Government had accorded sanction for an amount of ₹333.27 crore for integrated development of roads with Storm water drains, ducts, Street lights and Street furniture, to bring the newly added areas of Chennai City on par with the core city. The funds are being utilized to provide a complete face lift to the extended areas by laying '**State-of-the-art**' roads with all required utilities.

In order to realise the **vision of Hon'ble Chief Minister**, Corporation of Chennai has undertaken a massive exercise to assess the requirements of the newly added areas in terms of

Infrastructure required by way of roads, street lights, storm water drains, solid waste management etc.

A Comprehensive plan of action in consultation with reputed city planners, well run NGOs, architects and consultants with expertise in the various facets of city development has been prepared.

In the first phase of this special project, 360 roads of 175.36 km have been taken up for integrated development. The roads would be provided with storm water drains, footpaths, carriageway, street lights, bus shelters, street furniture, uniform signages, cycle paths and all other elements which would make them properly designed. The focus of this program is to ensure development of roads in a planned and integrated manner.

The abstract of the works taken up in 2011-2012 under the Chennai Mega City Development Mission is as given below:

Sl. No.	Zone No.	Name of the Zone	No of roads	Length (in Km)	Estimated Amount (₹ in Crore)						Total Amount
					Roads	Storm Water Drains	Foot Paths	Ducts for Cables	Street Lights	Street Furniture	
1	I	Thiruvottiyur	17	7.24	7.57	4.95	2.66	2.89	0.74	1.20	20.01
2	II	Manali	11	11.25	7.43	6.92	4.99	-	1.96	1.63	22.93
3	III	Madhavaram	27	13.34	7.77	4.82	1.13	1.17	0.98	0.89	16.76
4	VII	Ambattur	70	56.07	55.31	20.10	4.65	1.56	3.45	1.37	86.44
5	XI	Valasara vakkam	29	19.48	18.38	22.52	5.11	-	2.03	-	48.04
6	XII	Alandur	106	26.78	26.30	4.65	20.85	-	2.27	1.24	55.31
7	XIV	Perungudi	37	16.06	14.04	20.88	4.63	1.11	1.46	1.04	43.16
8	XV	Sholinga nallur	63	25.14	28.71	6.77	4.30	-	0.84	-	40.62
		Total	360	175.36	165.51	91.61	48.32	6.73	13.73	7.37	333.27

### **3.2 Other Road Maintenance Programmes**

The **Hon'ble Chief Minister** has given a new direction to the road sector by advocating a technological innovation viz., using plastic wastes along with bitumen for laying of roads. The Corporation of Chennai has embarked on a programme by which all bituminous roads are being re-laid using waste plastics, thus ensuring durability and a safe and cost effective solution to the environmental hazard caused by throwaway plastics.

During 2011-12, 79 Km of 118 Bus Route Roads at a cost of ₹51.78 crore and 292 km of 1498 Interior roads at a total cost of ₹ 54.00 crore have been taken up for relaying. All road works are being taken up utilizing thin plastic waste to become plastic bituminous roads. Plastic waste mixed with bitumen increases the strength of the road because of the binding capacity of plastic. A massive drive has been launched in the Corporation for collection of thin plastic waste and much effort has gone into bringing about awareness of the use of waste plastic for laying of roads. On all Wednesdays, thin plastic waste is collected through

conservancy workers at the door steps of the people. The students of Chennai Corporation schools are also being motivated to bring plastic waste from their homes. Private schools and college students are also involving themselves in campaigns for collection of thin plastic. Corporates are also involving themselves in this effort.

The Government have sanctioned ₹150 lakhs in 2011-12 under the Environment Protection and Renewable Energy Development Fund for setting up of shredding, storage units and for IEC activities in all the zones.

### **3.3 Storm Water Drains, Canals and Waterways in Chennai**

#### **3.3.1 Improvements to Micro and Macro Drainage System in Chennai City**

Chennai Corporation is responsible for creating and maintaining the infrastructure for the disposal of storm water in Chennai City. In order to prevent flooding in Chennai City, the Chennai Corporation in association with the Public Works Department has prepared a detailed Project Report



at a cost of ₹ 1448 crore and the same has been sanctioned under the JnNURM scheme.

The Ministry of Urban Development, Government of India has sanctioned the projects in 4 basins as detailed below: -

Sl. No	Name of Basin	Chennai Corporation Component	Public Work department component	Approved amount
		(₹ in crore)		
1.	Northern Basin	277.17	82.69	359.86
2.	Central Basin	261.11	83.89	345.00
3.	Eastern Basin	140.40	303.67	444.07
4.	Southern Basin	136.20	162.78	298.98
	<b>Total</b>	<b>814.88</b>	<b>633.03</b>	<b>1447.91</b>

The project envisages the construction of 290 Km of new drains, remodelling of 183 Km of existing drains and improving 16 canals for a length of 29 Km at an estimated cost of ₹ 814.88 crore. The above works have been divided into 12 water sheds, in 4 basins across the city.

### 3.3.2 Macro Drains undertaken by Public Works Department

Buckingham Canal, Otteri Nullah and Virugambakkam – Arumbakkam Canal are three major waterways being improved by Public Works Department to a length of 65.17 Km. In addition, five new link canals and five tank surplus canals have also been proposed and works are being carried out to a length of 28.62 Km.

### 3.3.3 5000 Storm water drain Inlets and Rain Water Harvesting on Roads

When roads are laid and storm water drains alongside these roads are also built, there is a need to provide scientifically designed inlets. During rains, these inlets help to channelise the rainwater to flow into the storm water drain. To begin with, 5000 storm water drain inlets will be constructed on the roadsides while being integrated with the storm water drain. In addition to the existing efforts, rain water harvesting structures will be provided at every 10 meter interval along the edge of the road.

### 3.4 Solid Waste Management

The generation of Municipal Solid Waste in Chennai City after its expansion has increased to 4000 Metric Tonne per day. To cope with this daunting problem, the Corporation of Chennai is taking several new initiatives. Equipments like compactors, haulage trucks, loaders, mechanical sweepers, bins etc., are being procured at a cost of ₹57.60 crore. A detailed route chart for tricycles and compactor vehicles has been drawn up, to effectively supervise solid waste management activities in the Corporation. A Short Message Service (SMS) pattern of reporting has been evolved for the field staff. The Corporation of Chennai has also outsourced conservancy activities in three Zones to a private operator.

Meanwhile, a major initiative has been launched to tackle the problem of solid waste management by the publication of Expression of Interest at the international level for three distinct aspects relating to solid waste management in Chennai city as follows:

- a) Setting up integrated Municipal Solid Waste processing facilities for the City of Chennai and local bodies requiring assistance from CoC in close proximity to Chennai, to deal with and manage the final disposal of over 2,500 M.T of Municipal Solid Waste on a daily basis.
- b) Remediation and Scientific closure of two major dump yards at Kodungaiyur and Perungudi with a definite timeline.
- c) Street Cleaning, Door-to-door collection of garbage and transportation to integrated processing facilities site in Zones/Wards assigned by Corporation of Chennai in a phased manner with timelines.

### 3.5 Bridges - Ongoing Works

A total of eight bridge works (Rail Over Bridges and Rail Under Bridges) have been taken up under JnNURM funds at a cost of ₹ 120.67 crore to ease traffic congestion. Of these eight works, three works have been completed. The remaining five are in progress. A Grade separator at a cost of

₹23.00 crore is under progress at Mint junction under the Capital Funds of Corporation of Chennai.

### 3.5.1 Action Plan for Bridges – 2012-13

Vehicular traffic in Chennai has increased manifold in the past decade, causing congestion all over the City, mainly in commercial areas like T.Nagar, Egmore and Royapettah etc. To mitigate this situation, feasibility studies for the construction of Grade Separators at the following locations will be done through consultants.

- To link the Grade Separators at Mahalingapuram – North Usman Road and at South Usman Road into a single Grade Separator and taken upto Anna Salai or Extending the South Usman Road Grade Separator upto Anna Salai.
- Adhithanar Salai, Pantheon Road and Dr.Rukmani Lakshmi pathy Road junction.
- College Road, Sterling Road and Valluvar Kottam High Road Junction.
- K.K.Nagar 80 ft. road and Arcot Road junction at Saligramam.

- Mandaiveli Junction near Mandaiveli Bus Stand.
- Bharathi Salai and Royapettah Clock Tower Junction.
- Gandhi Mandapam Salai and Ponniammann Koil Salai Junction at Kotturpuram.

The following small / large Bridges and Subways are proposed across waterways and railway crossings in 2012-13.

- Stephenson Road Bridge across Otteri Nullah
- Rail Over Bridge (ROB) at Villivakkam Level Crossing (LC1).
- Pedestrian Subway across Railway Level Crossing No.1 near Alandur AJS Nidhi Higher Secondary School under deposit scheme by Railways.
- Vehicular Bridge in lieu of existing Foot Bridge across Captain Cotton Canal in Dr.Ambedkar Road, Suzhpunalkarai.
- Additional Box Culvert at Kaliyamman Koil Street, Chinmaiya Nagar across Virugambakkam Canal.

- Box Culvert connecting Solaiamman Koil Street and Sathyavanimuthu Nagar in Ezhil Nagar across Kodungaiyur Canal.
- Box Culvert connecting Loco Scheme Road and 70 Feet Road, Jawahar Nagar.

### **3.6 Conservation of Heritage Buildings**

Two heritage buildings on EVR Periyar Salai - Ripon Building and Victoria Public Hall are being maintained by the Corporation of Chennai. The Ministry of Urban Development, Government of India has sanctioned a sum of ₹ 6.10 crore under JnNURM for the restoration of these two buildings. The work for restoration of Ripon Building is to be completed by December 2012. The restoration work of Victoria Public Hall is due to be completed by July 2012.

### **3.7 Basic Services to Urban Poor (BSUP) – Phase I**

The Ministry of Housing and Urban Poverty Alleviation has sanctioned ₹127.43 crore for providing basic amenities to 236 slums in Chennai City under BSUP component of JnNURM. The project envisages construction of 1370 in situ houses and

improvement of infrastructure including cement concrete roads, Storm Water Drains, Community Toilet, Community centre, Anganwadi, etc. in the selected slums. Out of 1370 housing units, 846 have been completed and construction of 492 units are under progress. All the 1418 infrastructure works that were taken up, have been completed. Out of the savings amount, 124 works have been selected, of which 61 works have been completed and the remaining works are expected to be completed soon.

### **3.7.1 Basic Services to Urban Poor (BSUP) – Phase II**

Another 186 slums have been selected under Phase II of BSUP for improvement of basic amenities in the selected slums at a cost of ₹72.63 crore. 537 infrastructure works have been taken up under this programme, of which 422 have been completed at a cost of ₹ 48.99 crore and the remaining works will also be completed soon.

### **3.7.2. Basic Services to Urban Poor (BSUP) in Expanded Areas**

In the expanded areas of Chennai Corporation covering Tiruvottiyur, Kathivakkam, Madhavaram, Alandur and Ambattur, the BSUP scheme is implemented at an estimated cost of ₹ 23.00 crore. A total number of 1674 housing units were taken up, of which 1241 have been completed. Under the infrastructure component, 120 works have been taken up, of which 93 works have been completed. The remaining works will also be completed soon.

### **3.8 Energy Conservation**

A major drive is being taken up to bring down electricity consumption in the Corporation of Chennai. An energy audit is to be conducted in 2012-13 and a strategy worked out for bringing down electricity consumption by the Corporation by at least 25% this year. This will include replacement of High consumption tube lights with those that require lesser energy, while ensuring that the power factor is above 0.9. Street light monitoring systems are also proposed to be established. Also, Solar street lighting systems have been planned so as to use more and more renewable energy.

## **4. Directorate of Town Panchayats**

Town Panchayat Administration is striving to uplift the standard of living of the people in Town Panchayats by providing better civic services, development of infrastructure facilities and generating employment opportunities to the urban poor.

### **4.1. Ordinary Elections to Town Panchayats – 2011**

Government is committed to strengthen the grassroot democratic institutions. Urban local bodies play an important role in Governmental efforts to improve the standard of living of the people. Hence, in 2011 as soon as the Government assumed power, it took efforts to enable the State Election Commission to conduct elections to local bodies and extended all cooperation thereto. Elections to local bodies were held in October 2011. Chairpersons of Town Panchayats were directly elected by the electors. The first meeting of the newly elected councils was held on 25.10.2011, during which all the elected representatives were sworn in. Indirect election to

the offices of the Vice Chairman was held on 29.10.2011. Further, elections of members to Taxation Appeal Committee and Appointment Committee were held on 21.11.2011.

Not less than one third of the offices and members were reserved for women. Similarly, seats were reserved for SC/ST in proportion of their strength to the total population of the Town Panchayat, within which not less than one third of the seats had been reserved for women. Details of Chairpersons and members so elected are furnished below:

**Chairpersons:**

SI.No.	Category	Number
1	Scheduled Castes (General)	56
2	Scheduled Castes (Women)	28
3	Scheduled Tribes (General)	2
4	Scheduled Tribes (Women)	1
5	Women (General)	148
6	General	294
	Total	529

**Ward Members :**

SI.No.	Category	Number
1	Scheduled Castes (General)	742
2	Scheduled Castes (Women)	667
3	Scheduled Tribes (General)	3
4	Scheduled Tribes (Women)	22
5	Women (General)	2078

6	General	4791
	Total	8303

Orientation training was given to the Chairpersons and Vice Chairpersons by the respective District Collectors. **Comprehensive training to all the elected representatives will be given through the Tamil Nadu Institute of Urban Studies, Coimbatore at a cost of ₹10.00 lakh.**

**4.2 Organisational Setup**

There are 529 Town Panchayats in the State. They are governed under the Tamil Nadu District Municipalities Act, 1920 and classified based on their annual income, as follows: -

SI. No.	Grade	Annual Income (₹ in Lakh)	No.of Town Panchayats
1.	Special Grade	Above ₹ 20.00 lakh	12
2.	Selection Grade	Above ₹ 16.00 lakh up to ₹20.00 lakh	222
3.	Grade – I	Above ₹ 8.00 lakh up to ₹16.00 lakh	215
4.	Grade – II	Above ₹4.00 lakh upto ₹ 8.00 lakh	80
		Total	529

The population of the Town Panchayats, as per Census 2011, is 81,11,258, which constitutes 11.24% of the State's population and 23.21% of the State's urban population. Town Panchayats occupy 62.79% of the total urban area of the State. The Director of Town Panchayats is the Head of the Department. The Assistant Directors look after the administration at the zonal level under the monitoring of the respective District Collectors.

#### 4.3 Services and Functions

Town Panchayats provide a wide range of civic services to the public such as drinking water, street lights, sanitation, solid waste management, roads, drains and pavements, burial grounds and slaughter houses. This apart, they also undertake construction and maintenance of bus stands, community halls and markets. Issuing birth and death certificates and trade licenses, levy and collection of taxes and fees, approval of building plans are the other primary statutory functions of the Town Panchayats.

#### 4.4 Revenue

Property Tax, Profession Tax, Fees, Lease, Rents and User charges are the principal sources of revenue of the Town Panchayats. Surcharge on Stamp duty, apportionment of Entertainment tax, State and Central Finance Commission Devolution Grants are the other important sources of revenue of the Town Panchayats.

#### 4.5 Fund Flow in Town Panchayats

This Government, under **the visionary leadership of the Honourable Chief Minister** has, as a measure to boost the fund availability for developmental activities in the Town Panchayats, announced the **Integrated Urban Development Mission. An unprecedented block amount of ₹250.00 crore** was made available in 2011-12 to the Town Panchayats, under the IUDM for implementation of core infrastructure schemes like roads, storm water drains, water supply, solid waste management, Under Ground Sewerage Schemes, street lights etc.

The Government has ensured that the Town Panchayats receive substantial grants through development schemes, such as the **Tamil Nadu**

**Urban Road Infrastructure Fund, Environmental Protection and Renewable Energy Development Fund, NABARD assisted schemes, tourism development projects, Hill Area Development Programme, Western Ghats Development Programme and Minimum Needs Programme.** Funds are also sanctioned under major schemes such as **the Jawaharlal Nehru National Urban Renewable Mission (JnNURM)** and its sub-components of **the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), the Integrated Housing and Slum Development Programme (IHSDP), the Basic Services to the Urban Poor (BSUP) and the Swarna Jayanti Shahari Rojgar Yojana (SJSRY).**

#### **4.6 Financial outlay**

The total outlay of the Department for the year 2011-12 was ₹1756.99 crore, which includes ₹391.01 crore of own revenue of the Town Panchayats, ₹765.51 crore of Devolution Grant, ₹589.67 crore of development schemes, ₹4.56 crore of subsidy to the TANGEDCO towards reduction in tariff to the Town Panchayats and ₹6.24 crore of

allotment for salary and other allowances of the Directorate of Town Panchayats and the offices of the Assistant Directors of Town Panchayats.

#### **4.7 Infrastructure Development**

Growing urbanization and a high growth rate of urban population have generated a great demand for the creation and maintenance of various core infrastructure facilities such as water supply, solid waste management, underground sewerage schemes, roads, street lights, crematoriums, slaughter houses, parks and playfields etc. in Town Panchayats.

##### **4.7.1. The Integrated Urban Development Mission**

The **flagship Programme** of the Government, the **Integrated Urban Development Mission** has proved to be a boon for the urban local bodies in the State. The Scheme has provided the Town Panchayats with the necessary financial support to take up projects in core infrastructure areas like water supply, solid waste management, storm water drains, Under Ground Sewerage, roads, street lights etc. During 2011-12, a sum of ₹250.80 crore was allotted to



the Town Panchayats under this Scheme. The details are as follows:

Sl.No.	Sector	Allocation (₹ in Crore)
1	Roads	108.15
2	Storm Water Drains	45.69
3	Water Supply	34.92
4	Solid Waste Management	15.64
5	Under Ground Sewerage Scheme	9.67
6.	Others	36.73
	Total	250.80

This Mission will be continued for the year 2012-2013.

#### 4.8 Under Ground Sewerage Scheme

It is the vision of the Honourable Chief Minister that all the Town Panchayats in the State should be covered by Under Ground Sewerage Schemes. The Government is committed to implement UGSS in all the Town Panchayats of the State, in phases. At present, Under Ground Sewerage Schemes have been taken up in 4 Town Panchayats viz. Mamallapuram, Thirumazhisai,

Thiruchendur and Orathanadu at a total cost of ₹54.24 crore. The Detailed Project Reports for the remaining 525 Town Panchayats have been prepared at a cost of Rs.12,850 crore.

#### 4.9 Roads

In order to improve the connectivity and accessibility of Town Panchayats, the Government has given top priority for upgradation of roads in Town Panchayats. Town Panchayats maintain 18553.72 Km of roads of various types such as BT Roads (8777.25 Km), CC roads (4173.17 Km), Metal roads (1441.20 Km), Gravel roads (3246.78 Km) and Earthen roads (915.32 Km). During the year 2011-12, improvement of roads under various schemes was taken up as detailed below:

##### 4.9.1 Integrated Urban Development Mission

Improvement of 575.50 Km of roads in 426 Town Panchayats was taken up at a cost of ₹108.15 crore.

##### 4.9.2 NABARD-RIDF XVII

During the year 2011-12, the Directorate of Town Panchayats accessed ₹97.90 crore as

assistance under the NABARD-RIDF XVII component and 587.47 Km length of roads were improved in 221 Town Panchayats.

A sum of ₹51.31 crore has been provided in the Budget Estimate 2012-13 for this scheme.

#### **4.9.3 The Tamil Nadu Urban Road Infrastructure Fund**

Improvement of 296.47 Km of roads in 339 Town Panchayats was taken up at a cost of ₹50.57 crore in 2011-12.

A sum of ₹50.57 crore has been provided in the Budget Estimate 2012-13.

#### **4.9.4 Environment Protection and Renewable Energy Development Fund**

An amount of ₹18.00 crore was allotted in 2011-12 to the Town Panchayats, with which, BT roads using waste plastics have been taken up for a length of 108.76 Km in 94 Town Panchayats.

**The Honourable Chief Minister's directions** that plastic waste generated in the local

bodies should be utilised to lay roads **has been realised in the Town Panchayats.** It has been ensured that majority of the road works taken up during 2011-12 in the Town Panchayats have used plastic waste.

#### **4.10 Water Supply**

As per the norms of the Tamil Nadu Water Supply and Drainage Board, 499 Town Panchayats are in comfortable position with respect to water supply. Schemes are being taken up to ensure that the remaining Town Panchayats are also provided with adequate water supply. During the year 2011-12, improvement to water supply works have been taken up in 78 Town Panchayats at a cost of ₹7.26 crore under the Integrated Urban Development Mission. The Tamil Nadu Water Supply and Drainage Board has taken up as many as 8 major Combined Water Supply Schemes for execution during 2011-12. 62 Town Panchayats will be benefitted by these Combined Water Supply Schemes.

#### 4.11 Housing

Providing dwelling units to the urban poor with infrastructure facilities such as drinking water, drainage and street lights has been the objective of the scheme of Basic Services to the Urban Poor (BSUP) and Integrated Housing and Slum Development Programme (IHSDP), which are sub-missions of the JnNURM.

Construction of 3144 dwelling units at an estimated cost of ₹43.16 crore has been taken up in 17 Town Panchayats under BSUP. Similarly, construction of 4542 units at an estimated cost of ₹59.45 crore in 25 Town Panchayats has been taken up under IHSDP.

#### 4.12 Solid Waste Management

It is the endeavour of the Government to ensure that the Town Panchayats are maintained in a clean and green manner. Solid Waste Management, therefore, assumes great significance in the Town Panchayats. More than 4100 vehicles are involved in primary collection and 1100 vehicles are utilized for secondary collection of solid waste.

7273 Sanitary workers and over 4400 members of Self Help Groups are involved in solid waste management.

Town Panchayats have taken several **unique initiatives** for solid waste management. These include segregation at source, power from food waste, vermi composting, pelletisation of plastic waste etc. The Town Panchayats have effectively utilised waste plastic for road laying. Similarly, vermi composting has been done commercially thereby adding to the revenue of the Town Panchayats. The Town Panchayats have also utilised the services of well run NGOs in the solid waste management programme.

**Under the Integrated Urban Development Mission, solid waste management has been taken up on priority.**

During the year 2011-12, an allotment of ₹15.64 crore was made for strengthening infrastructure facilities and purchase of vehicles, covering 194 Town Panchayats. These activities would be taken up in more Town Panchayats during the year 2012-13.

#### **4.13 Public Health**

Open defecation affects public hygiene and sanitation besides offending human dignity. The Government is determined to make Tamil Nadu an **open defecation free State**. To achieve this objective, the Town Panchayats will undertake a massive programme of construction of public toilets, repairs to existing toilets as well as an effective IEC campaign.

During the year 2011-12, construction of 52 **Integrated Sanitary Complexes** in 52 Town Panchayats and renovation of 75 sanitary complexes in 62 Town Panchayats have been taken up at a cost of ₹ 5.53 crore.

##### **4.13.1 Toilets for the Differently Abled**

The Government under the able leadership of the **Hon'ble Chief Minister** has taken various measures for the welfare of the differently abled, including provision of Barrier Free Environment for the differently abled, extension of various Welfare Schemes for the differently abled. The Town Panchayats have taken special efforts to provide

toilet facilities for the differently abled and specialized toilets are being constructed. Accordingly, during the year 2011-12, a special programme was implemented for construction of 532 toilets at a cost of ₹9.93 crore in 503 Town Panchayats. Ramps, hand holding bars, suitable seats, alarm and electrification have been provided in the toilets. Special arrangement has been made for body wash. Provision of separate toilets for men and women has been ensured. In the Integrated Sanitary Complexes to be constructed, specialised toilets for the differently abled will also be incorporated.

#### **4.14 Street Lights**

Under the Integrated Urban Development Mission, a thrust has been given to the provision of street lights in the Town Panchayats. An amount of ₹3.12 crore has been provided in 2011-12 for providing street lights. In view of the huge expenditure on current consumption charges, it is proposed to take up an energy audit in Town Panchayats in respect of street lights and water supply. The 3,70,544 street lights in Town

Panchayats will be replaced with **energy efficient lights including solar lights** in phases.

#### **4.15 Part II Scheme**

During the year 2011-2012, construction of office building for the zonal office of the Assistant Director of Town Panchayats, Sivaganga and office buildings for 19 Town Panchayats of Mamallapuram, Mandapam, Periakodiveri, Ponnamaravathi, Nannilam, Cholapuram, Sirugamani, Avinashi, Mecheri, Mettupalayam, Sithayankottai, Eraniel, Kulasekaram, Ayyalur, Ammayanaickanur, S.Kannanur, Poolambadi, Velankanni and Chitlapakkam Town Panchayats was taken up at a cost of ₹5.49 crore. Improvements to Water Supply works were taken up at a cost of ₹2.92 crore in Jegathala, Nilakottai, Cheranmadevi, Sambavarvadagarai, Sundarapandiapuram, Nazareth, Sayarpuram, Vilathikulam, Kanniyakumari, Azhigiapandiapuram, Balapallam, Kappiyarai and Thenthamaraikulam Town Panchayats.

#### **4.16 Infrastructure Gap Filling Fund**

Financial allocation is made from out of the Devolution Grant to bridge gaps in providing infrastructure facilities in Town Panchayats. During the year 2011-12, 155 works covering improvement of water supply, roads, burial grounds, construction of office buildings, gassifier crematoriums and slaughter houses have been taken up at a cost of ₹20.99 crore.

A sum of ₹25.63 crore has been provided in the Budget Estimate 2012-13 for this scheme.

#### **4.17 Operation and Maintenance Gap Filling Fund**

Financial allocation is made from out of the Devolution Grant to bridge gaps in operation and maintenance of infrastructure facilities in Town Panchayats. During the year 2011-12, 84 works covering improvement of water supply, roads, office buildings and bus stands have been taken up at a cost of ₹13.99 crore.

A sum of ₹17.09 crore has been provided in the Budget Estimate 2012-13 for this scheme.

#### **4.18 Poverty Alleviation**

Funds under the Swarna Jayanti Shahari Rozgar Yojana, a Centrally Sponsored Scheme, is being utilised to ensure gainful employment to the urban poor in the Town Panchayats through self employment and wage employment ventures. The scheme is funded by the Government of India and the State Government in the ratio of 75:25. A sum of ₹23.10 crore was allotted for the year 2011-12. The scheme has the following sub components:

##### **4.18.1 Urban Self Employment Programme (USEP)**

It enables individual urban poor to set up gainful self employment ventures by providing subsidized credit, besides technology, marketing, infrastructure, knowledge and other support to them. Each beneficiary is eligible for a maximum project cost of ₹2.00 lakh including 25% subsidy and 5% beneficiary contribution. This component favours a cluster approach. During the year 2011-12, subsidised credit was provided to individual beneficiaries to take up economic activities such as petty trades, milch animals, natural fibre products, catering, repairing electronic goods etc.

#### **4.18.2 Urban Women Self - Help Programme (UWSP)**

Under this component, subsidised credit is provided to groups of urban poor women to set up gainful self employment ventures and also a revolving fund for Self Help Groups / Thrift and Credit Societies formed by urban poor women. The groups are eligible for a subsidy of ₹3.00 lakh or 35% of the cost of the project or ₹60,000 per member of the group, whichever is less. The remaining amount will be mobilised as bank loan and margin money. During the year 2011-12, subsidised credit was provided for taking up economic activities such as readymade garments, brick kiln, retail vending of vegetables, weaving etc.

#### **4.18.3 Skill Training for Employment Promotion amongst Urban Poor (STEP-UP)**

This component focuses on providing assistance for skill formation/ upgradation of the

urban poor to enhance their capacity to undertake self employment as well as access to better salaried employment. Women shall constitute not less than 30% of the beneficiaries. SC and ST must be benefitted atleast to the extent of proportion of their strength in the BPL population of the town. Special provision of 3% reservation should be made for the differently-abled. The average unit cost allowed for training will not exceed ₹10,000 per trainee. During the year 2011-12, skill training was given in activities such as, repairing electronic goods, tailoring, covering jewellery, first-aid service, computers etc.

#### **4.18.4 Urban Wage Employment Programme (UWEP)**

This component aims at utilising the labour of the urban poor for the construction of socially and economically useful public assets. Material and labour component of works under this component shall be maintained at 60:40 ratio. During the year 2011-12, road and drain works were taken up.

#### **4.18.5 Urban Community Development Network (UCDN)**

This component relies on establishing and nurturing community organizations and structures like Neighbourhood Groups (NHGs), Neighbourhood Committees (NHCs) and Community Development Societies (CDSs) that facilitate sustained urban poverty alleviation. During the year 2011-12, action was taken to train the groups in identification of beneficiaries, preparation of project reports, preparation of loan and subsidy applications, monitoring of recovery and providing other support necessary for the programme.

#### **4.19 Financial Devolution**

##### **4.19.1 State Finance Commission Grant**

During the year 2011-12, an allotment of ₹664.83 crore was provided as SFC grant for the Town Panchayats. Out of this, a sum of ₹55.90 crore has been released to the Town Panchayats at the rate of ₹10.00 lakh per Town Panchayat as minimum lumpsum grant. The balance amount has been apportioned among the Town Panchayats on population basis. The grant is used for meeting establishment cost, repayment of loans and O & M

charges. A sum of ₹811.59 crore has been provided in the Budget Estimate 2012-13.

##### **4.19.2 13<sup>th</sup> Central Finance Commission Grant**

The 13<sup>th</sup> Central Finance Commission grant is being allotted annually to the Town Panchayats for the period from 2010-11 to 2014-15. The allotment has two components, namely General Basic Grant and General Performance Grant. During the year 2011-12, ₹76.11 crore was allotted under Basic Grant and ₹24.57 crore was allotted under Performance Grant.

A sum of ₹84.00 crore under Basic Grant and ₹57.65 crore under Performance Grant has been provided in the Budget Estimate 2012-13.

#### **4.20 Rain Water Harvesting**

The **Rain Water Harvesting movement** launched in 2001 was **the brainchild of the Honourable Chief Minister**. It has had a tremendous impact in recharging the groundwater table all over Tamil Nadu. Amendments to the



provisions of Tamil Nadu District Municipalities Act, 1920 and Building Rules issued there under, have made rain water harvesting mandatory in every building in the Town Panchayats. During 2011-12, in order to give a **fillip to this laudable programme**, the Town Panchayats have undertaken the construction of new RWH structures and renovation of old RWH structures. IEC activities are being carried out in Town Panchayat areas to sustain the momentum of the programme.

#### **4.21 Animal Birth Control**

The World Health Organization has recommended to implement the Animal Birth Control Programme as an alternative to inhuman killing of dogs. The Government of India notified the Animal Birth Control (Dogs) Rules 2001 as required under sub-section 1(9) of section 38 of the Prevention of Cruelty to Animals Act, 1960.

During the year 2011-12, 4762 dogs were sterilized in Town Panchayats.

#### **4.22 Thane Cyclone – 2011**

16 Town Panchayats in Cuddalore District and 15 Town Panchayats in Villupuram District witnessed extensive damages to infrastructure facilities, caused by the **Thane** Cyclone storm which hit the districts on 30.12.2011. Steps were taken on a war footing by the Town Panchayats to provide water supply by hiring generators till power supply was restored. Water Supply was provided through tankers to fulfill the immediate needs of the public. Conservancy workers were mobilised from the Town Panchayats of other districts to clear the debris and fallen trees and to attend to sanitation and chlorination of drinking water sources. 6676 street lights in the Town Panchayats of Cuddalore District and 3649 street lights in the Town Panchayats of Villupuram District were restored on a war footing. Damaged roads in the Town Panchayats were repaired at a cost of ₹ 9.35 crore.

Restoration activities in the Town Panchayats of the Thane Cyclone affected districts were undertaken at a total outlay of ₹11.05 crore.

#### **4.23 Staff Welfare**

In order to strengthen the administrative machinery of the Town Panchayats, **225 vacancies**

**have been filled up at various levels of the department during 2011-12. 11 Bolero Jeeps have been ordered to be provided to the Assistant Directors of Town Panchayats at a cost of ₹55.55 lakh, for better monitoring of scheme implementation and general administration, besides attending to public grievance redressal. Free SIM Cards have been ordered to be provided at a cost of ₹19.84 lakh to 570 officials of the department for effective communication.**

#### **4.24 Satellite Town**

Sriperumbudur Town Panchayat of Kancheepuram District has been selected as a Satellite Town under the Centrally Sponsored Scheme of Urban Infrastructure Development. The objectives of the scheme are to reduce pressure on million plus Urban Agglomerations by developing infrastructure facilities in the Satellite Towns and to sustain them by implementing reforms such as energy audit, water audit, introduction of cost effective technologies and capacity enhancement for improved Operation & Maintenance. The scheme encourages Public Private Partnerships in the

development of the satellite town. Reservation of 10-15% of housing sites for the urban poor and promotion of the urban local body level reforms are the other objectives of the scheme. Under the scheme, 3 projects covering the core sectors of water supply, UGSS and solid waste management will be taken up at a cost of ₹101.37 crore. The cost would be shared by the Government of India, Government of Tamil Nadu and the Sriperumbudur Town Panchayat in the ratio of 80:10:10.

## **5. Chennai Metropolitan Water Supply and Sewerage Board**

The Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB), constituted in 1978, is vested with the responsibility of promoting and securing the planned development of water supply and sewerage services, creation, operation and maintenance of the needed infrastructure and implementation of perspective plans to meet both current and future requirements in the areas falling under Chennai Metropolitan limit.

### **5. 1 Operational Area of CMWSSB**

The operational area of the CMWSSB has increased from 174 sq.km. to 426 sq.km., consequent on the recent inclusion of 42 adjacent local bodies within the Chennai City limits. As per the 2011 census, provisional population of the expanded Chennai city is 67.27 lakh. The CMWSSB is currently operating its services through 15 Area Offices and 200 Depot Offices.

## **5.2 Water supply**

### **5.2.1 Sources of drinking water to the city**

Providing safe drinking water in adequate quantity to people of Chennai city is the prime endeavour of the Board. The drinking water requirement of Chennai city is met by drawing raw water from the surface reservoirs around Chennai city- Poondi, Redhills, Cholavaram, Chembarambakkam and also from Veeranam lake in Cuddalore District. Water is also received from the Kandaleru reservoir under Krishna Water Supply Project. In addition to this, CMWSSB is drawing about 100 MLD of water from the Desalination Plant at Minjur constructed on Design, Build, Own, Operate and Transfer (DBOOT) basis.

At present, the Board supplies about 765 MLD (Million Litres per Day) to domestic consumers in the City area and about 65 MLD of water to bulk consumers such as adjacent local bodies and industries located in Chennai Metropolitan Area. CMWSSB is taking necessary action to streamline water supply facilities to the areas which have been

recently included within the Chennai City Corporation limits.

### 5.2.2 Growth in Operation of Water Supply

In the past 34 years of its functioning, the Board has enhanced its capacity and infrastructure for delivery of treated water as below:

Details	Status in 1978	Present status
Operational area (sq.km)	174	426
Population (in lakh)	30	67.27 (Provisional)
<b>Water Supply</b>		
Water Supply (MLD)	240	830
Length of water mains (Km)	1,250	2,930
Distribution stations	3	16
Water treatment capacity (MLD)	182	1,394
Consumers	1,16,000	5,18,514

### 5.2.3 Augmentation of city water supply sources

All the sources of water supply to Chennai City are dependant on the monsoon and whenever there is deficiency in rainfall, the city

experiences water scarcity. Moreover, Chennai and its surrounding areas have experienced high population and economic growth. This had led to rapid development resulting in a sharp increase in water demand and thereby exerting pressure on the Board to identify new water resources. Taking into account the long-term drinking water requirements of the City and to develop a drought proof Metropolitan city, the **Hon'ble Chief Minister of Tamil Nadu during the year 2003 had ordered the setting up of a Sea Water Reverse Osmosis Desalination Plant to augment water supply.**

### 5.2.4 Desalination Plants

In order to bridge the demand-supply gap and as a drought proofing measure, a 100 MLD capacity Desalination Plant at Minjur on Design, Build, Own, Operate and Transfer (DBOOT) basis with an agreement period of 25 years was commissioned.

In addition to the 100 MLD capacity Sea Water Reverse Osmosis Desalination Plant at Minjur, in order to cater to the needs of the

Southern part of Chennai city, another Sea Water Reverse Osmosis Desalination Plant at Nemmeli of 100 MLD capacity has been taken up with financial grant from Government of India and the works are under progress. The plant is expected to be commissioned soon.

**Considering the growth and expansion of Chennai City, this Government has proposed to set up another 400 MLD Desalination Plant south of Chennai.** Action has been initiated to identify land and to fix the consultancy for conducting feasibility studies, including financial viability, preparation of Detailed Project Report, tender Documents and Evaluation of bids for the proposed plant.

#### **5.2.5 Second Transmission main from Chembarambakkam Water Treatment Plant upto Poonamallee bye-pass junction**

In order to convey the full intended quantity of 530 MLD of treated water, Government has sanctioned laying of the second parallel line of 2000 mm dia pipeline, for a length of 6.5 km from Chembarambakkam Water Treatment Plant upto

the Poonamallee bye-pass junction. Action has been initiated to carry out the work at an estimated cost of ₹ 41.35 Crore.

#### **5.2.6 On going Water Supply Schemes**

<b>Sl. No.</b>	<b>Name of the Work</b>	<b>Sanctioned cost (₹in crore)</b>	<b>Status of implementation</b>
<b>Projects for Chennai City</b>			
<b>1</b>	Improvement works to water supply system in Chennai city	322.00	5 works completed and other works are in progress.
<b>2</b>	Maduravoyal	23.30	Work in progress
<b>3</b>	Ullagaram-Puzhuthivakkam	24.24	Work in progress
4	Thiruvottiyur	85.11	Work in progress
5	Alandur	64.39	Work in progress
6	Ambattur	267.08	Work in progress
7	Nerkundram	19.17	Work in progress
<b>Other Local Bodies</b>			
8	Avadi Municipality	103.84	Work in progress
	<b>Total</b>	<b>909.13</b>	

Water supply schemes for Avadi, Ambattur, Maduravoyal, Ullagaram-Puzhuthivakkam,

Thiruvottiyur, Alandur and Nerkundram have been taken up under Jawaharlal Nehru National Urban Renewal Mission (JnNURM) funds and all the schemes are in progress. The details are as given below:

### 5.2.7 Water Supply to Below Poverty Line (BPL) families in Chennai city

- At present, the Board supplies water through 1,394 trips of lorries to the (BPL) families in 314 number of streets.
- It is now proposed to provide house service connections to each of the BPL families in these areas instead of mobile lorry supply.
- A DPR has been prepared for ₹23.56 crore for laying additional water mains in unserved areas of slums, erection of new public fountains and new water connections to supply water to BPL families.

## 5.3 Sewerage System

### 5.3.1 Growth in Sewerage service

Details	Status in 1978	Present status
Length of sewer mains (Km)	1,223	2,677
No. of pumping stations	58	209
Sewage treatment capacity (MLD)	57	558
No. of consumers	1,14,000	6,11,275

### 5.3.2 Ongoing Sewerage Schemes

The sewerage schemes for Avadi, Ambattur, Tambaram, Maduravoyal, Thirumazhisai, Perungudi, Porur, Ullagaram-Puzhuthivakkam and Pallikaranai have been taken up under JnNURM funds and all the schemes are in progress. The status of schemes is presented below:

Sl. No.	Name of the Work	Sanctioned cost (₹in Crore)	Status of implementation
<b>Projects for Chennai City &amp; newly added areas</b>			

Sl. No.	Name of the Work	Sanctioned cost (₹in Crore)	Status of implementation
<b>Projects for Chennai City &amp; newly added areas</b>			
1	Providing water supply and sewerage facilities along Rajiv Gandhi Salai (IT Corridor)	41.77	Work in progress
2	Additional 60 MLD Sewage Treatment Plant at Perungudi	31.48	Completed.
3	Additional 54 MLD Sewage Treatment Plant at Nesapakkam	54.57	Work in progress
4	Ullagaram-Puzhuthivakkam	28.08	Work in progress
5	Ambattur	130.91	Work in progress
6	Maduravoyal	57.45	Work in progress
7	Porur	38.29	Work in progress
8	Perungudi	20.19	Work in progress
9	Pallikaranai	58.61	Work in progress
Other Local Bodies			
10	Avadi Municipality	158.05	Work in progress
11	Tambaram Municipality	160.97	Work in progress
12	Thirumazhisai Town Panchayat	20.47	Work in progress

Sl. No.	Name of the Work	Sanctioned cost (₹in Crore)	Status of implementation
<b>Projects for Chennai City &amp; newly added areas</b>			
	<b>Total</b>	<b>800.84</b>	

### 5.3.3 Works taken up under TNUDP-III

#### Thiruvottiyur Under Ground Sewerage Scheme

Improvement and extension of the Under Ground Sewerage Scheme in Thiruvottiyur has been taken up at an estimated cost of ₹ 87.63 crore. The work is in progress.

#### Madhavaram Under Ground Sewerage Scheme

The Underground Sewerage Scheme for Madhavaram has been taken up at an estimated cost of ₹ 50.22 crore and work is in progress.

#### Ambattur Sewerage Scheme Phase –I

The Underground Sewerage Scheme for Ambattur Phase –I (balance works) has been taken up at an estimated cost of ₹ 65.75 crore and works are in progress.

### 5.3.4 Mechanisation of Sewer Operation and Maintenance

For modernisation of sewer operation, the Board has initiated action to mechanise the operation and maintenance of the sewerage system. There are 83 numbers of Jet Rodding Machines and 70 numbers of Desilting Machines in operation. In 2011-12, the Government has sanctioned and released a sum of ₹ 200.00 lakh for procurement of 10 additional numbers of jet rodding machines for the Operation and Maintenance Department of CMWSS Board. The Government has also directed the CMWSSB to procure 20 numbers of desilting machines at an estimated cost of ₹ 271.00 lakh and these machines have been procured.

### 5.3.5 Chennai Mega City Development Mission

#### Improvements to Water supply and Sewerage Schemes in Chennai City and Added Areas

- In order to achieve the aim of the **Hon'ble Chief Minister of creating world class infrastructure for Chennai City**, the Government of Tamil Nadu in 2011-12 have

launched the Chennai Mega City Development Mission so as to improve the infrastructure and basic amenities in Chennai City and the newly added areas of Chennai Corporation.

- The CMWSSB has prepared Detailed Project Reports (DPRs) for strengthening the existing water supply and sewerage system in Chennai City and improvements in the added areas. **In 2011-12 the Government have sanctioned an amount of ₹ 189.10 crore to CMWSSB under the Chennai Mega City Development Mission for the provision of integrated water supply and sewerage system to Chennai City and newly added areas of Chennai Corporation.** The details of works are as follows:

Sl. No.	Category of works	Amount sanctioned ₹ in Crore
1	Laying of force mains between pumping stations	9.26
2	Enlargement of Sewage Pumping Mains	32.43
3	Laying of water supply lines in	23.56



	uncovered areas of Slums to supply water to Below Poverty Line (BPL) families	
4	Providing Under Ground Tanks and Water filling points in Newly Added areas	12.23
5	Re-routing of Sewage Pumping Mains	22.98

6	Insertion of manholes at various locations in newly added area of Ambattur (Mugappair), construction of Roadside pumping stations and providing submersible pumpsets	15.61
7	Replacement of choked up water mains / PVC mains	20.71
8	Improvement to existing Sewage Pumping stations	11.24
9	Procurement of 35 Nos. of Jet Rodding machines and 50 Nos. of Desilting machines	9.90
10	Enlargement of sewer mains	31.18
	Total	189.10

### 5.3.6 Construction of Mini Sewage Pumping Station and allied works at Gandhi Nagar, Virugambakkam

In order to improve the functioning of the Sewerage system in Gandhi Nagar area, steps to set up a new Mini Sewage Pumping Station at an

estimated cost of ₹ 282 Lakh at Gandhi Nagar Main Road to benefit a population of 10,450 in 63 streets has been initiated.

### 5.3.7 Waste Water Management

- A comprehensive Action Plan for Waste Water Management to improve and integrate the sewerage system in Chennai and its suburban areas, complete treatment and Recycling of Waste Water and to prevent the entry of sewage into the City's River System, has been prepared. This will facilitate an integrated management of Waste Water besides protecting the City River System from pollution.
- The present operations of CMWSSB covers an extent of 426 sq.km which includes newly added areas. The sewage generated from the house sewer connections is linked to a sewerage system having a length of about 2,677 km and which is collected in 209 sewage pumping stations. The five zones of the macro system covering the entire city, have independent zonal collection, conveyance, treatment and disposal facilities. The sewage

from pumping stations is conveyed to 11 Sewage Treatment Plants.

- A Sewage Treatment plant is under construction in Nesapakkam. Action has been initiated to construct sewage treatment plants at Thiruvottiyur, Sholinganallur, Koyambedu and Navalur. It is also proposed to provide two Sewage Treatment Plants at Villivakkam and Perungudi.
- The **Hon'ble Chief Minister** is very keen to protect the waterways and water bodies from the pollution caused by untreated sewage being let into them. All the water ways within Chennai city have been perambulated and 105, 183 and 49 ( a total of 337) sewage outfalls have been identified in the Cooum river basin, the Buckingham canal and the Adyar basin respectively. It has been proposed to plug all the 337 numbers of outlets to prevent untreated sewage from entering into the Chennai City Waterways and to treat this sewage before letting it out, at a cost of ₹ 300 Crore.

### 5.3.8 Recycling of Waste Water

The Government, as a policy promotes the recycling of sewage to meet purposes other than drinking. The CMWSSB has initiated action to put up a 45 MLD Tertiary Treated Reverse Osmosis Plant in Koyambedu at a cost of ₹ 90 Crore. More such projects will be implemented under PPP mode for recycling sewage to meet industrial needs. This would solve environmental problems and also take care of the water supply needs of the industries in and around Chennai City.

### 5.4 Newly Added areas

Consequent on the recent expansion of Chennai Corporation, the area of operation of CMWSSB has increased from 174 sq.km to 426 sq.km. Engineering staff and Tax collection staff have been posted in the newly added areas for operation and maintenance of the available infrastructure facilities and services. Steps are being taken to upgrade the infrastructure and services at the earliest.

#### 5.4.1 Water Supply Initiatives in Newly Added Areas

- About 76 MLD of Water is being supplied through the pipeline system. About 2.5 MLD of water is supplied through mobile water tankers.
- The number of tanker lorries has been increased from 62 to 94 and the quality of water is being checked periodically.
- Wherever feasible, the Board is in the process of supplying water by tapping the nearby Metro water source, with construction of Under Ground Tank, providing filling points and erection of HDPE Tanks as immediate measures.

#### **5.4.2 Existing and proposed Water supply schemes in newly added areas**

- Out of the 42 local bodies recently included within the Chennai Corporation limits, Kathivakkam and Valasaravakkam are already having water supply schemes. The water supply scheme for Porur has been completed recently. Water supply schemes in 6 areas namely Thiruvottiyur, Maduravoyal, Nerkundram, Ullagaram-Puzhuthivakkam, Alandur and Ambattur are in progress and measures have been taken to expedite their implementation. The water supply scheme for Madhavaram is to be taken for implementation in 2012-13.

- The CMWSSB has drawn up a detailed Plan of Action to cover the remaining 32 local bodies.

#### **5.4.3 Sewerage initiatives in Newly Added Areas**

- To attend the sewer complaints, Jet Rodding machines and Desilting machines are deployed.
- Sewer lorries are engaged for removal of sewage wherever required.
- Out of the 42 newly added areas included within the Chennai Corporation limits, Valasaravakkam and Alandur already have sewerage schemes. Sewerage schemes in 8 erstwhile local bodies namely Thiruvottiyur, Madhavaram, Ambattur, Maduravoyal, Porur, Ullagaram-Puzhuthivakkam, Perungudi and Pallikaranai areas are under progress. Action has been initiated for part commissioning of some of these schemes for the immediate benefit of the public.
- For newly added 18 local bodies, Detailed Project Reports have already been prepared. For the remaining 14 newly added areas, the Detailed Project Reports are under preparation.

#### **5.5 Global Positioning system**

In order to track the movement of water carrying tankers and to prevent the possible pilferage of water, the CMWSSB initiated a scheme to install Global Positioning System (GPS) in all the water carrying tankers of the CMWSS Board in 2011-12. The work is in progress.

#### **5.6 Measures for Customer care and comfort:**

The Board has taken various steps to improve service delivery and for the speedy redressal of consumer grievances. Some of them are as follows:

##### **5.6.1 Complaints Monitoring System**

All Area Offices, Depot Offices and Head Office are interlinked through a Wide Area Networking (WAN). All consumers, irrespective of their location, can register their grievances in any of the offices over phone or in person and the registered grievances are instantly transferred through the Grievances Monitoring System to the concerned Depot office for necessary action. Action taken on such grievances / complaints is also monitored through this system.

##### **5.6.2 Grievance Monitoring System using SMS**

The Short Message Service (SMS) has also been implemented in the Board, by which any Consumer can register a complaint over mobile phone and get an acknowledgement for the complaint from Metro water by SMS. Complaints so received are automatically forwarded by the Grievances Monitoring System to the relevant Depot Engineer through SMS, in order to take remedial action. After redressal of the complaint, the action taken is informed to the consumer through SMS.

##### **5.6.3 Complaints redressal through website**

Consumers can also register their complaints through the Board's website i.e. [www.chennaietrowater.tn.nic.in](http://www.chennaietrowater.tn.nic.in) and also through e-mail [cmwssb@md2.vsnl.net](mailto:cmwssb@md2.vsnl.net). The registered complaints are redressed as per Citizen's Charter and the consumers are informed through e-mail.

##### **5.6.4 Open House Meeting**

To improve service delivery, the Board is conducting Open House Meetings in all the Area Offices between 10.00 A.M. and 1.00 P.M. on every 2<sup>nd</sup> Saturday of the month. These meetings are presided over by the Senior Officers of the Board.

The complaints / grievances / suggestions received during these meetings are attended to immediately.

#### **5.6.5 Complaints monitoring - 24x7**

A round the clock complaint cell is also functioning at the Head Office of the Board. Consumers can register their complaints / grievances either in person or by dialing 28454040/45674567. The registered complaints are immediately transferred online to the concerned Depot Engineers and also by an SMS through the mobile phone and attended to immediately.

#### **5.7 Information Technology related initiatives**

- Two nos. of Cheque / DD deposit Kiosks were installed at Anna Nagar and Adyar Area offices for collection of water tax and charges using Intranet facilities in the month of November 2011 at a cost of ₹4.98 lakh. As on 31<sup>st</sup> March 2012, ₹19.69 lakh has been collected from 1029 consumers through these kiosks.
- A Personal Information System for the CMWSSB staff developed by National Informatics Center is under implementation in the Board.

- For monitoring the on-going projects in the Board, a work monitoring system has been developed and implemented in the Board from the month of January 2012.

#### **5.8 Rain Water Harvesting**

**Rain Water Harvesting is the brain child of Hon'ble Chief Minister.** Consistent and concerted steps have been taken by the CMWSSB to create awareness about the benefit of Rain Water Harvesting among the people of Chennai City.

Considering the importance of Rainwater harvesting in conserving precious ground water resource, the CMWSSB has taken the initiative to constitute a fully dedicated **"Rainwater Harvesting Cell"**.

- The Chennai Metropolitan Area Ground Water (Regulation) Act 27 of 1987 has been amended in October 2002 to make the installation of Rainwater Harvesting structures mandatory for all the buildings in Chennai City.

- In order to get new water and sewer connections, Rainwater Harvesting structures have been made mandatory for all the buildings (irrespective of size and area).

Ground water levels and quality in Chennai Metropolitan area are being monitored every month through observation wells. Following the implementation of the Rain Water Harvesting scheme, the ground water levels and its quality in Chennai city is improving year after year.

## **6. Tamil Nadu Water Supply and Drainage Board**

The Tamil Nadu Water Supply and Drainage Board (TWAD Board) was formed on 14.04.1971 as an autonomous organisation with the stated objective of providing Water Supply and Drainage facilities to Rural and Urban areas of Tamil Nadu, excluding the Chennai Metropolitan Area. TWAD Board over the years, has built up its capacity and capability considerably in all sectors and is ensuring effective implementation of Water Supply and Sewerage Schemes. The TWAD Board is headed by the Managing Director who is supported by the Technical, Financial and Administrative Wings. At

present, the TWAD Board has four Chief Engineers with Headquarters at Vellore, Thanjavur, Coimbatore and Madurai and one Project Chief Engineer at Dharmapuri.

### **6.1 Activities of TWAD Board**

- Planning, Investigation, Design, Implementation and Commissioning of Water Supply and Sewerage Schemes in Rural and Urban areas.
- Operation and Maintenance of Combined Water Supply Schemes.
- Water Quality Monitoring and Surveillance Programme.
- Activities on Sustainability of Drinking Water Sources.
- Training Activities.

### **6.2 Rural Water Supply Programme**

The norms prescribed by the Government of India for protected water supply scheme to Rural population is 40 litres per capita per day (40 lpcd). Water Supply Schemes to Rural Habitations are implemented based on surveys, to assess their sufficiency status. Rural Water Supply Schemes are being implemented with State Government Funds under the Minimum Needs Programme (MNP) and

Central Government Funds under the National Rural Drinking Water Programme (NRDWP).

### 6.2.1 Achievements in Rural Water Supply during 2011 – 2012

During 2011-12, 6,000 partially covered Rural Habitations have been provided with drinking water supply. The details are as given below:

Sl. No.	Description	No. of Habitations covered
1	Coverage through Individual Power Pump Schemes	389
2	Coverage of Quality Affected Habitations	77
3	Coverage through Combined Water Supply Schemes	582
4	Coverage through revamping works in existing Combined Water Supply Schemes maintained by TWAD Board	4,952
<b>Total</b>		<b>6,000</b>

### 6.2.2 Source Sustainability

With a view to enhance the Sustainability of the drinking water Sources, the TWAD Board has taken up construction of Recharge Structures under

the Government of India and State Government Assisted Programmes.

During 2011-12, 769 Recharge Structures (647 Check dams and 122 Recharge shafts) have been completed as targeted.

### 6.2.3 Combined Water Supply Schemes

**In order to give a more Sustainable and Potable Water Supply to the public, the TWAD Board formulates and implements Combined Water Supply Schemes in coastal, quality affected and needy areas by combining more than one local body and based on common source of water supply viz., Rivers, Dams and Reservoirs. These are a testimony to the Engineering expertise of the TWAD Board.**

During 2011-12, 34 such schemes were under implementation with financial assistance from the Minimum Needs Programme (MNP), the National Rural Drinking Water Programme

(NRDWP), Jawaharlal Nehru National Urban Renewal Mission (JnNURM) / Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).

The following 12 Combined Water Supply Schemes **have been completed at an estimated cost of ₹85.22 crore in 2011-12, benefitting a total population of 3.76 lakh.**

Sl. No.	Name of the scheme	Estimate amount (₹ in lakh)	Population benefitted
1	<b>CWSS to Konur and 16 other Habitations</b> in Reddiarchatiram Union in Dindigul District	49.80	8,355
2	<b>CWSS to Subramaniapuram and 6 other Habitations</b> in Aranthangi union in Pudukottai District.	29.00	5,151
3	<b>CWSS to Kadanadu</b> and 3 other Village Panchayats in Udhagamandalam Union in The Nilgiris District.	1,854.00	35,855
4	<b>CWSS to 53 habitations in Pillapalayam</b> and 6 other panchayats in	621.00	30,225

Sl. No.	Name of the scheme	Estimate amount (₹ in lakh)	Population benefitted
	Krishnarayapuram union in Karur District.		
5	<b>CWSS to 17 Habitations in Brammadesam</b> and 3 other Village Panchayats in Ambasamudram Union in Tirunelveli District.	96.31	14,175
6	<b>WSIS to 10 Rural Habitations</b> in Vilpatty Panchayat of Kodaikanal union in Dindigul District.	75.00	3,559
7	<b>WSIS to 4 Rural Habitations in Vilpatti panchayat</b> in Kodaikanal union in Dindigul District.	39.68	1,822
8	<b>CWSS to Moovanur and 44 Habitations</b> in Musiri and Manachanallur Union in Trichy District	554.00	22,426
9	<b>CWSS to Vellur and 24 habitations</b> in Musiri union in Trichy District	322.60	13,031
10	<b>CWSS to Thenpoondipattu</b> and 9 other Habitations in Cheyyar union in Thiruvannamalai District.	83.39	4,048



Sl. No.	Name of the scheme	Estimate amount (₹ in lakh)	Population benefitted
11	<b>CWSS to 706 Rural habitations</b> in Arimalam, Aranthangi, Avudayarkoil and Manamelkudi Unions and Aranthangi Municipality in Pudukottai District with Bulk Provision to 120 Habitations in Pudukottai and Thanjavur Districts.	3,909.09	2,01,335
12	<b>CWSS to Chengam, Pudupalayam Town Panchayats</b> with bulk provision to 40 wayside habitations in Chengam, Pudupalayam unions in Thiruvannamalai District.	888.00	36,400
	<b>Total</b>	<b>8,521.87</b>	<b>3,76,382</b>

Remaining 22 CWSS at a cost of ₹264.54 crore benefitting a population of 17.19 lakh are under implementation across 12 Districts.

#### 6.2.4 Providing 4<sup>th</sup> Wire / Separate Feeder Mains for CWSS

The Government have sanctioned an amount of ₹ 12.25 crore in G.O.Ms. No.2,

MA&WS(WS4), dated 09.01.2012 to take up works for providing separate feeder main and 4<sup>th</sup> Wire Connection to the following CWSS which are under trial run/ Contractor's maintenance to ensure the designed quantity of water supply.

Sl. No.	Name of the Scheme	Present Stage
	<b>I. Separate feeder main</b>	
1	CWSS to Villukuri, Aloor Town Panchayats and 53 Habitations in Kanniyakumari District.	Work under progress
2	CWSS to Edaicode, Pazhugal Town Panchayats and 32 Habitations in Kanniyakumari District.	Work under progress
	<b>II. 4<sup>th</sup> wire connection</b>	
1	<b>CWSS to 54 Rural Habitations</b> in Veppilai and Kanavaipudur panchayats in Salem District.	Work under progress
2	<b>CWSS to 72 Rural Habitations</b> in Kosur and 5 other Panchayats in Karur District	Work under progress
3	<b>CWSS to 53 Rural Habitations</b> in Pillapalayam and 6 other panchayats in Karur District	Work under progress
4	<b>CWSS to Vayalcheri and 19 Rural Habitations</b> in Sivagangai District	Work under progress

### 6.2.5 Major Combined Water Supply Schemes

The following 8 Major Combined Water Supply Schemes have been taken up for implementation during 2011-12, at a total cost of ₹ 3,276.62 crore and are in progress.

SI . N o.	Name of the scheme	Estimate Cost (₹ in crore)	Population benefitted (in lakh)
1	Combined Water Supply Scheme to Melur and 2 Other Municipalities, 6 Town Panchayats and 1,430 Rural Habitations in 8 Unions of Madurai District and 1 Town Panchayat in Sivagangai District with River Cauvery as source.	784.00	15.92
2	Augmentation of Water Supply to Palladam Municipality, 23 Town Panchayats and 965 Rural Habitations in 8 Unions of Coimbatore and Tiruppur Districts with Pillur Dam as source.	224.92	12.29
3	Combined Water Supply Scheme to 7 Town Panchayats, 395 Rural Habitations in Rajapalayam, Srivilliputhur, Watrap(Part) and Sivakasi (Part) unions in Virudhunagar District, with River Tamiraparani as source, near Mukkudal.	173.00	4.82

SI . N o.	Name of the scheme	Estimate Cost (₹ in crore)	Population benefitted (in lakh)
4	Combined Water Supply Scheme to 637 Rural Habitations in Aruppukkottai, Kariyapatti, Thiruchuli, Narikkudi and Virudunagar (Part) Unions in Virudhunagar District with River Tamiraparani as source near Vallanadu	190.00	4.24
5	Combined Water Supply Scheme to 755 Rural Habitations in Sattur, Vembakkotai, Sivakasi, Virudhunagar(Part). Watrap(Part), Srivilliputhur(Part) and Aruppukkottai(Part) Unions in Virudhunagar District with River Tamiraparani as source near Seevalaperi	234.00	6.51
6	Combined Water Supply Scheme to 295 Quality affected Habitations and 315 wayside Habitations in Sirkali, Kollidam, Sembanarkoil and Mayiladuthurai Unions in Nagapattinam District	105.70	3.70

7	Combined Water Supply Scheme to Athur and Narasingapuram Municipalities, 20 Town Panchayats and 1345 Rural Habitations in 12 Unions of Salem District	270.00	13.09
8	Combined Water Supply Scheme to Vellore Corporation, 11 Municipalities, 5 Town Panchayats and 944 Rural Habitations of Vellore District with Cauvery as source	1,295.00	<b>24.46</b>
	<b>Total</b>	<b>3,276.62</b>	85.03

#### 6.2.6 Revamping of Combined Water Supply Schemes

Revamping works are taken up in the age-old Combined Water Supply Schemes maintained by TWAD Board in which a reduction in yield of sources, a decrease in the efficiency of pumpsets and damages in pipe lines, valves due to road widening etc. are encountered. These Revamping works are carried out to make the CWSS fully functional and to enhance the supply to the designed quantity of water to the beneficiaries.

During 2011-12, **943 revamping works covering 4,952 habitations** have been completed under MNP / NRDWP Assistance at a **cost of**

**₹101.69 crore.** The category-wise works completed are as below:

Sl. No.	Category	No. of works	Estimate cost (₹ in crore)
1	Source Augmentation	33	5.45
2	Booster Pumping Stations	18	2.73
3	Sumps	91	7.41
4	Replacement of aged Pumpsets	111	4.15
5	Air Valves	170	5.27
6	Replacement of dilapidated Over Head Tanks	8	0.29
7	Replacement of Pipelines Damaged due to Road widening	330	49.00
8	Providing Separate Power Feeder Mains/4 <sup>th</sup> Wire	174	26.35
9	Providing Surge Protection System	8	1.04
	<b>Total</b>	<b>943</b>	<b>101.69</b>

#### 6.2.7 Special Programme

The provision of safe drinking water to Government Schools, Anganwadis and Government Hostels is the avowed policy of the

Government. The achievement under this programme in 2011-12 is as below:

- Water Supply to **3,447 Government Schools.**
- Water Supply to **1,390 Anganwadis.**
- Water Supply to **229 Government Hostels in Rural Areas.**

#### 6.2.8 Financial Achievement during 2011-12

The expenditure under Rural Water Supply Programme during 2011-12 is ₹ **753.00 Crore** with State and Central Assistance.

#### 6.2.9 Rural Water Supply Programme for 2012-13

During the year 2012-13, **7,000** Rural habitations are proposed to be covered through Individual Power Pump Schemes, Combined Water Supply Schemes and revamping works to the CWSS maintained by TWAD Board. The details are as below:

Sl. No.	Description	No. of Habitations to be covered
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1	Coverage through Individual Power Pump Schemes	4,097
2	Coverage of Quality Affected Habitations	64
3	Coverage through Combined Water Supply Schemes	286
4	Coverage through revamping in existing Combined Water Supply Schemes maintained by TWAD Board	2,553
<b>Total</b>		<b>7,000</b>

Further, under the Special Programme, in the year 2012-13, it has been proposed to provide Water Supply to

- 2,578 Government Schools
- 5,296 Anganwadis
- 50 Primary Health Centres in Rural areas
- 25 Government Hostels in Rural areas

During 2012-13, under the Sustainability Component, it is proposed to construct 1,568 Recharge Structures as below :

- **Check Dams** - **919**
- **Percolation ponds** - **45**
- **Recharge Shafts** - **245**
- **Oorani improvements** - **234**

- **Hydrofracturing in Bore wells - 125**

### **6.2.10 Water Quality Surveillance and Monitoring**

In order to achieve the objective of ensuring quality water supply to the public, the TWAD Board has established one State level, 31 District level and 51 Sub divisional level laboratories. These laboratories have facilities for testing all the basic water quality parameters and for effective surveillance and monitoring of water supply sources in both Rural and Urban areas. It is pertinent to note that the State Level Laboratory, Chennai which was awarded ISO 9001-2000 Certification during January 2004, has now been upgraded to ISO 9001:2008 certification. This laboratory has been recognized as the State Referral Institute for Tamil Nadu by the Government of India.

- **2.46 lakh** Rural drinking water sources have been tested during 2011-12 under the NRDWP and the water quality data has been updated in the Integrated Management Information System (IMIS).

- During the year 2012-13, it is proposed to test the quality of **2.46 lakh** Rural drinking water sources.

### **6.2.11 Financial outlay for Rural Water Supply programme during 2012-13**

A sum of ₹ 566.35 crore under MNP (State Government Fund) and ₹ 400 crore under NRDWP (Central Government Fund) has been provided in the Budget Estimate for the Financial Year 2012-13 for the Rural Water Supply Programme.

## **6.3. Urban Water Supply Programme**

Urban Towns are provided with drinking water supply with financial assistance from the Government of India under the Jawaharlal Nehru National Urban Renewal Mission (JnNURM), the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), the World Bank assisted TNUDP-III, KfW, JICA, State Government grants under MNP and Urban local body share.

### **6.3.1 Urban Water Supply Improvement Schemes under implementation**

In the year 2011-2012, Water Supply Improvement Schemes were under implementation in 47 Urban Towns covering 17 Municipalities and 30 Town Panchayats, benefitting a population of 14.54 lakh, at a total cost of ₹ 353.08 crore.

- The following Water Supply Improvement Schemes (WSIS) benefitting a population of 2.01 lakh in 13 Towns ( 1 Municipality and 12 Town Panchayats) at an estimate cost of ₹ 39.33 crore have been completed in 2011-2012.

Sl. No	Name of Town	District	Estimate cost (₹ in Lakh)	Population benefitted
	<b>Municipalities</b>			
1	Rasipuram	Namakkal	825.25	46,330
	<b>Town Panchayats</b>			
1	Gandhinagar	Vellore	29.15	9,487
2	Katpadi	Vellore	489.00	14,912
3	Chengam	Tiruvannamalai	501.40	23,223
4	Pudupalayam	Tiruvannamalai	240.00	10,005
5	Sankarapuram	Villupuram	63.00	12,263
6	Gingee	Villupuram	1,463.70	21,251
7	Thittacheri	Nagapattinam	49.00	8,490
8	Kuthalam	Nagapattinam	49.60	13,444

Sl. No	Name of Town	District	Estimate cost (₹ in Lakh)	Population benefitted
9	Labbaikudikadu	Perambalur	45.25	8,741
10	Keeranur	Pudukottai	14.20	10,509
11	Sithayankottai	Dindigul	65.00	12,099
12	Ganguvarpatti	Theni	98.36	10,592
	<b>Total</b>		<b>3,932.91</b>	<b>2,01,346</b>

The remaining 34 Urban Water Supply Improvement Schemes benefitting a population of 12.54 lakh at a cost of ₹ 313.76 crore are in progress.

### 6.3.2 Integrated Urban Development Mission

Water Supply Improvement Schemes in 3 Town Panchayats viz, Kaveripattinam in Krishnagiri District, Suleeswaranpatty in Coimbatore District and Melachockkanathapuram in Theni District have been taken up under the Integrated Urban Development Mission (IUDM) at an outlay of ₹14.64 Crore, benefitting a population of 0.51 Lakh.

### 6.4 Hogenakkal Water Supply and Fluorosis Mitigation Project

### 6.4.1 Water Supply Component

The Hogenakkal Water Supply and Fluorosis Mitigation Project is being implemented by the Government of Tamil Nadu with the aim of supplying safe and potable drinking water to the people of Dharmapuri and Krishnagiri Districts. This project covers 3 Municipalities, 17 Town Panchayats and 6,755 Rural habitations in 18 Panchayat Unions in both the Districts at an estimate cost of ₹ 1,928.80 Crore. The population to be benefited is 29.80 Lakh.

The Project has been split up into five packages for prompt implementation. The progress under each package is given below:

Pack age No.	Description of works	Achieveme nt in percentag e (%)
I	Head Works, Water Treatment Plant, Raw Water and Clear Water Transmission Main and Master Balancing Reservoir (MBR) at Madam	59

Pack age No.	Description of works	Achieveme nt in percentag e (%)
II	Trunk Main from MBR and Feeder Mains- 2,387 Km. covering 1,653 Habitations of 5 Unions, 2 Town Panchayats and Dharmapuri Municipality in Dharmapuri and Krishnagiri Districts	64
III	Branch Trunk Main 1,572 Km. covering 1083 Habitations in 3 unions and 5 Town Panchayats in Dharmapuri District	47
IV	Pumping Main from Moongilpatti-3107 Km. covering 1720 Habitations in 5 unions, 3 Town Panchayats and Hosur Municipality in Krishnagiri District	54
V	Trunk main from MBR to Bargur and Feeder Main – 2950 Km, covering 2299 habitations in 5 Unions, 7 Town Panchayats and Krishnagiri Municipality in Dharmapuri and Krishnagiri Districts.	53

The overall physical achievement made is 56 % and an expenditure of ₹ 882 Crore has been incurred so far. The scheme is targeted for completion by December, 2012.

### 6.4.2 Fluorosis Mitigation Component

The Fluorosis Mitigation Component is implemented based on a comprehensive three-

pronged approach, involving Hospitals, Schools and the Community. It is implemented in coordination with the Director of Medical and Rural Health Services, the Department of Public Health and Preventive Medicine, the Department of Medical Education, the Department of Education and the District Administration so as to assess the level of incidence of dental, skeletal and non-skeletal fluorosis amongst the public, in both Dharmapuri and Krishnagiri districts. The project also seeks to undertake mitigation measures through awareness and life style modification, nutritional supplementation and medical treatment in selected cases. All Government Doctors in the two districts have been trained to diagnose the incidence of fluorosis among the patients and to prescribe preventive measures. School teachers have been trained to assess the status of dental fluorosis amongst the students. 100% House-hold health survey will be conducted to assess the prevalence of fluorosis amongst the 30 lakh population of both the districts.

#### **6.4.3 Financial outlay for Hogenakkal Water Supply and Fluorosis Mitigation Project**

An amount of ₹ 730.00 Crore has been allocated for Hogenakkal Water Supply and Fluorosis Mitigation Project in the Budget Estimate 2012-13.

#### **6.5 Operation and Maintenance of Combined Water Supply Schemes**

Combined Water Supply Schemes, covering more than one local body, are being maintained by TWAD Board as per G.O. Ms.No.84, MA&WS dated 10.03.1994. At present, 525 CWSS covering 5 Corporations, 58 Municipalities, 290 Town Panchayats, 27,342 Rural habitations and 422 Industries/Institutions benefiting a total population of 2.71 crore are being maintained by the TWAD Board. Every year a number of CWSS are completed and are added to the CWSS under maintenance by the TWAD Board.

##### **6.5.1 Providing Telemetry System of monitoring (SCADA) for Combined Water Supply Schemes**

To have an effective remote monitoring and supervisory control of all the components of CWSS, which have a large number of pumping stations and distribution networks, the Supervisory Control and



Data Acquisition (SCADA) Telemetry System is being installed in the following two CWSS at a cost of ₹ 3 Crore under the Part-II Scheme for 2011-12.

1. Combined Water Supply Scheme to Iruppali and 1,161 wayside habitations in Salem District.
2. Combined Water Supply Scheme to Kadayampatty and 920 habitations in Salem District.

#### **6.6 Water Supply Improvement Scheme to Sri Lankan Refugee camps**

TWAD Board has taken up Water Supply Improvement Schemes in 75 Sri Lankan Refugee camps at an estimate cost of ₹ 434.81 lakh in order to benefit 49,227 inmates. So far, 63 Refugee camps have been provided with Water Supply. For the remaining 12 camps, the works are in various stages of completion.

#### **6.7 Restoration of CWSS affected by Thane Cyclone**

During the onslaught of December 2011 Thane Cyclone, 11 CWSS in Cuddalore District benefitting 1 Municipality, 1 Town Panchayat and 127 Rural habitations and 7 CWSS in Villupuram

District benefitting 1 Municipality, 4 Town Panchayats and 150 Rural Habitations were severely affected and became non-functional. The TWAD Board under-took remedial measures on a war footing and restored water supply in all the 18 CWSS within a record time of 48 hours.

#### **6.8 Investigation and Preparation of Detailed Project Reports (DPR) for Water Supply Schemes**

The TWAD Board has prepared Detailed Project Reports (DPRs) for 46 Schemes during 2011 -12 at a cost of ₹ 1,375.55 Crore, benefitting a total population of 39.44 Lakh.

Out of the above 46 Schemes, 11 Water Supply Schemes, covering 5 Town Panchayats and 225 Rural Habitations, benefitting a population of 2.05 Lakh were sanctioned at a cost of ₹ 33.71 crore. They have been taken up for implementation during 2011 – 12.

Sl. No.	Name of the scheme	Estimate Cost (₹ in Crore)	Population benefitted

1	CWSS to Chithamur and 27 habitations in Anakkavur Union in Thiruvannamalai District	1.85	13,756
2	CWSS to Padaveedu and 46 Habitations in Polur Union in Thiruvannamalai District	3.03	17,445
3	Replacement of Distribution System to Kaveripattinam Town Panchayat in Krishnagiri District	0.64	15,800
4	WSIS to Samathur Town Panchayat in Coimbatore District	0.49	6,196
5	Dedicated water supply Scheme to Suleeswaranpatti Town Panchayat in Coimbatore District	7.60	23,600
6	CWSS to Thekkampatty and 31 other Habitations in Karamadai Union in Coimbatore District	3.01	33,693
7	CWIS to Manmangalam and 71 other habitations in Karur Union in Karur District.	2.38	24,232
8	CWSS to 40 habitations in Pallapalayam, Andankoil East and Andankoil West panchayats in Thanthoni union in Karur District.	6.43	29,445
9	WSIS to Melachockanathapuram Town Panchayat in Theni District.	6.36	14,164
10	Providing WS to 6 habitations in Keelanatham Panchayat in Tirunelveli District.	0.97	9,078
11	WSIS to Pathamadai Town Panchayat in Tirunelveli District	0.95	18,000
	<b>Total</b>	<b>33.71</b>	<b>2,05,409</b>

The preparation of Detailed Project Reports for 25 Water Supply Schemes, covering 29 Town Panchayats and 924 Rural Habitations, benefitting a population of 9.02 lakh, at a total cost of ₹276.02 Crore, have been completed. They are proposed to be taken up for execution during 2012-13 with due fund tie-up as below:

Sl. No.	Name of the scheme	Project Cost (₹ in Crore)	Population benefited
1	WSIS to Kallakudi Town Panchayat in Trichy District.	0.49	13,100
2	WSIS to Pullambadi Town Panchayat in Trichy District.	0.95	13,000
3	WSIS to Thirunageswaram Town Panchayat in Thanjavur District.	8.60	15,000
4	WSIS to Ayyampettai Town Panchayat in Thanjavur District	5.58	15,700
5	WSIS to Darasuram Town Panchayat in Thanjavur District.	9.28	16,000
6	WSIS to Kottur Town Panchayat in Coimbatore District.	1.41	26,250
7	WSIS to Odayakulam Town Panchayat in Coimbatore District.	0.79	13,700

Sl. No.	Name of the scheme	Project Cost (₹ in Crore)	Population benefited
8	WSIS to Vettaikaranpudur Town Panchayat in Coimbatore District	0.48	19,600
9	WSIS to Karamadai Town Panchayat in Coimbatore District	9.97	27,817
10	WSIS to Jagathala Town Panchayat in The Nilgiris District	1.65	15,700
11	CWSS to 327 Habitations in Idapadi, Magudanchavadi and Konganapuram unions in Salem District.	40.36	96,926
12	WSIS to Avalpoondurai Town Panchayat in Erode District.	0.45	3,175
13	WSIS to Kunnathur Town Panchayat in Tiruppur District	0.30	9,000
14	WSIS to Nambiyur Town Panchayat in Erode District.	1.94	6,800
15	WSIS to Anthiyur Town Panchayat in Erode District.	3.04	22,100
16	WSIS to Ammapet Town Panchayat in Erode District.	1.38	9,800
17	WSIS to Pandamangalam Town Panchayat in	0.99	6,700

Sl. No.	Name of the scheme	Project Cost (₹ in Crore)	Population benefited
	Namakkal District.		
18	WSIS to Mohanur Town Panchayat in Namakkal District.	0.94	17,540
19	WSIS to Velur Town Panchayat in Namakkal District	0.96	21,400
20	WSIS to Alanganallur Town Panchayat in Madurai District.	0.68	7,625
21	WSIS to Palamedu Town Panchayat in Madurai District.	0.84	9,564
22	Augmentation of Water Supply to 147 Rural Habitations of Sankarankovil-Alangulam CWSS in Tirunelveli District.	31.32	1,31,438
23	CWSS to 170 Habitations in Manur Union (Part) and Palayamkottai Union (Part) in Tirunelveli District	46.54	1,28,346
24	CWSS to 34 Habitations in Manur Union (Part) and Palayamkottai Union (Part) in Tirunelveli District	8.78	22,082
25	CWSS to Azhagiypandipuram and 8 other Town Panchayats and 246 rural habitations	98.30	2,33,859

Sl. No.	Name of the scheme	Project Cost (₹ in Crore)	Population benefited
	in Kanyakumari District.		
	<b>Total</b>	<b>276.02</b>	<b>9, 02,222</b>

The preparation of Detailed Project Reports for 10 other schemes are under finalization.

The TWAD Board took up Investigation and completed the preparation of Detailed Project Reports for the following 8 CWSS during 2011-12, as per G.O.Ms.No.155, MA&WS (WS2) Department dated 15.10.2011

Sl. No.	Name of the Scheme	Estimate Cost (₹ in Crore)	Population benefited (in lakh)
1	Water Supply Improvement Scheme to Theni-Allinagaram Municipality in Theni District	60.60	1.00

Sl. No.	Name of the Scheme	Estimate Cost (₹ in Crore)	Population benefited (in lakh)
2	CWSS to Cuddalore, Virudhachalam Municipalities, 9 Town Panchayats and 1,647 Rural Habitations in 11 Panchayat Unions in Cuddalore District and Villupuram, Tindivanam Municipalities, 4 Town Panchayats and 1,946 Rural Habitations in 15 Panchayat Unions in Villupuram District	650.00	25.37
3	Combined Water Supply Scheme to 3,517 Rural Habitations in Pudukottai, Viralimalai, Annavasal, Ponnamaravathi, Kunnandarkoil, Tirumayam, Arimalam, Gandarvakottai, Aranthangi, Karambakudi, Thiruvarankulam Unions in Pudukottai District and 125 Habitations in S.Pudur, Kallal and Sakkottai Unions of Sivagangai District and Vallam Town Panchayat in Thanjavur District	575.00	11.93
4	Combined Water Supply Scheme to Zamin Uthukuli Town Panchayat and 63 Rural Habitations in Pollachi North, South Unions in Coimbatore District	12.84	0.41

Sl. No.	Name of the Scheme	Estimate Cost (₹ in Crore)	Population benefited (in lakh)
5	Combined Water Supply Scheme to 158 Rural Habitations in Gudimangalam and Udumalpet Unions in Tiruppur District	48.40	1.02
6	Combined Water Supply Scheme to 147 Rural Habitations in Pappakudi (Part), Keelapavur, Alangulam, Manur, Melaneelethanallur, Sankarankovil Unions in Tirunelveli District	31.32	1.31
7	Combined Water Supply Scheme to Keelapavur Town Panchayat and 163 Rural Habitations in Pappakudi (part), Kadayam and Keelapavur Unions in Tirunelveli District	46.00	1.45
8	Combined Water Supply Scheme to Udangudi Town Panchayat and 368 Rural Habitations in 12 Panchayat Unions in Thoothukudi District	103.47	1.87
	<b>TOTAL</b>	<b>1,527.63</b>	<b>44.36</b>

## 6.9 Under Ground Sewerage Schemes

Realising the public health imperatives and in order to achieve the twin objectives of safe waste

water disposal and environmental protection, the Government directed that all Towns in Tamil Nadu be covered with UGSS. Accordingly, TWAD Board has prepared **636 Detailed Project Reports at an estimate cost of ₹ 20,820 crore to provide UGSS to 3 Corporations, 117 Municipalities and 516 Town Panchayats.**

### 6.9.1 Status of Under Ground Sewerage Schemes under implementation by TWAD Board.

- **3 Underground Sewerage Schemes** benefitting a population of **16.18 Lakh** at an estimate cost of **₹ 823.74 Crore** are under implementation by TWAD Board.
- **Underground Sewerage Schemes**, namely the Maraimalai Nagar Municipality UGSS and the Chinnamanur Municipality UGSS, benefitting a population of **0.87 lakh** at an estimate cost of **₹ 18.27 Crore** have been completed and are under trial run.
- **Underground Sewerage Schemes namely UGSS to Ramanathapuram, Cuddalore,**

Namakkal, Thiruvannamalai, Dharmapuri, Villupuram and Pudukottai benefitting a population of **6.73 lakh** at an estimate cost of **₹ 263.01 Crore are under progress and expected to be completed in 2012-2013.**

- **he remaining 14 Underground Sewerage Schemes** benefitting a population of **8.54 lakh** at an estimate cost of **₹ 542.46 Crore** are in progress.
- **nder Ground Sewerage scheme to Orathanadu Town Panchayat** in Thanjavur District is being taken up under the **Integrated Urban Development Mission (IUDM)** at a cost of **₹ 15.21 Crore**, to benefit a population of **10,172**.

#### **6.9.2 Sanitation facilities to Government Hospitals**

TWAD Board has taken up provision of sanitation facilities to 17 Government Hospitals at an estimate cost of ₹ 16.52 Crore under the National Rural Health Mission (NRHM). Out of these, 12 Schemes (Chidambaram, Tambaram, Pudukottai, Tiruppur, Namakkal, Hosur, Sholingur, Manaparai, Mayiladuthurai, Thiruvallur, Cuddalore and Padmanabhapuram) have been completed and

commissioned. The remaining 5 Schemes (Erode, Kallakurichi, Ramanathapuram, Aruppukottai and Tenkasi) are in progress and are expected to be completed in 2012.

#### **6.10 Hydrogeological Activities**

The technique of Remote Sensing and GIS (Geographical Information System) are extensively adopted in scientific source finding activities and identification of suitable locations for constructing recharge structures to ensure source sustainability.

The Ministry of Drinking Water and Sanitation, Government of India, has sanctioned a Project to TWAD Board for the updation of "Ground Water Prospects Maps" for the entire State of Tamil Nadu at the cost of ₹ 1.98 crore. The Project will be completed by October 2012.

#### **6.11 Management Information System**

The Tamil Nadu Water Supply and Drainage Board has established a Management Information System (MIS) to manage data flow relating to all its schemes. Online information is provided for physical progress of implementation and performance of all water supply and sewerage

schemes. The daily pumping quantity from the Head works of various water supply schemes maintained by TWAD Board is also uploaded and monitored online.

TWAD Integrated e-governance system - TWADNEST enables it to integrate the various functions of all the offices of Tamil Nadu Water Supply and Drainage Board relating to Project Reporting, Financial Accounting, Human Resource Management by using a single software application interface. This makes for better coordination and effective monitoring of all the activities of the TWAD Board.

## **7. Tamil Nadu Urban Development Fund (TNUDF)**

Tamil Nadu is one of the largest urbanized States in the country with 48.45% (Census 2011) of the total population residing in urban areas. The latest estimate indicates that the urban population of the State is expected to rise to 67% by the year 2030. Urban infrastructure facilities have to be created keeping the future needs in mind. However, creation of urban infrastructure facilities across the Urban Local Bodies (ULBs) has not kept pace with the growth in population. In order to bridge the demand-supply gap to link ULBs with capital markets and to instill a sense of market discipline, Government of Tamil Nadu established the Tamil Nadu Urban Development Fund (TNUDF) as a Trust in the year 1996, on a 'Public- Private Partnership' mode with the participation of ICICI Bank Limited (ICICI), Housing Development Finance Corporation Limited (HDFC) and IL & FS Financial Services Limited (IL & FS).

The Vision of TNUDF is “To be a sustainable financial intermediary that enhances the flow of private capital to the urban sector in the State of Tamil Nadu and facilitate urban local bodies to become capable and sustainable organizations, sensitive to stake holders in providing the highest quality of urban services.”

The Mission of TNUDF is “To contribute to improvement in urban quality of life in Tamil Nadu by facilitating efficient urban infrastructure asset creation and provision of urban services through innovative project development, independent appraisal and sustainable financing.”

### **7.1 Objectives of TNUDF**

- Finance urban infrastructure projects, which improve the living standards of the urban population.
- Facilitate private sector participation in infrastructure through joint venture and public – private partnership.
- Improve the financial management of urban local bodies and enabling them to access debt finance from markets.

TNUDF finances basic service projects such as roads, bridges, storm water drains, sewerage & sanitation, water supply, solid waste management etc., and commercially viable remunerative projects such as bus stands, market complexes etc, executed by ULBs.

The Fund is managed by a corporate trustee viz., Tamil Nadu Urban Infrastructure Trustee Company Limited (TNUITCL) and is operated by a Fund Manager viz., the Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL).

The total corpus of the Fund is ₹199.60 crore, of which a sum of ₹142.91 crore has been contributed by Government of Tamil Nadu and the balance amount of ₹56.69 crore has been contributed by ICICI, HDFC and IL & FS. In addition to the above, the Fund is operating three external lines of credit, viz the Tamil Nadu Urban Development Project III (TNUDP-III) assisted by the World Bank, the Sustainable Municipal Infrastructure Financing –Tamil Nadu (SMIF-TN) Program assisted by KfW and the Tamil Nadu Urban Infrastructure Project (TNUIP) assisted by the Japan International Cooperation Agency (JICA). The total



resources available under the above lines of credit is ₹2841.10 crore (Table 1).

**Table: 1 Size of External Lines of Credit**

(₹ in crore)

Sl.No.	Components	TNUDP-III	SMIF-TN	TNUIP	Total
1	Institutional Development Component	115.00	0.00	0.00	115.00
2	Loan to ULBs	602.60	271.20	180.50	1054.30
3	Capital Grants to ULBs	811.90	150.80	102.73	1065.43
4	Technical Assistance Grant	41.40	13.00	27.40	81.80
5	Grants to traffic and transportation	188.60	0.00	0.00	188.60
6	Others	236.90	65.00	34.07	335.97
	<b>Total</b>	<b>1996.40</b>	<b>500.00</b>	<b>344.70</b>	<b>2841.10</b>

## 7.2. Tamil Nadu Urban Development Project III (TNUDP III)

TNUDF has successfully implemented TNUDP II for the period from 1999-2004 under World Bank line of credit. During the TNUDP-II project period, TNUDF has mobilized additional

funds from other sources such as issue of bonds, user contribution etc.

TNUDP III is on the lines of TNUDP II and is intended to consolidate the achievements of TNUDP II, thus continuing to improve urban infrastructure services in Tamil Nadu on a sustainable manner. The objectives of TNUDP III are as follows:

- To develop TNUDF as a financial intermediary to provide financing for infrastructure to ULBs on a sustainable basis.
- To strengthen urban reforms and consolidate the achievements under TNUDP-II in institutional strengthening and capacity building.
- To provide a grant to the Chennai Metropolitan Development Authority to take up traffic and transportation sub-projects in the Chennai Metropolitan Area.

The TNUDP-III which was launched on 19.10.2005, consists of two components, namely (i) Institutional Development Component (IDC) and (ii) Urban Investment Component (UIC). The IDC provides the technical assistance and training needed to build up capacity to further the devolution process. The UIC aims at developing sustainable urban investments such as water

supply, sewerage and sanitation, solid waste management, storm water drains, roads and common facilities such as transportation networks. The total outlay of the project is ₹ 1996.40 crore (US \$ 434 million) with the World Bank assistance of ₹ 1380 crore (US \$ 300 million). The funding pattern of the scheme is furnished in Table 2 below:

**Table: 2 Funding pattern of TNUDP-III**

Sl. No.	Component	World Bank Finance	GoTN Finance	Inno-vative Finance	Total	
					US \$ mn	₹ in cr.
<b>1</b>	Institutional Development Component	<b>15.00</b>	<b>10.00</b>	<b>0.00</b>	<b>25.00</b>	<b>115.00</b>
<b>2</b>	Urban Investment Component					
	- Loan to ULBs	125.00	6.00	50.00	181.00	832.60
	- Capital Grants to ULBs	112.50	64.00	0.00	176.50	811.90
	- Project Development Advisory	9.00	0.00	0.00	9.00	41.40
	- Grants to Transportation	37.00	4.00	0.00	41.00	188.60
	<b>Sub total</b>	<b>283.50</b>	<b>74.00</b>	<b>50.00</b>	<b>407.50</b>	<b>1874.50</b>
<b>3</b>	Others : World Bank Front End Fee	<b>1.50</b>	<b>0.00</b>	<b>0.00</b>	<b>1.50</b>	<b>6.90</b>
	<b>Total(1+2+3)</b>	<b>300.00</b>	<b>84.00</b>	<b>50.00</b>	<b>434.00</b>	<b>1996.40</b>

(Exchange rate @ ₹46/ US \$)

A sum of ₹1458.91 crore has been sanctioned for 101 projects implemented in ULBs and 5 projects implemented by CMDA through Highways Department under investment component (Table 3).

**Table: 3 Projects funded under TNUDP-III**

(₹ in crore)

Sl. No.	Sector	No. of Projects	Project Cost	Loan Sanc tioned	Grant Sanc tioned	Total Sanc tioned
<b>I Project for ULBs</b>						
1	Under Ground Sewerage Schemes	25	1217.71	302.05	594.95	897.00
2	Water Supply Schemes	18	402.04	108.31	191.77	300.08
3	Solid Waste Management schemes	32	26.33	15.30	8.01	23.31
4	Bus Stands	7	29.30	17.72	1.32	19.04
5	Roads	18	185.86	101.93	6.48	108.41
6	River Improvement	1	31.23	18.74	9.37	28.11
	<b>Total – I</b>	<b>101</b>	<b>1892.47</b>	<b>564.05</b>	<b>811.90</b>	<b>1375.95</b>
<b>II Projects for CMDA</b>						
1	Roads	5	82.96	0.00	82.96	82.96
	<b>Total – II</b>	<b>5</b>	<b>82.96</b>	<b>0.00</b>	<b>82.96</b>	<b>82.96</b>
	<b>Grand Total</b>	<b>106</b>	<b>1975.43</b>	<b>564.05</b>	<b>894.86</b>	<b>1458.91</b>

Of the above 106 projects, 74 projects (72 of ULBs and 2 road works of CMDA) have been completed and 32 projects (29 of ULBs and 3 road works of CMDA) are under progress. Considering the

time required for completion of projects under implementation, **Government of Tamil Nadu had recommended the extension of time for TNUDP-III upto 31<sup>st</sup> March 2014 and forwarded the proposal to Government of India for onward transmission to the World Bank. This has been approved by the World Bank**

### **7.3. Sustainable Municipal Infrastructure Financing –Tamil Nadu (SMIF – TN) Programme**

The Sustainable Municipal Infrastructure Financing –Tamil Nadu (SMIF – TN) Programme with the assistance of KfW, the German funding agency, was launched with the objective of improving the living conditions of residents in urban areas by constructing and improving water supply, sewerage and other urban facilities. The project implementation period is five years, starting from 2008.

The total outlay of the project is ₹500 crore (Euro 77 million) consisting of ₹422 crore (Euro 65 million) development loan for financing of urban infrastructure projects to be passed on to ULBs as

loan and capital grant and ₹13 crore (Euro 2 million) towards assistance for strengthening the technical capabilities of the ULBs. A sum of ₹65 crore (Euro 10 million) is to be passed on to the Water and Sanitation Pooled Fund for development of Municipal Bond.

The funds have been committed for 14 projects, for which a sum of ₹ 421.89 crore (Table 4) have been sanctioned.

**Table: 4 Projects funded under SMIF-TN Programme**

(₹ in crore)

SI. No.	Sector	No. of Projects	Project Cost	Loan Sanctioned	Grant Sanctioned	Total Sanctioned
1	Under Ground Sewerage Schemes	2	254.61	83.45	78.54	161.99
2	Water Supply Schemes	8	188.20	90.33	56.26	146.59
3	Roads & Storm Water Drains	3	67.64	44.87	16.00	60.87
4	Bridges	1	162.51	52.44	0.00	52.44
	<b>Total</b>	<b>14</b>	<b>672.96</b>	<b>271.09</b>	<b>150.80</b>	<b>421.89</b>

Of the above 14 projects, 2 projects have been completed and the remaining 12 projects are under implementation.

**As the above scheme is expected to be completed during the financial year 2012-13, KfW has been approached for a second line of credit and the appraisal for assistance is in process. The assistance is likely to be of the order of about ₹ 520 crore (Euro 80 million).**

#### **7.4. Tamil Nadu Urban Infrastructure Project (TNUIP)**

The Tamil Nadu Urban Infrastructure Project (TNUIP), with the assistance of Japan International Cooperation Agency (JICA), was launched with the objective of providing safe and reliable water supply and sewerage services in ULBs. The project provides long-term financial assistance to ULBs through the TNUDF. The project implementation period is five years from 2008.

The total outlay of the scheme is ₹ 345 crore (JPY 9824 million), of which the JICA line of credit is

₹ 300.04 crore (JPY 8551 million) as detailed in Table 5 below:

**Table: 5 Funding pattern TNUIP**

<b>SI. No.</b>	<b>Details</b>	<b>INR (in crore)</b>	<b>YEN (in million)</b>
1	<b>Project Cost</b>		
	Funding to ULBs	283.23	8072
	Technical Assistance		
	TNUDF	16.81	479
	CMA / DTP	10.59	302
	Land cost	23.26	663
	IDC & commitment charges	10.81	308
	<b>Total</b>	<b>344.70</b>	<b>9824</b>
2	<b>Funding Pattern</b>		
	JICA line of credit	300.04	8551
	ULB contribution	23.26	663
	Government of Tamil Nadu contribution	21.40	610
	<b>Total</b>	<b>344.70</b>	<b>9824</b>

(Exchange rate @ JPY 2.85 /Rupee)

The entire funds of ₹283.23 crore available for implementation of ULB projects have been committed for 6 water supply projects (viz. Trichy Corporation, Madhavaram, Palani, Coonoor, Idappadi and Devakottai Municipalities) and all the six projects are under various stages of implementation / procurement.

## 7.5 Estimated approvals for Urban Infrastructure Projects in 2012-13

During 2012 – 2013, it is proposed to approve urban infrastructure projects worth ₹ 300 crore in areas like Sewerage and Sanitation, Water Supply, Roads, Solid Waste Management, Storm Water Drains and other infrastructure projects.

## 7.6 Water and Sanitation Pooled Fund (WSPF)

Water and Sanitation Pooled Fund (WSPF), a fully owned Government Trust, has been created in the year 2002 to cater to the civic needs like water and sanitation in small and medium towns and raising resources on pooled basis through a market driven approach, thereby reducing transaction and borrowing costs to finance essential infrastructure. This Trust has been created as a not-for-profit entity. The objectives of WSPF are:

- Provide financial assistance for setting up infrastructure projects,
- Mobilize resources from the capital market under pooled finance structure,
- Facilitate the participation of private sector in water and waste water sectors through direct investment and joint delivery mechanism of public private partnership,

- Enable urban local bodies to access debt finance from markets and
- Act as the Nodal Agency on behalf of Central and / or State Government for water, sanitation and / or any other infrastructure projects.

A sum of ₹ 120.30 crore (Table 6) has been mobilized by way of issue of bonds by WSPF.

**Table: 6 Details of resources mobilized by issue of Bonds**

Sl. No.	Details	₹ in Crore
1	<b>9.20%, 15 year Non-Convertible Redeemable Bonds</b> Taxable bonds issued by pooling the requirements of 13 ULBs in the year 2002.	30.41
2	<b>7.25%, 10 year Tax Free Non-Convertible Redeemable Bonds under PFDF Scheme</b> Tax free bonds (first tranche) issued by pooling the requirements of 7 ULBs under the Pooled Finance Development Fund (PFDF) scheme of Government of India in the year 2008.	6.70

3	<b>7.50%, 10 year Tax Free Non-Convertible Redeemable Bonds under PFDF Scheme</b>  Tax free bonds (second tranche) issued by pooling the requirements of 7 ULBs under the PFDF scheme of Government of India in the year 2010.	83.19
	<b>Total</b>	<b>120.30</b>

The Government and KfW have approved the nomination of the WSPF to mobilize resources by issue of taxable bonds of ₹ 102 crore under the KfW assisted SMIF-TN Program. The details are furnished in Table 7 below:

**Table: 7 Bond Mobilization structure**

Sl.No.	Details	Percentage	₹ in Crore
1	Equity contributed by Government of Tamil Nadu as grant	10%	19.00
2	Loan provided by KfW to WSPF	35%	65.00
3	Taxable bond to be mobilized from the market	55%	102.00
	<b>Total</b>	<b>100%</b>	<b>186.00</b>

It is proposed to mobilize taxable bonds amounting to ₹ 102 crore during the financial year 2012-13.

### **7.7 Chennai Mega City Development Mission**

The Government has launched the Chennai Mega City Development Mission (CMCDM) and has designated the Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL) as the Nodal Agency for CMCDM. The funds under CMCDM will be made available to Corporation of Chennai and Chennai Metropolitan Water Supply and Sewerage Board to implement various urban infrastructure and basic service projects like roads, storm water drains, street lighting, water supply and sanitation in Chennai and its suburban areas. The fund will be provided through budgetary provision every year by the Government.

### **7.8 Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL)**

Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL) is a public limited company formed in the year 1996 under the Indian Companies Act, 1956, with an authorized capital of ₹ 2.00 crore. The paid-up share capital of the company is ₹ 1 crore, of which a sum of ₹ 49 lakhs

is contributed by the Government of Tamil Nadu. The other shareholders are ICICI Bank Limited, Housing Development Finance Corporation Limited and IL & FS Financial Services Limited.

TNUIFSL manages the Tamil Nadu Urban Development Fund, Water and Sanitation Pooled Fund and various Government Grant Funds. TNUIFSL undertakes the functions of project development, project appraisal, project structuring, resources mobilization and fund management.

TNUIFSL provides a total solution for the promotion of urban infrastructure development, from concept to commissioning of the projects. The Company has been running profitably since its inception and is declaring a dividend regularly.

### **7.9 Chennai Rivers Restoration Trust**

The Adyar Creek and the Estuary from the eastern part of Thiru Vi Ka Bridge covers an area of about 358 acres. This unique eco system has supported a wide variety of flora and fauna which gradually degraded over the years. Therefore, the Government in 2003 ordered to restore the eco system and to develop an Eco park covering an extent of 58 acres. The Government sanctioned

₹ 50.00 crore to form a Special Purpose Vehicle (SPV) in the name of "Adyar Creek Eco Park Ltd." to implement and manage the same.

Accordingly, a Trust has been formed in the name of "Adyar Poonga Trust" under the Chairmanship of the Chief Secretary to Government to implement the Eco Restoration Plan. Later it has been renamed as "Chennai Rivers Restoration Trust" (CRRT). In order to manage and carryout maintenance of Adyar Poonga, a Special Purpose Vehicle in the name of "Adyar Poonga", a company under section 25 of the Companies Act, 1956 has been incorporated with the authorized share capital of ₹ 10 lakhs and the entire amount has been contributed by Government of Tamil Nadu. The Board of Adyar Poonga is also headed by the Chief Secretary to Government.

A draft Ecological Restoration Plan for 58 acres was prepared and finalized after detailed consultations with public and representatives of various Non-Governmental Organizations (NGOs). The major components of the restoration activities undertaken were removal of debris, increasing the

water spread in order to enhance the tidal influx in the creek and plantation of Coromandel Coastal vegetation. Eco-restoration plan in 58 acres have been implemented and the Eco Park was created. So far, the Government has released ₹ 41.00 crore for this Project. The Government is additionally sanctioning ₹ 1.00 crore every year for the Administrative and Educational activities of Adyar Poonga.

Since it is the first of its kind in wetland restoration in the country, the eco-park is functioning as a centre for environmental education and research activities. The eco-park is housing an environmental education centre, nursery for plants and demonstrating alternative technology like wind and solar energy. To impart knowledge on environment to the community, particularly for school children, regular environmental education programmes are being conducted. In order to evaluate the restoration progress, regular ecological and biodiversity monitoring are being taken up. A total of 23,489 students from 301 schools have visited the Poonga and experienced the concept of eco restoration during 2011-2012.

### **7.9.1 Eco-restoration plan for Adyar Estuary (300 acres)**

The Government have extended the scope of the eco restoration done by the Adyar Poonga by including the 300 acre of Adyar Creek and Estuary on the Eastern part of Thiru. Vi. Ka. Bridge, Adyar to improve, protect and maintain the Environment. Necessary clearance from State Coastal Zone Management Authority (SCZMA) and from Ministry of Environment and Forests (MoEF), Government of India will be obtained and then the project will be implemented.

### **7.9.2 Merger of Cooum Sub-basin Restoration Management (CSRМ) with Chennai Rivers Restoration Trust (CRRT)**

The objectives of CRRT, among other things, are to engage in the development and improvement of eco parks, eco-restoration of rivers, water bodies and waterways with the view to maintain eco-balance, water conservation, minimize and mitigate pollution. The Cooum Sub-basin Restoration Management (CSRМ) was created only to look after the restoration and management of Cooum Sub-basin. For better coordination,



management and restoration activities of all rivers and waterways in Chennai, the activities of CSRM is brought under the umbrella of CRRT. To streamline the entire river restoration work and to avoid duplication of administrative set up, planning and advisory activities, the CSRM was merged into CRRT vide G.O. (Ms) No.24 Municipal Administration and Water Supply (MC-1) Department dated 16.03.2012.

## **8. Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited**

Tamil Nadu Urban Finance and Infrastructure Development Corporation Ltd.,(TUFIDCO) is a specialized agency to fulfill the needs of infrastructure development and quality oriented services in the urban local bodies of the State.

The Government of Tamil Nadu has appointed TUFIDCO as State Level Nodal Agency (SLNA) for the sub-missions of Urban Infrastructure & Governance (UIG) and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) under the Jawaharlal Nehru National Urban Renewal Mission (JnNURM). TUFIDCO also functions as Fund Manager in respect of the Metropolitan Infrastructure Development Fund (MIDF), Infrastructure Gap Filling Fund, Operation and Maintenance Gap Filling Fund, Corporation and Municipal School Students Scholarship Fund.

## 8.1 Jawaharlal Nehru National Urban Renewal Mission (Jn NURM)

The Government of India has launched the Jawaharlal Nehru National Urban Renewal Mission (JnNURM) with financial participation of the Government of India, State Government and Urban Local Bodies to improve the urban infrastructure. The aim of the programme is to infuse funds into urban infrastructure projects for sustained economic development of urban areas and to revitalize the cities and towns to make them clean and livable.

### Objectives of the programme:

- To scale up planned and integrated development of urban infrastructure and services in 65 cities all over the country.
- To promote urban reforms for efficient, sustainable and accountable urban service delivery.

The four components of the programme are :

1. Urban Infrastructure and Governance (UIG)
2. Basic Services for Urban Poor ( BSUP)

3. Urban Infrastructure Development Scheme for Small and Medium Towns ( UIDSSMT)
4. Integrated Housing and Slum Development Programme (IHSDP)

### 8.1.1 Urban Infrastructure and Governance (UIG)

Under the Urban Infrastructure and Governance(UIG) component, important infrastructure projects like Water Supply, Under Ground Sewerage System, Solid Waste Management, Storm Water Drains have been taken up in three Mission cities – Chennai, Madurai and Coimbatore and their urban agglomerations.

#### Funding Pattern:

The funding pattern depends upon the sector and also the classification of the Cities. Under UIG, the funding pattern is as follows:-

City/Sector	GOI Share-Grant (Percentage)	GoTN Share-Grant (Percentage)	ULB/FI Share (Percentage)
Chennai	35	15	50
Coimbatore and Madurai	50	20	30
Desalination	80	10	10

projects			
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Under the Urban Infrastructure and Governance (UIG), 48 projects have been sanctioned, as per the details given below: -

(Rupees in Crore)

Cities	No. of Projects	Project Cost	GOI Share – Grant	GoTN Share – Grant	ULB/ FI Share
Chennai	35	3585.43	1294.40	533.42	1757.61
Madurai	8	838.52	419.26	167.70	251.56
Coimbatore	5	826.20	413.10	165.24	247.86
<b>Total</b>	<b>48</b>	<b>5250.15</b>	<b>2126.76</b>	<b>866.36</b>	<b>2257.03</b>

Out of 48 projects sanctioned, 12 projects have been completed and the remaining projects are under various stages of progress.

#### **Formation of Programme Management Unit (PMU):**

The Programme Management Unit (PMU) has been created at the State Level Nodal Agency - TUFIDCO with six functional specialists to assist the SLNA to perform the stipulated duties under JnNURM.

#### **Formation of Project Implementation units for Chennai, Madurai and Coimbatore Corporations:**

The Government of India had directed to create Project Implementation Units in each of the Mission Cities for the effective implementation of projects. The Project Implementation Units for Coimbatore and Madurai have been formed with 8 functional specialists. A composite PIU with 24 functional specialists has been created for Chennai, with sub-structures functioning at the Corporation of Chennai, the Chennai Metropolitan Water Supply and Sewerage Board, the Commissionerate of Municipal Administration and the Directorate of Town Panchayats.

#### **Formation of Independent Review and Monitoring Agency(IRMA):**

The Government of India has approved the formation of an **Independent Review and Monitoring Agency (IRMA)** to monitor the effective implementation of Jawaharlal Nehru National Urban Renewal Mission (JnNURM) schemes at ULB level. M/s Mahindra Consulting Engineers

Ltd, Chennai has been appointed as IRMA for the mission cities.

So far, 125 reports have been submitted by IRMA and these have been sent to the Government of India and implementing agencies.

### 8.1.2 Urban Infrastructure Development Scheme For Small And Medium Towns (UIDSSMT)

Under this component, important infrastructure projects like water supply, underground sewerage, solid waste management, roads and storm water drains have been taken up in towns other, than the three Mission Cities of Chennai, Madurai and Coimbatore.

The pattern of funding under this component is as follows:

<b>GOI Share – Grant</b>	<b>GoTN share - Grant</b>	<b>ULB/FI share</b>
80%	10%	10%

Under this component, 122 projects have been sanctioned to the urban local bodies as per details given below:

(₹ in crore)

<b>Urban Local Bodies</b>	<b>No. of projects</b>	<b>Project cost</b>	<b>GOI share - Grant</b>	<b>GoTN share - Grant</b>	<b>ULB/ FI Share</b>
Corporations	3	11.66	9.34	1.16	1.16
Municipalities	52	691.73	553.39	69.17	69.17
Town Panchayats	67	179.33	143.47	17.93	17.93
<b>Total</b>	<b>122</b>	<b>882.72</b>	<b>706.20</b>	<b>88.26</b>	<b>88.26</b>

Out of the 122 sanctioned projects, 91 projects have been completed.

### Project Implementation Units

Two Project Implementation Units have been created in the Commissionerate of Municipal Administration and one Project Implementation Unit has been created in the Directorate of Town Panchayats for the effective implementation of the projects.

### **Independent Review and Monitoring Agency (IRMA)**

M/s.Mahindra Consulting Engineers Ltd, Chennai is the Independent Review and Monitoring Agency (IRMA) for UIDSSMT. According to the guidelines of the UIDSSMT scheme, a set of 12 projects in the state have been taken up for monitoring and review under UIDSSMT. The consultants have completed the review for 12 projects and reports have been sent to the Government of India.

### **8.2 Metropolitan Infrastructure Development Fund (MIDF)**

The Mega City Programme has been phased out from March 2005 and in its place, a new centrally sponsored scheme, the JnNURM has been introduced by the Government of India. The Mega City Programme guidelines envisaged that infrastructure has to be created on a sustainable basis in the cities. The MCP guidelines stipulate that a revolving fund has to be created under the scheme, out of the contributions made by the Central and State Governments. Repayments under the Mega City Programme by the beneficiaries

constitute the revolving fund. TUFIDCO has so far created a revolving fund of ₹ 1039.53 crore.

This revolving fund is the source of funding for the Metropolitan Infrastructure Development Fund (MIDF). The Government of India has issued guidelines to utilise the revolving fund so mobilised for the creation of urban infrastructure projects in Chennai Metropolitan Area only.

So far, a sum of ₹ 717.84 crore has been sanctioned under the MIDF for various infrastructure projects in Chennai Metropolitan Area.

### **8.3 TUFIDCO's Infrastructure Funding Scheme(TIFS)**

An Infrastructure Funding Scheme has been formulated by TUFIDCO namely, TUFIDCO's Infrastructure Funding Scheme (TIFS) in order to extend financial assistance to implement various infrastructure projects such as Roads, Storm water drains, Water supply, Underground sewerage, Bus stands, shopping complexes etc., in Urban Local Bodies, Boards, Statutory authorities and other Government agencies. This fund has been raised

from Share capital, reserves and surplus of TUFIDCO, loan from Banks and deposits from the public.

## **9. New Tiruppur Area Development Corporation Limited**

The first Public Private Partnership project in the country was proposed in Tiruppur for provision of Water Supply and Sewerage to Tiruppur Municipality, adjacent area and industries. Government signed a Concession Agreement with the then Tiruppur Municipality (now Corporation) and the Special Purpose Vehicle, New Tiruppur Area Development Corporation Limited (NTADCL). The Agreement was to implement a 185 million litres per day (mld) water supply project mainly for meeting the requirements of knitting industries in and around Tiruppur. **The foundation Stone was laid on 20.06.2002 by the Hon'ble Chief Minister and the project was inaugurated in February 2006.**

This water supply project is also catering to the domestic water supply requirements of Tiruppur Corporation. In addition, 18 Village Panchayats and about 600 rural habitations covered in 5 Panchayat Unions in the wayside are benefitted by the

project. A Sewerage system in major parts of Tirupur Corporation has also been completed and functioning. Low cost sanitation facilities have also been implemented for the urban poor.

The Industries in Tiruppur have been facing the problem of safe disposal of the effluent generated. In the opinion of the Pollution Control Board, the industries have not adequately responded to the regulatory requirements of the Board. The matter has been under consideration of the High Court and finally, Hon'ble High Court has delivered a Judgment in January 2011 ordering closure of industries until adequate pollution control measures are taken up by the industries.

Consequently, most of the Dyeing industries which are not following the pollution control measures have been closed. This had a cascading effect on the project and the demand for water. During the last 14 months, there has been a substantial reduction in industrial demand of water supply. Notwithstanding this, New Tiruppur Area Development Corporation Limited has been maintaining its committed quantum of supply to the

domestic sector – both in Tiruppur Corporation and wayside villages.

In view of the serious financial situation of New Tiruppur Area Development Corporation Limited and based on the representations from the company viz., the Tamil Nadu Water Investment Company Ltd (TWICL), promoter of New Tiruppur Area Development Corporation Limited and from the lenders represented by Industrial Development Bank of India (IDBI Bank), the problems of the company were considered. A Corporate Debt Restructuring package was worked out in consultation with the lenders under which the lenders agree to reschedule the debt, reduce the interest rate and convert 15 per cent of the debt into equity, while the Government would undertake to buy an additional 100 mld of water from the company at the opportunity cost of ₹21 per kl (₹15 per kl as fixed charges and ₹6 per kl as variable costs which would be subject to annual escalation).

Tiruppur Corporation would meet the entire variable charges and 10 per cent of the fixed charges, while the Government would meet 90 per cent of the fixed charges. In addition, the existing

charges for domestic water supply would be enhanced in accordance with the provisions of the concession agreement. To reduce the debt and to meet the short fall of resources required to service debt, the Government would contribute Rs 114 crore as equity share capital to the company (₹ 55 crore in 2011-12; ₹ 35 crore in 2012-13 and ₹ 24 crore in 2013-14). Further, a sum of ₹ 36.00 crore provided as ways and means advance to enable the company to pay its loan and interest installments in time and avoid becoming a non-performing asset would be converted into equity. The Corporate Debt Restructuring package has also been approved by the Company Law Board. The company will also be allowed to explore industrial demand in the area surrounding the project area. The package is expected to allow the company to revive and the project to continue to serve the public in the area continuously.

**K.P. MUNUSAMY**  
**Minister for Municipal Administration**  
**and Rural Development**



**MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT**

**LIST OF PART – II SCHEMES FOR THE YEAR 2012-2013**

(₹ in Lakhs)

<b>Sl. No.</b>	<b>Name of the Schemes</b>	<b>Amount</b>
<b>I.</b>	<b><u>Directorate Of Town Panchayats</u></b>	
1.	Purchase of Computers and Hardware for Town Panchayat Offices (529 Nos.), Assistant Director of Town Panchayats (16 Nos.) and Directorate of Town Panchayats (10 Nos.)	<b>195.00</b>
2.	Improvement of existing Water Supply Schemes in 7 Town Panchayats (Vadakkanandal, Kaveripattinam, Uddaiyarpalayam, Chittiyankottai, Aravakurichi, Pacode and Anjungramam)	<b>143.00</b>
3.	Construction of 10 New Office Buildings for Town Panchayats and Assistant Director of Town Panchayats (Sembakkam, Natrampalli, Pappaparatti, Pasur, Thiyagadurgam, Karamadai, Valangaiman, Kattuputhur,	<b>317.00</b>

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	Achanpudhur and Villukuri)	
4.	Construction of 4 Sanitary Complexes in 3 Town Panchayats (R.S.Mangalam, Alanganallur and C.Pudhupatti)	<b>40.00</b>
5.	Construction of Shopping Complex and Market improvements in 3 Town Panchayats (Melpattampakkam, Thiruppuvanam and Elumalai)	<b>39.00</b>
6.	Construction of Slaughter House at weekly market at Mudukalathur Town Panchayat, Ramanathapuram District.	<b>20.00</b>
7.	Improvement of infrastructure facilities in Bus stand in 3 Town Panchayats (R.S.Mangalam, Elumalai and Omalur).	<b>70.00</b>
8.	Road, Storm water drain and Bridge works in 3 Town Panchayats (Ganguvarpatti, Vellaloor and Paravai)	<b>188.00</b>
9.	Compost yard improvement in 2 Town Panchayats (Sholavandan and Alanganallur)	<b>30.00</b>

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<b>II.</b>	<b><u>CORPORATION OF CHENNAI</u></b>	
10	Purchase of 2 Nos. of Cold Milling machine for the purpose of attending patches in important roads of Chennai City.	<b>300.00</b>
<b>III.</b>	<b><u>TAMIL NADU WATER SUPPLY AND DRAINAGE BOARD</u></b>	
11	Provision of SCADA for Combined Water Supply Scheme (CWSS) to 893 habitations in Nagapattinam District.	<b>150.00</b>
12	Provision of SCADA for CWSS in 417 wayside habitations in Coimbatore and Tiruppur Districts.	<b>150.00</b>
<b>IV.</b>	<b><u>CHENNAI METROPOLITAN WATER SUPPLY AND SEWERAGE BOARD</u></b>	
13	Centralised City Water Supply Network System using real time Data Acquisition and Matrix Display System.	<b>200.00</b>

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<b>V.</b>	<b><u>COMMISSIONERATE OF MUNICIPAL ADMINISTRATION</u></b>	
14	Construction of additional works in the new Office Building for Regional Directorate of Municipal Administration, Tiruppur.	<b>50.00</b>
15	Providing additional facilities in the new hostel building at Tamil Nadu Institute of Urban Studies (TNIUS), Coimbatore	<b>75.00</b>
16	Construction of 42 Nos. (7 Blocks) of new Quarters for Sanitary Workers at Sankarankoil Municipality.	<b>200.00</b>
17	Construction of new Zonal Office Buildings in 3 Corporations ( Madurai, Salem and Thoothukudi) new Office Buildings in 3 Municipalities (Udhagamandalam, Mettupalayam and Sathyamangalam) and new additional Building in 1 Municipality (Walajapet).	<b>500.00</b>

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18	Construction of new Modern Slaughter Houses in the 5 Municipalities (Rasipuram, Dharmapuri, Hosur, Thiruthani and Poonamallee)	<b>100.00</b>
19	Construction of new Modern Gasifier Crematorium in 5 Municipalities (Anakaputhur, Thiruverkadu, Maraimalai Nagar, Kancheepuram and Thiruthani).	<b>200.00</b>
20	Purchase of one new Jet Rodding Machine to the Chinnamanur Municipality for UGSS	<b>40.00</b>
21	Purchase of one new 500 KVA diesel Generator in the Coimbatore City Municipal Corporation and Pollachi Municipality	<b>135.00</b>
22	Construction of new Storm Water Drain at Thiruthangal Municipality	<b>58.00</b>
	<b>Total</b>	<b>3200.00</b>

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**DEMAND No.34**

**MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT**

**Estimate of the amounts required for Expenditure in 2012-2013**

**BUDGET ESTIMATE 2012-2013**

(₹ in Thousands)

	<b>Revenue</b>	<b>Capital</b>	<b>Loan</b>	<b>Total</b>
<b>Demand for Grant – Voted</b>	5,698,82,44	3,516,06,17	209,87,89	9,424,76,50
<b>Appropriation – Charged</b>	3	-	-	3

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**Net Expenditure Rupees in Thousands**

<b>Head of Account</b>		<b>2010-2011 Accounts</b>	<b>2011-2012 Budget Estimate</b>	<b>2011-2012 Revised Estimate</b>	<b>2012-2013 Budget Estimate</b>
2215	Water Supply and Sanitation	399,64,54	339,28,55	190,68,25	192,83,95
2217	Urban Development	544,78,12	1,439,33,86	1,117,45,39	1,493,26,85
2251	Secretariat – Social Services	5,18,34	7,48,31	5,09,94	5,58,30
2515	Other Rural Development Programmes	9,61,23	9,97,79	8,78,33	14,69,17
2551	Hill Areas	62,00	1	95,29	-
3475	Other General Economic Services	15,23,02	16,56,98	23,83,41	24,31,51
3604	Compensation and Assignments to Local Bodies and Panchayat Raj Institutions	2,553,38,58	3,271,57,21	3,262,55,59	3,965,22,97

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4215	Capital Outlay on Water Supply and Sanitation	941,82,61	1,553,71,08	1,648,53,51	1,761,75,06
4217	Capital Outlay on Urban Development	272,71,94	1,636,32,03	857,32,01	1,199,83,01
4515	Capital Outlay on Other Rural Development Programmes	129,23,22	5,49,07	56,80,09	54,48,10
5054	Capital Outlay on Roads and Bridges	- 5,76,71	1	-	-
6215	Loans for Water Supply and Sanitation	143,45,40	39,58,28	114,04,28	37,02,89
6217	Loans for Urban Development	118,00,00	340,78,00	150,00,00	172,00,00
7610	Loans to Government Servants etc.	-	1	3,75	15,00
7615	Miscellaneous Loans	42,09	70,00	70,00	70,00

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**DEMAND No.34**

**MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT**

**BUDGET ESTIMATE 2012-2013**

**(₹ In Thousands) (Gross)**

Head of Department		Revenue	Capital	Loan	Total
1 34 01 Secretariat	Charged	1	-	-	1
	Voted	5,65,76	-	15,00	5,80,76
2 34 02 Commissionerate of Municipal Administration	Charged	1	-	-	1
	Voted	3,401,61,77	1,735,03,02	172,70,00	5,309,34,79
3 34 03 Directorate of Town Panchayats	Charged	1	-	-	1
	Voted	1,164,78,93	54,68,13	-	1,219,47,06
4 34 04 Tamil	Voted	3,00,02	1,426,35,01	37,02,89	1,466,37,92

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Nadu Water Supply and Drainage Board					
5 34 05 Chennai Metropolitan Water Supply and Sewerage Board	Voted	188,48,92	300,00,01	-	488,48,93
6 34 06 Tamil Nadu Urban Finance & Infrastructure Development Corporation Ltd.,	Voted	935,27,04	-	-	935,27,04
Total	Charged	3	-	-	3
	Voted	5,698,82,44	3,516,06,17	209,87,89	9,424,76,50

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