

DEMAND No. 34

MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT

Policy Note - 2014-2015

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 Puratchi Thalaivi Amma 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. The Government have accorded utmost importance for the provision and access to safe

and adequate drinking water to every household in the Urban Local Bodies. In order to meet this challenging objective, the Government have initiated various projects under the Integrated Urban Development Mission (IUDM), Japan International Cooperation Agency (JICA), German Development Bank (KfW), Tamil Nadu Urban Development Mission (TNUDP-III) and Urban Infrastructure Development Schemes for Small and Medium Towns (UIDSSMT) and had spent a sum of ₹945.95 crore during the year 2013-14 to complete water supply schemes in 3 Corporations, 6 Municipalities and 4 Town Panchayats.

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. **The Hon'ble Chief Minister** had also inaugurated a 100 mld capacity desalination plant at Nemmeli on 22.02.2013 at a cost ₹ 871.24 Crore to further stabilize the water supply to Chennai City, 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 near 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

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. The Government had taken a policy decision to implement Under Ground Sewerage System in all the Urban Local Bodies in a phased manner. During 2013-2014 a sum of ₹327.78 crore had been spent for the completion of 11 projects. In addition, 33 schemes at a cost of ₹3268.70 crore have been taken up. Absence of sufficient and well maintained public toilets in the urban areas had led to the age old practice of open

defecation. Recognizing this the Government had released ₹244.45 crore in the past 3 years for the construction and renovation of Community Hall.

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 ₹1500 crore was provided for the Chennai Mega City Development Mission and ₹2250 crore for the Integrated Urban Development Mission during the past 3 years. 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 2014-2015 an amount of **₹500 crore** will be 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. This Government lays special emphasis on the fact that all the Urban Local Bodies are to be maintained clean and green. Solid Waste Management, therefore assumes greater significance among the basic functions of the Urban Local Bodies. To fulfil this objective and to promote source segregation RRR concept (Reduce, Reuse and Recycle) had been introduced. The Government had created a special Solid Waste Management fund of ₹100 crores and several projects have been taken up in 79 towns.

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

The population of the Corporations (except Chennai Corporation) as per census 2011, is 80,65,843 accounting for 11.18% of the total population of the State and 23.08% of

the Urban population and the annual growth rate is 1.10%. The total area under the Corporations (except Chennai Corporation) is 1278.34 sq.km. which constitutes 9.38 % of the total urban area of the State.

The population of the Municipalities as per census 2011, is 90,18,646 accounting for 12.50% of the total population of the State and 25.80% of the urban population and the annual growth rate is 1.02%. The total area under the Municipalities is 2560.12 sq.km. which constitutes 18.78 % of the total urban area of the State.

There are 11 Municipal Corporations (except Chennai) viz, Madurai, Coimbatore, Tiruchirappalli, Tirunelveli, Salem, Tiruppur, Erode, Vellore, Thoothukudi, Dindigul and Thanjavur and 124 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 as follows:

Sl. No.	Grade	Annual income (in ₹ crore)	No. of Municipalities
(1)	(2)	(3)	(4)
1	Special Grade	Above 10.00	18
2	Selection Grade	6.00-10.00	28
3	First Grade	4.00-6.00	34
4	Second Grade	Below 4.00	44
Total			124

Elected Representatives in Municipal Corporations and Municipalities

As mandated by the 74th Constitutional Amendment Act, the elections to the Municipal Corporations and Municipalities were conducted on 17th and 19th October 2011. During these elections, the Corporation Mayors and Municipal Chairpersons were elected directly by the

people. The elected Corporation Mayors, Municipal Chairpersons and Councillors under the following categories have assumed their Offices on 25th October 2011.

Urban Local Bodies	SC (General)	SC (women)	ST (Women)	Women (General)	General	Total
Corporations						
Mayors	--	1	--	3	6	10
Councillors	54	31	--	245	490	820
Municipalities (*)						
Chair persons	10	6	1	35	74	126
Councillors	275	197	4	1037	2199	3712

(*) Includes Dindigul and Thanjavur Municipalities. Later, Dindigul and Thanjavur Municipalities have been upgraded as Corporations. Sembakam Town panchayat has been upgraded as Municipality.

2.1 Infrastructure Development

Creating and maintaining urban infrastructure is an important function of the Urban Local Bodies (ULBs). The Government accords highest priority to the creation of

quality and effective infrastructure. Infrastructure works in ULBs are taken up by accessing financial assistance from Central/State Governments and external funding agencies like World Bank, German Development Bank (KfW) and Japan International Cooperation Agency (JICA).

2.2 Integrated Urban Development Mission

The Hon'ble Chief Minister has launched the Integrated Urban Development Mission for all Corporations (except Chennai), Municipalities and Town Panchayats which has given major thrust to the Infrastructure Development of the Urban Local Bodies in improving the basic standards of infrastructure like roads, drinking water supply, street lights, sewerage, storm water drains, sanitation, solid waste management, improvement of bus stands, parks etc., in an integrated manner.

During the last 3 years, ₹1665.80 crore has been infused for development of urban infrastructure. Out of 5598 works undertaken, 4932 have been completed, and the balance works are in various stages of implementation.

The sector wise projects taken up during the year 2013-14 under IUDM are as follows:

Sl. No	Sector	No. of ULBs	Amount Sanctioned (₹ in Crore)	Number of Works taken up	Completed	Works under progress
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Under ground Sewerage Scheme	26	125.52	27	0	27
2	Water Supply	72	281.53	200	40	160
3	Roads	55	172.97	303	92	211
4	Storm Water Drains	9	39.55	67	3	64
5	Solid Waste Management	20	16.74	20	0	20
6	Street Lights	2	14.48	2	0	2
7	Eradication of Open Defecation Construction of Toilets	77	12.50	88	4	85
	Total		663.29	707	139	568

During 2014-15 an amount of ₹500.00 crore has been sanctioned for continuing this scheme.

2.3 Water Supply

Norms prescribed by Central Public Health and Environmental Engineering Organization (CPHEEO) for drinking water supply in Corporations and Municipalities covered by underground sewerage system is 135 Litres Per Capita per Day (LPCD). For other cities not covered by underground sewerage system, it is 90 LPCD. The ULBs aim to implement water supply schemes with the objective of achieving these norms.

Out of 11 Corporations (except Chennai), the present status of water supply in 5 Corporations is 110 LPCD and above and in 3 Corporations is in the range of 70-109 LPCD & 3 Corporations are in the range of less than

70 LPCD. Out of 124 Municipalities the present status of water supply in 42 Municipalities is 90 LPCD and above in 80 Municipalities in the range of 40 – 89 LPCD, 2 Municipalities are less than 40 LPCD.

The Government has accorded priority for the provision and access to safe and adequate drinking water to every household in the Urban Local Bodies. In order to improve the water supply situation, the government has taken up various water supply projects availing financial assistance from various external agencies as Japan International Cooperation Agency (JICA), German Development Bank (KfW), World Bank and under various schemes such as Integrated Urban Development Mission (IUDM) and Urban Infrastructure Development for Small and Medium Towns (UIDSSMT). These schemes are being implemented by ULBs and in some cases by the para-statal agencies like Tamil Nadu

Water Supply and Drainage Board (TWAD) and the Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB).

The water supply schemes under implementation with the financial assistance from different funding agencies are detailed below:

Sl. No.	Name of Scheme	Number of projects	Project Cost (₹ crore)
(1)	(2)	(3)	(4)
1	Tamil Nadu Urban Development Project III	19	630.99
2	Urban Infrastructure & Governance (JnNURM)	9	589.27
3	Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)	40	736.40
4	Tamil Nadu Urban Infrastructure Programme (JICA)	9	663.68
5	Sustainable Municipal Infrastructure Financing (KfW)	9	417.55
	Total	86	3037.89

Under TNUDP III, 19 Water Supply Schemes were taken up at a cost of ₹630.99 crore, of which, 15 schemes have been completed. The dedicated water supply scheme in Salem Corporation is under trial run. Water Supply Improvement Schemes to Pallavapuram, Pammal and Theni Allinagaram Municipalities taken up at a cost of ₹211.88 crore are under progress.

Under Urban Infrastructure & Governance (JnNURM), 9 water supply improvement schemes (WSIS) have been taken up at an estimated cost of ₹589.27 crore, of which 5 works have been completed. Balance 4 projects (Avadi, Thirumangalam and Water Supply Schemes for added areas of Coimbatore and Madurai Corporation) are in various stages of implementation.

Under Urban Infrastructure Development Scheme for Small and Medium Towns (JnNURM), 40 Water Supply Improvement schemes (WSIS) were taken up, at a cost of ₹736.40 crore of which, 22 schemes have been completed.

- In Palladam, Mettur, Chidambaram, Dharapuram, Tiruchengode, Attur, Kayalpattinam, Cumbum, Kovilpatti, Karaikudi, Vandavasi, Vellakoil and Kangeyam Municipalities, the works are in various stages of implementation.
- In respect of Periyakulam, Thiruvathipuram, Tindivanam and Arani Municipalities, administrative sanction has been accorded and TWAD Board is implementing the projects. Water Supply Improvement Scheme work for Kodaikanal Municipality is under consideration by Government of Tamil Nadu.

With the financial assistance of **JICA**, 9 water supply improvement schemes have been taken in Tiruchirappalli and Thoothukudi

Corporations, Palani, Coonoor, Edappadi and Devakottai Municipalities at a cost of ₹663.68 crore. The projects in Tiruchirapalli Corporation and Devakottai Municipality are completed and remaining are under progress. Dindigul, Mettupalayam and Udumalpet Municipalities are in Tender stage.

The Hogenakkal Water Supply and Fluorosis Mitigation Project has been completed at an estimated cost of ₹1928.80 crore which benefited Dharmapuri, Krishnagiri and Hosur Municipalities.

The water supply scheme in Thoothukudi Corporation has been taken up under **JICA** fund at an estimated cost of ₹282.44 crore and the work is under progress.

Under KfW fund, out of 9 works were taken up, at a cost of ₹417.55 Crore, the works in Tirunelveli Corporation, Kadayanallur and

Thiruvannamalai Municipalities have been completed at a total estimated cost of ₹80.30 crore. Works in Karur, Udhamandalam, Thanthoni, Inamkarur, and Pallipalayam Municipalities are being implemented by TWAD board.

New Scheme for improvement of source and distribution system in Tirunelveli Corporation is being implemented at a total estimated cost of ₹230.00 crore by the ULB.

Apart from the above major projects, the TWAD Board is also implementing the following Water Supply Projects:

- Vellore Combined Water Supply Scheme (CWSS) at an estimated cost of ₹1295.00 crore for Vellore Corporation and Ambur, Arcot, Arakkonam, Gudiyatham, Ranipet, Tirupattur, Vaniyambadi, Walajapet, Jolarpet, Melvisharam and Peranampet Municipalities.

- CWSS to Attur and Narasingapuram Municipalities taken up for implementation at an estimated cost of ₹270.00 crore.
- CWSS to Melur Municipality has been taken up at an estimated cost of ₹23.80 crore.

Apart from the above the following water supply improvement schemes have been proposed to be taken up for implementation during 2014-15:-

Sl. No	Name of the Town	Name of the scheme	Project cost (₹ crore)	Source of funding
(1)	(2)	(3)	(4)	(5)
1	Coimbatore	24x7 Distribution system improvement	496.81	JnNURM-UIG
2	Anakaputhur	Improvement to Distribution System	13.57	
3	Poonamallee	Distribution system improvement	20.00	
4	Erode	Augmentation of source and coverage of added areas.	391.91	JnNURM-UIDSSMT

Sl. No	Name of the Town	Name of the scheme	Project cost (₹ crore)	Source of funding
(1)	(2)	(3)	(4)	(5)
5	Kumbakonam	Improvement to Distribution system	23.34	JnNURM-UIDSSMT
6	Sathya mangalam	Improvement to Distribution system	24.00	
		Total	969.63	

2.3.1 Efficient Water Management System

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

- Replacing inefficient motors and pumps to improve the efficiency of the pumping system.
- Revamping the existing water supply network to ensure equitable distribution of water.
- Implementation of the Supervisory Control and Data Acquisition (SCADA) system 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. have been taken up in the water supply scheme in Corporations and Municipalities.

- In Coimbatore Corporation, SCADA implementation has been completed by TWAD Board. For Pilur-II, DPR is under preparation.
- SCADA system has been partially implemented in the Corporations of Tirunelveli, Tiruppur and Madurai.
- In Tiruchirappalli Corporation, implementation is under progress.
- In Rasipuram, Komarapalayam, Tiruchengode, and Narasingapuram Municipalities, SCADA works are at Tender stage.

2.3.2 Improvement of Distribution system

In order to improve the distribution system in 42 ULBs, Detailed Project Reports (DPRs) have been prepared for 31 ULBs at a project cost of ₹695.76 crore, of which, 11 works amounting to ₹161.04 crore are being taken up under various schemes like TNUIP,

UIDSSMT, UIG and IUDM. DPRs are under preparation and action is being taken up to have financial tie up for the balance ULBs.

2.3.3 Rain Water Harvesting

The path-breaking Rain Water Harvesting (RWH) 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 has 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 while issuing Building Plan approval. The rain water harvesting structures created throughout the State have helped to raise the ground water table substantially. The awareness programme for Rain Water Harvesting is also being continued in all the ULBs.

Upto June 2014, out of 40.99 lakh buildings in Corporations and Municipalities, 30.64 lakh buildings (20,000 Government buildings and 30.44 lakh Private buildings) have been provided with RWH structures. Rain water harvesting in the water bodies in ULBs have also been given major thrust. Out of 1478 Ponds and temple tanks, 585 have already been provided with RWH structures.

With this drive, 74.75% of Buildings and 40% of Ponds and Tanks have been covered up to June 2014. The harvestable rain water from

buildings and water bodies is calculated at 4.42 TMC which may be recharged into the ground water (Source: TWAD).

ULBs are taking effective steps to revive and rejuvenate RWH structures and to install new structures in the remaining water bodies. During the year 2014-15, RWH structures will be taken up in remaining Buildings and 177 Ponds and Tanks in the ULBs.

2.3.4 Water Scarcity Mitigation Measures during summer

In order to tackle the water scarcity situation in the summer, Water Scarcity Mitigation Measures in 3 Corporations and 40 Municipalities in 11 Districts comprising severe rainfall deficit districts, have been taken up at an estimated cost of ₹67.80 crore, of which ₹50.87 crore has been released as grant. Remaining ULBs in other 20 districts have taken up Summer Management works at an estimated

cost of ₹77.22 crore. In 31 Districts, 2335 works such as rejuvenation of sources, creation of new sources, replacement of pipelines, and supply through lorries are being undertaken and 1850 works have been completed and the balance works are in progress. These works have proved to be of immense help in tackling the shortage of water in rainfall deficit districts.

2.4 Under Ground Sewerage Scheme

As per the policy decision of the Government, the implementation of UGSS to all the Urban Local Bodies will be taken up in a phased manner. The Detailed Project Reports for 117 Municipalities and three Corporations, namely Tiruchirappalli, Coimbatore and Thoothukudi, for an estimated project cost of ₹8670 crore have been prepared. These DPRs have been prepared by CMWSSB, TWAD Board, and the ULBs. The implementation will be taken

up in a phased manner after necessary financial tie up.

2.4.1 Implementation of Under Ground Sewerage Schemes

Under the **Tamil Nadu Urban Development Project-III**, UGSS have been taken up in 22 Towns for implementation at a total cost of ₹928.31 crore, of which the UGSS in Udhagamandalam, Chinnamanur, Namakkal, Dharmapuri, Perambalur, Dindigul(part), Thiruvannamalai, Kancheepuram, Ramanathapuram and Pallavapuram Municipalities have been completed at a cost of ₹368.26 crore.

Under the **Urban Infrastructure and Governance** component of JnNURM, UGSS in in 4 Towns (Madurai and Coimbatore Corporations, Avadi and Tambaram Municipalities) were taken up at a total cost of ₹925.49 crore and the works are at various stages of implementation.

Under the **Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)** component of JnNURM, UGSS in 3 Towns (Maraimalai Nagar, Ariyalur and Udumalaipet) were taken up at a total cost of ₹86.32 crore. UGSS in Maraimalai Nagar has been completed. The projects are in advanced stages of implementation in Ariyalur and Udumalacet.

Upto June 2014, 2,51,981 House Service Connections have been effected in 20 ULBs (viz.Coimbatore, Dharmapuri, Thiruvannamalai, Dindigul, Pallavapuram, Maraimalainagar, Chinnamanur, Kancheepuram, Tirunelveli, Tiruchirapalli, Madurai, Udhagamandalam, Namakkal, Karur, Mayiladuthurai, Kumbakonam, Thanjavur, Tiruppur, Perambalur and Ramanathapuram) in which the Under Ground Sewerage Scheme is completed.

Out of the 22 ULBs for which UGSS has been announced during the budget session of 2012-13, works are in progress in 4 ULBs (Perambalur, Ariyalur, Trichy – Srirangam and Nagercoil (Phase-I). For 17 ULBs financial closure has been achieved. The details are as follows :-

Sl. No.	Name of the Town	Source of funding	Estimated Cost (₹ crore)
(1)	(2)	(3)	(4)
1	Mettur	UIDSSMT	73.09
2	Tirupattur	UIDSSMT	104.01
3	Arakkonam	UIDSSMT	95.52
4	Jolarpet	UIDSSMT	79.00
5	Sattur	UIDSSMT	37.66
6	Periyakulam	UIDSSMT	26.60
7	Chidambaram	UIDSSMT	75.62
8	Pollachi	KfW	144.20
9	Karaikudi	KfW	111.41
10	Kodaikanal	IUDM	140.00
11	Palani	IUDM	98.30
12	Sathyamangalam	IUDM	54.26
13	Rasipuram	IUDM	55.42
14	Rameswaram	IUDM	38.94
15	Bodinayakanur	IUDM	60.60
16	Kumarapalayam	IUDM	107.81
17	Bhavani	IUDM	54.55
	Total		1356.99

For Hosur Municipality Financial tie-up is being arranged under TNSUDP.

The advanced techniques like trenchless technology for laying of sewer line, usage of prefabricated manholes, HDPE pipes and other modern technologies for treatment of sewage etc., are being explored.

2.5 Sanitation

With a vision to ensure that the towns are sanitized, healthy and liveable and sustain public health for all the citizens, the Government have brought to focus, access to safe sanitation including open defecation free and garbage free environment as priority areas.

2.5.1 Eradication of Open Defecation

Recognizing 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 posing serious sanitation problems and health hazards, the Government has announced the total elimination of open defecation by 2015. Necessary Guidelines and instructions were issued to the Urban Local Bodies and suitable sites have been identified for construction of toilets.

A massive awareness campaign has been launched to create awareness on health hazards of open defecation and need for behavioural change. A detailed survey has been taken up by the ULBs in coordination with NGO's, to identify the locations where open defecation is still practiced. Based on the Survey, 3024 number of public toilets improvements and construction of new toilets have been contemplated by 2015-16 to eradicate open defecation. In the last 3 years, construction of 809 new toilets and

rehabilitation of 1298 existing toilets have been taken up at a cost of ₹114.30 crore, out of which construction of 259 new toilets and rehabilitation of 1273 existing toilets has been completed and remaining are in various stages of progress.

With a view to improve the usability by different types of user groups, such as Men, Women, Children, Elders, Differently Abled, a “Universal Design Toilet–Namma Toilet” has been developed by the Commissionerate of Municipal Administration. It is being implemented in various ULBs and has received a positive feedback from all the users. On the same lines of Universal Access and Design, retrofitting manual for Municipal Engineers for improving the existing toilets has been prepared.

During 2014-15 an amount of ₹72.60 crore has been sanctioned for construction of toilets in needy places.

2.6 Animal Birth Control (ABC) Programme

The Animal Birth Control (ABC) Programme is part of the Public Health function of Corporations and Municipalities. To implement the Animal Birth Control Programme in a humane manner, sanitary workers and municipal staff have been provided with training from reputed NGOs. ULBs have been provided with 60 improved vehicles at the cost of ₹3 crore for humane and painless catching of dogs. 80 Shelters for pre and post-operative care and also for mortally wounded and terminally ill dogs have been sanctioned at the cost of ₹2.4 crore.

A survey was conducted and stray dogs in all the Corporations (other than Chennai) and Municipalities were estimated as 2,90,116. Out of which, 71,985 dogs were sterilised till June 2014. Further, action is being taken to sterilise the remaining dogs in a phased manner.

2.7 Solid Waste Management

In Tamil Nadu about 7297 MT of Municipal Solid Waste is being generated daily in 11 Corporations and 124 Municipalities. The Government has given a major thrust to Solid Waste Management. To strengthen primary collection and transportation of Municipal Solid Waste, the following vehicles and equipments have been procured:

Sl. No	Details	Nos.	Cost ₹ in Lakhs
1	Push carts	4535	453.50
2	Tricycles	857	128.55
3	Mini Autorickshaws	84	487.20
4	Tipper lorries	115	1725.00
5	Dumper Placer Lorries	175	3500.00

6	Compactor Vehicles	71	1278.00
7	Front End Loaders	58	1392.00
8	Tractors	6	36.00
9	Dumper Placer Bins	4479	2239.50
10	Street Bins	3004	540.72
11	Compactor Bins	2938	1127.75
	Total	16322	12908.22

The Government had announced Waste to Energy Project for Tirunelveli Corporation at an estimated project cost of ₹55.00 crore which is under implementation.

Transaction Advisor has been appointed for the implementation of Municipal Solid Waste Management Projects in 6 identified clusters namely, Tiruchirappalli, Tiruppur, Tirunelveli, Thoothukudi, Vellore Corporation and Nagercoil Municipality. Detailed Project Report has been prepared and is being posed for financial tie up.

As per the direction of the Hon'ble Chief Minister, a Special Solid Waste Management (SWM) Fund has been constituted

with a sum of ₹100.00 crore for financing projects to weaker Urban Local Bodies during 2013-14. Under this fund the following amount has been sanctioned:

- ₹4.00 crore for implementation of Waste to Energy Project in Tirunelveli Corporation.
- ₹6.53 crore for Scientific Closure of existing dump site at Ramayanpatti in Tirunelveli Corporation.
- ₹0.45 crore for construction of 5 TPD capacity Biomethanation cum Power Plant in Tambaram Municipality.

The SWM Fund has been enhanced to ₹133.00 crore for the year 2014-15.

2.7.1 Biomethanation Plants

Municipal Solid Waste consists of 50-60% of bio-degradable matter and the rest is recyclables and inerts. Of the total bio-degradable waste generated, approximately 20%–25% of waste comes from bulk waste

generators viz. Hotels, Restaurants, Marriage Halls, Vegetable markets, Slaughter houses etc. In order to reduce and utilize Bio-Degradable waste from the Bulk Waste Generators, a Biomethanation pilot project of capacity 3 MT was established at Arcot Municipality. The plant produces approximately 240 Units of electric energy per day which is utilized for energizing 500 No's of 40 watts street lights. Based on its success, 29 more Biomethanation power plants of 3–5 MT capacities are under construction in 5 Corporations and 24 Municipalities at an estimated cost of ₹28.30 crore with the financial assistance through IUDM Scheme, Part II scheme and SWM Fund.

After establishment of all the Biomethanation plants, the projected generation (net) of electric energy per year will be 48,18,000 and the projected Emission Reductions will be 4,095 tonnes **Co₂ per year.**

About 56,940 tonnes of waste per annum will be reduced as a result of this initiative.

2.8 Roads

Roads form the backbone of the Urban Infrastructure development. This Government endeavours to provide motorable roads that are designed and built for the primary use for vehicular and pedestrian traffic. Roads are designed for an intended span of life and are laid based on Ministry of Road Transport and Highways (MORTH) specifications taking into consideration of their cost effectiveness.

The Corporations (except Chennai) and Municipalities maintain a total road length of 23349.93 km of which 5055.15 km are cement concrete roads, 14797.719 km are black topped roads, 1068.249 km are WBM roads, 2138.599 km are Earthen roads and

290.213 km are other roads like cut stone pavement, paver block etc.

The maintenance of roads, restoring and relaying the damaged roads due to implementation of water supply schemes, under-ground sewerage schemes and natural calamities is supported under various schemes as detailed below.

2.8.1 Tamil Nadu Urban Road Infrastructure Programme

The Government puts much emphasis on improving roads damaged due to laying of sewer lines, water mains and also due to natural calamities, over a period of time and require restoration to full width to make it motorable. To this effect, the Government has announced an "Urban Road Infrastructure Programme". For the last three years, under this programme, 1,623 km length of roads damaged due to the implementation of Under

Ground Sewerage Schemes, Water Supply Improvement Schemes and natural calamities were taken up at a sanctioned cost of ₹652.11 crore comprising 3,182 works, of which 2,910 have been completed at a cost of ₹575.93 crore as detailed below :-

Year	Sanctioned cost (₹ in crore)	Total Number of works			Expendtre. (₹ in crore)
		Taken up	Completed	Balance	
(1)	(2)	(3)	(4)	(5)	(6)
2011-12	200.00	1035	1035	--	200.00
2012-13	186.50	1084	1048	36	179.66
2013-14	265.61	1063	827	236	196.27
Total	652.11	3182	2910	272	575.93

For the year 2014-15, ₹200 crore have been allocated for taking up 400 km of roads under this programme.

2.8.2 Integrated Urban Development Mission (IUDM)

Since the launch of IUDM, from the year 2011-12 to 2013-14, 1410.17 km length of roads were taken up at a sanctioned cost of

₹497.27 crore comprising 2107 works, of which 1895 have been completed at a cost of ₹378.95 crore as detailed below:

Year	Sanctioned cost (₹ in crore)	Length in Km	Total no of works			Expenditure (₹ In crore)
			Taken up	Completed	Balance	
1	2	3	4	5	6	7
2011-12	152.11	483.62	829	829	0	154.58
2012-13	172.19	495.87	975	974	1	180.75
2013-14	172.97	430.68	303	92	211	43.62
Total	497.27	1410.17	2107	1895	212	378.95

2.8.3 Uniform Retro Reflective Road Signage

The Government have taken massive restoration and relaying of roads in the ULBs. In order to enhance the utility and usefulness of these roads to the commuters and tourists by giving proper signage, like names, cautions, tourist destination etc., a programme was taken up to provide uniform retro reflective road signage. There are totally 21,337 streets in Corporations and 41,720 streets in

Municipalities. Major streets and junctions are covered with about 14,000 road fixtures in the Corporations and Municipalities. This will be continued in the following year.

2.8.4 Plastic Roads

Plastic waste poses a major threat to the environment. This Government have placed great importance on the effective use of plastic waste to reduce environmental degradation. In order to ensure a plastic free environment, road laying in Corporations and Municipalities is being done based on plastic waste technology. Based on the Policy of the Government to use the available plastic waste to the maximum extent possible, a programme of laying the roads using plastic waste has been taken up in the Urban Local Bodies.

During the last three years, 136 Metric Tonnes of plastic waste has been utilized in

laying 324.16 kilo-meters length of roads with the financial assistance of ₹52.93 crore. To promote the collection, segregation and shredding of plastic waste, Self Help Groups (SHGs) are trained and engaged in these activities. During the year 2013-14, 14 Plastic waste collection centres with 43 shredding machines are established.

2.9 Street Lights

Street lighting is a basic amenity and one of the most important responsibility of a local body. The 11 Corporations (except Chennai) and 124 Municipalities in the State maintain 7.34 lakh Street lights. Street lighting expenditure constitutes 25-30% of the electricity bill of the urban local bodies, which is a heavy burden on the financial resources of the ULBs. This necessitated the implementation

of measures to increase energy efficiency in street lights.

On pilot basis, energy efficiency measures have been taken up in 9 corporations and 35 Municipalities of Thanjavur and Tiruppur Region. It is expected to bring about 25–35 % reduction in the electricity bill. For this project, a sum of ₹111.64 crore have been allocated under IUDM during 2011-12, 2012-13 and 2013-14. Investment grade audit is completed. Retrofitting of existing street lights into energy efficient LED fittings is in progress and is expected to be completed by September 2014. Remaining five regions comprising 89 municipalities will be taken up in 2014-15.

2.10 Special Infrastructure Programme

2.10.1 Modern Gasifier Crematorium

As a measure to protect the environment, in preference to cremation by direct wood

burning, construction of crematorium based on the Gasifier technology have been taken up in the urban local bodies. This reduces the use of firewood by more than 50%.

Accordingly, Out of the 135 ULBs the needy 82 ULBs were identified for construction of 95 modern gasifier crematorium. In the last three years 38 crematoriums have been taken up at a cost of ₹17.85 crore, out of which 13 have been completed. Balance are in various stages of implementation. Out of the 67 modern Gasifier Crematoriums available in the state, 57 are maintained by the civil society. During the year 2014-15, the construction of Modern Gasifier Crematorium will be taken up in 4 Municipalities at an estimated cost of ₹2.60 crore.

2.10.2 Modern Slaughter Houses

In order to modernize the slaughter houses and to make them environmental

friendly and free from health hazards, during the last three years, under Part II and Infra Gap Filling Funds, 34 Modern Slaughter houses were taken up in 6 Corporations and 24 Municipalities at a cost of ₹ 8.00 crore. 14 Slaughter houses have been completed and others are in various stages of implementation.

A Modern Abattoir at an estimated cost of ₹9.85 crore has been sanctioned in 2013-14 for Tiruchirapalli Corporation with the assistance from the Ministry of Food Processing Industries, Government of India.

2.11 Infrastructure and O&M Gap Filling Fund

Based on the recommendations of the 4th State Finance Commission, Government has increased Infra Gap and O&M Gap Fund from 3% to 7% and 2% to 3% respectively. During the last 3 years, 3672 works have been taken

up at the estimated cost of ₹192.72 crore under Infra Gap Filling Fund out of which 3485 have been completed and the balance works are in various stage of implementation. Under the Operations and Maintenance Gap funds, 120 works have been taken up at the estimated cost of ₹124.02 crore of which 62 works have been completed and balance are in various stage of implementation.

For the year 2014-15, an amount of ₹282.59 crore under Infrastructure and Operation & Maintenance Gap Filling Fund have been allocated. This fund will be utilized for taking up various works as Water supply improvement works, Gasifier Crematorium, Slaughter House, and sanitary workers quarters, etc.

2.12 Construction of Office Buildings

Many of the Municipalities do not have sufficient office accommodation and due to

paucity of funds ULBs are unable to take up construction of new buildings or upgrading the existing facilities. It is intention of the government to provide better environment for the citizens and employees of the ULBs.

During the last three years a grant of ₹45.11 crore has been sanctioned for 35 ULBs comprising under Infrastructure gap filling fund, Operation and maintenance gap filling fund and Part II scheme, out of which, 12 office buildings completed and remaining are in various stage of implementation.

During the year 2014-15, the construction of new office building and additional office buildings in one Corporation and five Municipalities will be taken up at an estimated cost of ₹12.99 crore.

2.13 Sanitary Workers Welfare

Sanitary workers constitute about 70% of the workforce (30109 persons out of total 43089 personnel) of the Urban Local Bodies. Their role is critical in maintaining basic sanitation and solid waste management services which is the core function of the ULBs. It is important to make their profession dignified and to give them a safe and healthy working atmosphere.

In order to mechanize some of its operations, the ULBs have been provided with 33 Jet-Rodding machines and 46 De-Silting Machines. The ULBs are also providing safety gears. The government has sanctioned ₹28.31 crore during the last three years for 20 ULBs for construction of 488 quarters for sanitary workers.

During the year 2014-15, the construction of 186 sanitary workers quarters will be taken up in 1 corporation and 6 municipalities at an estimated cost of ₹14.82 crore.

2.14 Centrally Sponsored Schemes

2.14.1 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) Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) and

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

2.14.2 Urban Infrastructure and Governance (UIG)

Details of the works taken up under the UIG

(₹ in crore)

Sl No	Name of the scheme	No of ULBs	Sanctioned amount	Number of projects	
				Taken up	Completed
1	Water supply	5	589.27	9	5
2	Construction of Check dam	1	9.15	1	1
3	Storm Water Drains	2	528.31	2	1
4	Solid Waste Management	3	215.01	3	2
5	Under Ground Sewerage Scheme	4	925.49	4	0
	Total	15	2267.23	19	9

The above 19 projects have been taken up for implementation in Madurai and Coimbatore Corporations and the ULBs in their

agglomeration and also in the Municipalities of Chennai Agglomeration, of which 9 projects have been completed and others are in various stages of implementation.

2.14.3 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 includes all core urban infrastructure development projects such as Water supply, Sewerage, Solid Waste Management, construction and improvement of drains / Storm water drains, construction/ upgradation of roads, Parking lots/spaces on Public Private Partnership (PPP) basis, Development of heritage areas and Preservation of water

bodies. Details of Projects taken up are as follows:

(₹ in crore)

SI No	Name of the scheme	No of ULBs	Sanctioned amount	Number of projects	
				Taken up	Completed
1	Roads and Drains	16	69.41	16	16
2	Water supply	39	694.17	39	22
3	Under Ground Sewerage Scheme	11	607.54	11	1
4	Solid Waste Management	1	3.58	1	1
	Total	67	1374.70	67	40

The augmentation of source and improvement to Distribution system to Kodaikanal Municipality at an estimated cost of ₹42.23 crore have been proposed for implementation during 2014-15.

Apart from the above under UIDSSMT, the Water Supply Distribution Projects for Erode

Corporation, Kumbakonam, and Sathyamangalam Municipalities at an estimated project cost of ₹439.25 crore have been proposed under UIDSSMT for funding.

2.14.4 Special package for Comprehensive Infrastructure Improvement in Madurai Corporation

Considering the poor infrastructure in Madurai City, as announced during the budget speech 2012-13 a sum of ₹250.00 crore has been sanctioned as a Special Package by the Government for the comprehensive infrastructure improvement as one time grant. During the year 2012-13, a sum of ₹116.13 crore has been released as first instalment. The balance amount of ₹133.87 crore has been released during the year 2013-14. The amount is being utilized as urban local body contribution for the Under Ground Sewerage Scheme and Storm Water Drain works taken up under

JnNURM. So far ₹206.28 crore has been utilized. Works are in advanced stages of implementation.

2.14.5 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 sub-missions in the year 2006:

- 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.

Basic Services to the Urban Poor (BSUP)

The BSUP projects are aimed at the provision of basic services to the urban poor

including security of land tenure, affordable prices, improved housing and water supply while ensuring the convergence of existing services of the Government such as health, education, social security etc.

Under this scheme, the Government of India has sanctioned so far 51 projects, at a project cost of ₹2339.08 crore for construction of 92,272 dwelling units, out of which 45,300 have been completed. Balance 46,972 works are in various stages of implementation. Out of 3852 infrastructure works, 3717 have been completed. Balance 135 works are in advanced stages of implementation.

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
1	2	3	4	5	6	7	8	9
TNSCB	7	1393.34	44870	17850	27020	65	20	45
CMA	23	679.51	42010	22510	19500	934	927	7
DTP	14	43.16	2348	2090	258	186	186	0
COC	7	223.07	3044	2850	194	2667	2584	83
Total	51	2339.08	92272	45300	46972	3852	3717	135

Integrated Housing and Slum Development Programme (IHSDP)

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 94 projects for a sum of ₹566.11 crore, with central assistance of ₹400.45 crore under IHSDP. IHSDP is being implemented in 94 Towns.

Out of 37715 Housing units sanctioned, 31343 dwelling units have been completed and 6372 units are under progress. Out of 2233 infrastructure works sanctioned, 2112 works have been completed and the balance works are under various stages of implementation. The details of the projects implemented by various agencies are as below:

Name of the Implementing Agency	No. of Projects	Project cost (₹ in Crore)	Housing units			Infrastructure works		
			Sanctioned	Completed	In Progress	Sanctioned	Completed	In Progress
1	2	3	4	5	6	7	8	9
TNSCB	1	20.09	1443	1443	0	-	-	-
CMA	68	486.57	31730	25358	6372	1957	1836	121
DTP	25	59.45	4,542	4542	0	276	276	0
Total	94	566.11	37715	31343	6372	2233	2112	121

2.15 Urban Poverty Alleviation Programme

2.15.1 Amma Unavagam

Based on the announcement made by the Hon'ble Chief Minister of Tamil Nadu on the floor of the Assembly on 15.5.2013, 90 "Amma Unavagams" ten each in Madurai, Coimbatore, Tiruchirapalli, Salem, Tirunelveli, Tiruppur, Erode, Vellore and Thoothukudi Corporations have been inaugurated by the Hon'ble Chief Minister on 2.6.2013. Further, on 11.2.2014, the Hon'ble Chief Minister of Tamil Nadu has inaugurated one Amma Unavagam in Government Rajaji Hospital, Madurai. On an average in each Amma Unavagam, breakfast and lunch is being supplied for 300 persons. Upto June 2014, 4,66,38,455 idlies, 1,06,99,821 sambar rice, and 90,25,878 curd rice has been supplied to the public at a lesser price of ₹1 per idly, ₹5 per sambar rice and ₹3

per curd rice. On opening of the Amma Unavagams in the Corporation areas, the economically weaker section, labourers, school going children are being benefitted by getting hygienic and healthy food at lesser price. This scheme is functioning successfully with overwhelming response from the people.

Further, the Hon'ble Chief Minister of Tamil Nadu in the statement dated 1.6.2014 has announced that in order to extend the benefit of the Amma Unavagam which is functioning as security shield of poor and downtrodden people in Chennai Corporation and other Corporations, to the people in other urban areas. In the next phase, other than Madurai, Vellore, Tirunelveli and Thoothukudi, in all the Government Hospitals in the District Headquarter Towns 27 Amma Unavagams at the rate of one each, 129 Amma Unavagams in 124 Municipalities, 2 Amma Unavagams one

each in Thanjavur and Dindigul Corporations, two additional Amma Unavagams one each in Coimbatore and Madurai Corporations, totally 160 Amma Unavagams will be opened shortly. As per the above announcement of the Hon'ble Chief Minister of Tamil Nadu, action has been initiated to establish Amma Unavagams in the above towns.

2.15.2 Swarna Jayanti Shahari Rozgar Yojana (SJSRY)

SJSRY aims to provide gainful employment to the urban unemployed and under-employed through 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). 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 viz., Urban Self Employment Programme (USEP), Skill Training for Employment Promotion amongst Urban Poor (STEP-UP), Urban Women Self-Help Programme (UWSP), Urban Wage Employment Programme (UWEP) and Urban Community Development Network (UCDN). The Scheme was announced by the GOI in the year 1997 and the progress made under various components till 2013-2014 is detailed below.

Scheme Name	Target	Achievement
No. of beneficiaries assisted for setting up individual micro enterprises (USEP)	6777	7283
No. of beneficiaries provided skill training (STEP-UP)	80000	92145
No. of beneficiaries assisted for setting up Group micro enterprises (UWSP)	4744	5534

No. of beneficiaries assisted through Revolving Fund for T& CS under UWSP	9883	9994
No of Man days of work generated under UWEP (in lakhs)	---	2.74

For the year 2013-14, an amount of ₹119.66 crore has been sanctioned including incentive amount of ₹49.87 crore for implementation of the scheme in all urban Local Bodies. An amount of ₹115.42 crore has been utilized under various components. So far 80,956 NHGs, 9,364 NHCs and 780 CDSs have been formed and functioning effectively.

In the year 2013-2014, under the Thrift and Credit Society (TC&S) component, 5073 groups comprising the savings of ₹389.51 Lakh have been sanctioned, ₹343.84 Lakh as revolving fund under SJSRY. The total amount of loan disbursed among 271 groups comprising of beneficiaries for Group Enterprise activities

is ₹5425.84 Lakh of which ₹1666.23 Lakh was disbursed towards subsidy under SJSRY. Capacity building, training and awareness creation have been undertaken at a cost of ₹16.58 crore.

(₹ in Crore)

S. No	Name of the Component	2013-14			Upto 2013-14		
		Physical	Financial		Physical	Financial	
			Subsidy	Project Cost		Subsidy	Project Cost
1	STEP-UP	92145	46.98	46.98	495671	219.63	219.63
2	USEP	7283	9.47	33.37	129352	255.72	901.11
3	UWSP	5534	10.43	17.88	248493	90.51	155.16
4	TCS	9994	2.01	2.01	373796	57.19	57.19

The Department organised 21 exhibitions at the District & Region level and one at the State level through UCDN component in the year 2013-14 and has promoted sale of products produced by the women group to the tune of ₹1.06 crore with the net profit of

₹0.23 crore to 467 group consisting of 1987 members.

2.15.3 Tamil Nadu Urban Livelihood Mission (TNULM)

The Government has launched Tamil Nadu Urban Livelihood Mission vide G.O. No.73 dated 24th May 2013.

The components of TNULM are as follows:

1. Income generation and economic development activities,
2. Social sector interventions in health, education and sanitation,
3. Housing,
4. Basic amenities and services – water, sanitation and other amenities,
5. Social security and safeguards and
6. Social mobilization and capacity building

It will lay special emphasis on inclusive policies involving women, destitute and differently abled persons by dovetailing ongoing programmes. The High Level Governing Board

has decided to roll out TNULM with the available SJSRY funds for the year 2013-14 and directed the mission to conduct baseline data verification of existing Below Poverty Line (BPL) list to address the implementation and focus activities on vulnerabilities like social, occupational and residential.

An amount of ₹150 crore has been provided for the current financial year for the Mission. The Perspective Plan and the Annual Action Plan is being prepared.

2.15.4 National Urban Livelihood Mission (NULM)

The Ministry of Housing and Urban Poverty Alleviation, Government of India has launched NULM and the scheme will be implemented in place of SJSRY from the year 2014-15. The total allocation for the State of Tamil Nadu is ₹107 crore (Additional Central

Assistance) for 40 head quarter Towns and Towns having population greater than 1 lakh.

2.16 Financial Resources

The sources of revenue for Urban Local Bodies include taxes, shared revenue, charges and fees, loans and grants from the Central and State Governments. The major sources of income to the ULBs are:

- Tax and non-Tax items of Revenue (Self-Generated Income)
- Devolution from the State Government (SFC Grant)
- Central Finance Commission Grant (13th CFC Grant)
- Specific grants sanctioned by GOI and State Government
- Loans from funding agencies and Government

The financial resources for 11 Corporations and 124 Municipalities during the year 2013-14 is ₹5545.28 crore. This includes the following sources.

Sl. No.	Sources	(₹ in Crore)
1	2	3
1	Own Income	1623.60
2	State Finance Commission Grant	2235.00
3	State Grant for developmental works	631.85
4	13 th Central Finance Commission Grant	275.96
5	Grant for Centrally Assisted Schemes	383.62
6	Loans	395.25
	Total	5545.28

2.16.1 State Finance Commission

In accordance with Article 243 Y of the Indian Constitution, the Finance Commission constituted 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 Fourth State Finance Commission covers the period 2012-2017. Based on the recommendations of the Fourth State Finance Commission, the vertical sharing ratio of the funds from SFC Grant between rural and urban local bodies has been fixed as 58:42.

The devolution from State's Own Tax Revenue (SOTR) from 2008-2009 to 2013-14 apportioned to the Corporation (including Chennai) and Municipalities are as follows.

Year	Granted Devolution	Devolved SOTR (₹ in crore)
1	2	3
2008-2009	9%	888.48
2009-2010	9.5%	986.76
2010-2011	10%	1447.23
2011-2012	10%	1730.84
2012-2013	10%	2132.00
2013-2014	10%	2234.14

An amount of ₹2553.89 Crore has been allocated in the Budget Estimate for the year 2014-15 to all Corporations and Municipalities.

2.16.2 13th Central Finance Commission grant

As per the recommendations of the 13th Finance Commission, the Union Government has sanctioned grants to all Corporations and Municipalities in the State of Tamil Nadu for the period from 2010-11 to 2014-15. The total allocation of grants earmarked to the Municipalities and Corporations are as follows:

Sl. No.	Grant	₹ in crore
1	2	3
1.	General Basic Grant	1,464.02
2.	General Performance Grant	821.12
	TOTAL	2,285.14

An amount of ₹260.99 crore was released to all Corporations and Municipalities except Town Panchayats during the year 2013-14 and ₹501.10 crore has been allocated in the budget estimate for the year 2014-15.

2.17 External Aided Projects

The Government of Tamil Nadu is implementing 3 external aided projects namely

- i) World bank assisted TNUDP-III
- ii) Japan International Co-operation Agency (JICA) assisted TNUIP; and
- iii) German Development Bank(KfW) assisted SMIF

Details about the above projects are provided in the notes pertaining to TNUDF.

2.17.1 Institutional Development Component under TNUDP-III

The Institutional Development Component (IDC) implemented by the Commissionerate of Municipal Administration consists of the following components:

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

Capacity Building of Municipal employees

The capacity building component is intended to enhance the skills 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 being implemented by the Commissioner of Municipal Administration.

The Government has approved 133 training programmes for the officials and Elected Representatives of the Corporations and Municipalities at an estimated cost of ₹25.88 crore out of which 89 training programmes have been completed where 16,468 officials and 12,122 Elected Representatives, totally, 28,950 have been provided training.

Project Preparation Fund

The Project Preparation Fund has been created during the formation of TNUDP III in order to assist Corporations and Municipalities technically in the preparation of Detailed Project Reports, Bid Preparation, Bid Process Management and Project Management Consultancy by using this fund. 182 projects have been taken up at a consultancy cost of ₹36.86 crore. Out of the above, 76 projects including 1 slaughter house, 1 crematorium, 53 water supply improvement schemes, 3 bus stands, 16 no's of UGSS and 2 PMC have been prepared at a project cost of ₹4369.76 crore. Out of the reports, 41 water supply and 11 UGSS projects have been taken up for implementation with financial assistance from various source of funding.

2.18 E-Governance Implementation in Corporations and Municipalities

The government is giving a major thrust to e-Governance systems in Municipal Administration. The Commissionerate of Municipal Administration has set ambitious goals of anywhere anytime citizen services through web and mobile applications. A number of applications have been developed to bring uniformity, ease of access and usability for officials of the ULBs and citizens.

Under TNUDP-III, more than 600 computer systems and associated hardware have been purchased and Tamil Nadu State Wide Area Network (TNSWAN) has been established in 56 ULBs thus improving the computer infrastructure and connectivity. The following applications have been implemented by the Commissionerate of Municipal Administration during the previous year:

1. Web Portal with improved usability and same look and feel across all ULBs.
2. Web based Project Management to enable to keep track of the project status, time and cost overruns.
3. Dengue Vector Surveillance to improve in-field data capturing accuracy for Anti-Larval and Source Reduction activities for Dengue Vector surveillance.
4. Water Supply Monitoring to improve daily reporting of ULB Water Supply across from Municipalities and Corporations.

Continuous capacity building exercise has been taken up to provide training to staff and officials in various skill sets.

Under JnNURM, Detailed Project Report of approximately ₹18.06 crore has been approved by the Ministry of Urban Development. The centralized web based application will be implemented during the course of the year.

2.18.1 Implementation of Geographical Information Systems

The Commissionerate of Municipal Administration has taken up a challenging task of moving property tax and other asset management processes through Geographical Information Systems (GIS). Geo spatial survey has been completed in 17 ULBs, viz. Coimbatore, Madurai and Tiruchirapalli, Salem, Vellore, Erode and Tuticorin Corporations and Rajapalayam, Gobichettipalayam, Dindigul, Virudhanagar, Sivagangai, Udhamandalam, Tambaram, Krishnagiri, Pudukkottai and Namakkal Municipalities. Survey for remaining ULBs will be taken up in a phased manner.

The Commissionerate of Municipal Administration is also preparing an Enterprise level GIS application including a comprehensive Web based GIS and MIS specific to Municipal

Administration requirements. Some of the key solution features cover the following:

- i) Property Management
- ii) Estate Management
- iii) Advertisement & Hoardings
- iv) Disaster Management
- v) Water Supply Module
- vi) Sewage Management System
- vii) Roads and Transportation
- viii) Storm Water Drains Module

These applications will make use of the survey maps and MIS data available with the Municipalities and Corporations and help in improvising the revenue collections efficiency of the Municipalities and Corporations.

2.19 Tamil Nadu Institute of Urban Studies (TNIUS)

Tamil Nadu Institute of Urban Studies, Coimbatore was established in 1981 with a view to achieve greater efficiency in the functioning of the administration of ULBs. The main objectives are

- i) To create awareness on the need for the application of latest management techniques in various branches of Municipal Administration,
- ii) To disseminate knowledge of municipal administration and urban development through training programmes, seminars, conferences, publications etc.,
- iii) To conduct research studies and consultancy services in urban development, municipal administration and related disciplines, and
- iv) To foster and assist in the development of urban infrastructure and for integrated urban development.

The annual contributions collected from the Municipal Corporations, Municipalities and Town Panchayats constitute major source of revenue for its operation. A new Hostel has been constructed to improve the residential training capacity of the institute by an additional 32 people in 16 rooms.

The institute is at the forefront in conducting training for elected representatives and municipal staff. Various training programmes like orientation training for Elected Representatives and comprehensive and refresher training course for officials and staff of ULBs are conducted. The details of training programmes organized are as follows:

Sl. No.	Training	Number of People Trained
1	2	3
1	Post Graduate Diploma in Urban Financial Accounting and Management	40
2	Post Graduate Diploma in Solid Waste Management	23
3	Orientation Training Programme for Mayor, Deputy Mayor and Councillors and Orientation training for women elected representatives of Municipal Corporations and Municipalities	3396
4	Presidents of Community Development Society [CDS]	739

Sl. No.	Training	Number of People Trained
1	2	3
5	Double Entry Accounting System and Introduction & updated Accounting and Budget Manual	628
6	Local Financial Management - Best Practices and National Scenario for Accountants of municipalities	107
7	Two-week programme was conducted for newly recruited Assistant Engineers of Municipalities	65

The following research and studies have also been undertaken by the institute:

Sl. No.	Research / Consultancy Study Undertaken	Value of Research / Consultancy (₹ in Lakhs)
1	2	3
1	Slum Profile Analysis Report under the Urban Statistics for HR and Assessments [USHA] Survey Analysis	76
2	Perspective Plan for Tiruchirapalli Corporation	10 (estimated)
3	ULB Performance Ranking	10

Sl. No.	Research / Consultancy Study Undertaken	Value of Research / Consultancy (₹ in Lakhs)
1	2	3
4	Development of IEC activity and Strategy for Solid Waste Management	10

The Institute has signed Memorandum of Understandings (MoU) with reputed State and National Training and Research Institutions for collaborative learning in the field of Urban Governance such as

- 1) Engineering Staff College of India (ESCI), Hyderabad,
- 2) Indian Institute of Human Settlement (IIHS), Bengaluru and
- 3) ICT Academy of Tamil Nadu, Chennai

A Japanese team visited the Institute during 2014 for discussing the possibility of conducting collaborative capacity building programmes, resource exchanges etc.

For the current year, the focus of the Institute will be on Capacity Building under JnNURM for ULBs and to position itself as a

valuable resource centre supporting all the Urban Local bodies.

2.20 Corporations

2.20.1 Madurai Corporation

The population of Madurai Corporation as per 2011 census is 12,30,015, and the extent is 147.99 sq.km with an average annual income of ₹244.21 crore.

During the year 2013-14, the following projects were taken up for implementation:

- Under Integrated Urban Development Mission, a sum of ₹29.15 crore was sanctioned for contribution to WSIS work and improvement to Roads.
- For the year 2013-14, under TURIP ₹15.00 crore has been sanctioned to restore the length of 42.98 km of roads. Out of the 45 works taken up 41 works have been completed at an expenditure of ₹10.98 crore. Balance works are under progress.
- Under Infra gap filling fund and state fund, a sum of ₹1.00 crore was sanctioned for construction of 6 Universal design toilets.

- Under Infra gap filling fund, ₹6.00 crore was sanctioned for replacement of existing damaged AC pumping main for water supply improvements.
- Under UIG-JnNURM ₹106.99 crore was sanctioned to Avaniyapuram, Thirunagar and Vilangudi for Melur combined water supply scheme and the works are in progress

2.20.2 Coimbatore Corporation

The population of Coimbatore Corporation as per 2011 census is 12,62,122 and the extent is 265.26 sq. kms. with an average annual income of ₹489.40 crore.

During the year 2013-14, the following projects were taken up for implementation:

- Under Integrated Urban Development Mission, a sum of ₹26.43 crore was sanctioned for relaying of damaged roads due to implementation of UGSS to a length of 115.58 kilo-meters.
- Under Infra gap filling fund and state fund, a sum of ₹1.00 crore was

- sanctioned for construction of 10 no's of Universal design toilet
- Under Infra gap filling fund and O&M gap filling fund , a sum of ₹11.13 crore was sanctioned for Water supply improvement scheme
- Under TURIP 2013-14, ₹15.00 crore has been sanctioned to restore a length of 42.48 km of roads. 35 works have been taken up and completed at an expenditure of ₹15.52 crore.
- Under UIG-JnNURM water supply scheme at an estimated cost of ₹29.03 crore was sanctioned to Thudiyalur, Vellaikinaru, Saravanampatti, Chinnavedampatti and Kalapatti and the works are in progress.

The Ministry of Non-Conventional Energy of the Government of India has selected the Coimbatore City Municipal Corporation as one among the 60 cities in India for the purpose of declaring as Solar City. On obtaining necessary permission from the Non-Conventional Energy Agency of Government of

Tamil Nadu, a MoU has been executed with the ICLEI (International Council for Local Environmental Initiatives), South Asia for the purpose of preparation of DPR. Necessary steps will be taken to install Solar panels for generating electricity to be used in all the Corporation offices and buildings, multi storeyed tenements and thereby energy saving will be ensured.

2.20.3 Tiruchirappalli Corporation

The population of Tiruchirappalli Corporation as per 2011 census is 7,96,644 and the extent is 167.23 sq. kms. with an average annual income of ₹233.42 crore.

During the year 2013-14, the following projects were taken up for implementation:-

- Under Integrated Urban Development Mission, ₹15.20 crore was sanctioned for taking up of 6 road works, 21 Storm Water Drains and one Biomethanation plant.

- Under Infra gap filling fund and state fund, a sum of ₹0.85 crore was sanctioned for construction of 7 no's of Universal design toilet
- Under Infra and O & M gap filling fund a sum of ₹8.00 crore was sanctioned for improvement of Water supply.
- A sum of 24.00 crore was sanctioned under TNUDF-Own Fund for providing Underground Sewerage Scheme in Srirangam (Phase-I).
- Under TURIP 2013-14, ₹20.00 crore has been sanctioned to improve the roads to a length of 57.74 km. Out of 48 works 26 works have been completed at an expenditure of ₹15.52 crore. The balance works are under progress.

2.20.4 Salem Corporation

The population of Salem Corporation as per 2011 census is 6,96,760 and the extent is 91.34 sq. kms. with an average annual income of ₹128.50 crore.

During the year 2013-14, the following projects were taken up for implementation.

- Under Integrated Urban Development Mission, a total amount of ₹15.49 crore was sanctioned for Road works, Solid Waste Management, Storm water drains.
- Under Infra gap filling fund and state fund, a sum of ₹0.75 crore was sanctioned for construction of 4 no's Universal design toilet.
- Under Infra gap filling fund ₹1.00 crore was sanctioned Gasifier crematorium and ₹2.82 Crore was sanctioned for water supply improvement works.
- An amount of ₹8.00 crore has been sanctioned to restore the roads to a length of 15.18 km under TURIP 2013-14. 45 works have been taken up and completed at an expenditure of ₹9.43 crore.

2.20.5 Tirunelveli Corporation

The population of Tirunelveli Corporation as per 2011 census is 4,74,838 and the extent is 108.65 sq. kms. with an average annual income of ₹70.50 Crore.

During the year 2013-14, the following projects were taken up for implementation:-

- Under Integrated Urban Development Mission, a sum of ₹1.71 crore was sanctioned for improvements of roads and Solid waste Management (Biomethanation plant)
- Under Infra gap filling fund and state fund, a sum of ₹0.75 crore was sanctioned for construction of 5 no's of Universal design toilet.
- Under O&M gap filling fund ₹1.50 crore was sanctioned for water supply improvement works.
- Under Part II scheme a sum of ₹2.00 crore was sanctioned for sanitary workers quarters.
- ₹10.00 crore has been sanctioned under TURIP 2013-14 to restore the road length of 26.91 km. All the works have been completed at an expenditure of ₹10.16 crore.
- Under KfW a sum of ₹230.00 crore was sanctioned for water supply Improvement scheme and now it is under tender stage.

All the above works are in progress.

2.20.6 Erode Corporation

The population of Erode Corporation as per 2011 census is 4,05,345 and the extent is

109.52 sq. kms. with an average annual income of ₹127.75 crore.

During the year 2013-14, the following projects have been taken up for implementation:-

- Under Integrated Urban Development Mission, a sum of ₹22.26 crore was sanctioned for improvement of roads, storm water drains and solid waste management (Biomethanation plant).
- Under Infra gap filling fund and state fund, a sum of ₹0.75 crore was sanctioned for construction of 4 no's of Universal design toilet.
- Under O&M gap filling fund, a sum of ₹2.00 crore was sanctioned for providing Rain water harvesting at Periyasadayam palayam pond.
- Under Tamil Nadu Urban Road Infrastructure Project, a sum of ₹8.00 crore has been sanctioned to restore 15.70 kms of damaged roads due to UGSS. Out of 31 works taken up 30 works have been completed at an expenditure of ₹6.71 crore. The balance work is under progress.

- ₹1.70 crore was sanctioned under Environmental Protection and Renewable Energy Development Fund to relay 13.66 kms length roads using plastic waste.

All the above works are in progress.

2.20.7 Tiruppur Corporation

The population of Tiruppur Corporation as per 2011 census is 5,48,773 and the extent is 159.37 sq. kms. with an average annual income of ₹110.06 crore.

During the year 2013-14, the following projects were taken up for implementation:

- Under Integrated Urban Development Mission, a sum of ₹22.24 crore was sanctioned for water supply improvement scheme, storm water drains and Solid waste management. (Biomethanation plant)
- Under Infra gap filling fund and state fund, a sum of ₹0.75 crore was sanctioned for construction of 4 Universal design toilets.

- Under Infra gap filling fund, a sum of ₹0.50 crore was sanctioned for construction of slaughter house.
- Under Infra gap filling fund, a sum of ₹0.75 crore was sanctioned for construction of sanitary workers quarters.
- Under Infra gap filling fund, a sum of ₹6.00 crore was sanctioned for water supply improvement works for added areas.
- An amount of ₹15.00 crore has been sanctioned to restore the roads damaged due to the implementation of UGSS to a length of 23.15 km. Out of 36 works, 32 works have been completed at an expenditure of ₹13.95 crore and the balance 4 works are under progress.

2.20.8 Vellore Corporation

The population of Vellore Corporation as per 2011 census is 4,23,425 and the extent is 87.91 sq. kms. with an average annual income of ₹42.79 Crore

During the year 2013-14, the following projects were taken up for implementation:

- An amount of ₹47.10 crore was sanctioned under Integrated Urban Development Mission for contribution to combined water supply scheme, UGSS and Road works.
- Under Infra gap filling fund and state fund, a sum of ₹0.75 crore was sanctioned for construction of 7 no's of Universal design toilet.
- Under Infra gap filling fund and O & M gap filling fund, a sum of ₹3.65 crore was sanctioned for providing DI pumping main and 2 no's of Infiltration wells for improvement of water supply.
- Under TURIP 2013-14 a sum of ₹2.01 crore has been sanctioned to restore the roads damaged due to the implementation of UGSS to a length at 4.99 km. Out of 22 works taken up, 10 works have been completed at an expenditure of ₹1.41 crore. The balance works are under progress in various stages.
- A sum of ₹1295 crore was sanctioned to 11 ULBs and 5 Town Panchayats and 944 rural habitations for Vellore combined water supply scheme. All works taken up in 3 packages. The targeted completion period is 2015.

2.20.9 Thoothukudi Corporation

The population of Thoothukudi Corporation as per 2011 census is 3,20,466 and the extent is 90.64 sq. kms. with an average annual income of ₹47.50 crore.

During the year 2013-14, the following projects were taken up for implementation:

- A sum of ₹32.29 crore was sanctioned under Integrated Urban Development Mission for the contribution of combined water supply scheme, contribution for UGSS and improvement to Road works.
- Under Infra gap filling fund and state fund, a sum of ₹0.90 crore was sanctioned for construction of 10 no's of Universal design toilet.
- Under Infra gap filling fund, a sum of ₹0.75 crore was sanctioned for construction of sanitary workers quarters.
- Under Operation and Maintenance Gap Filling Fund, an amount of ₹0.40 crore was sanctioned for replacing 1.50 km of damaged pumping main.
- ₹10.00 crore has been sanctioned as grant under TURIP 2013-14 to restore the roads

damaged due to the implementation of UGSS to a length of 15.43 km. Out of 20 works, 18 works have been completed at an expenditure of ₹7.50 crore and the balance 2 works are under progress.

2.20.10 Thanjavur Corporation

Thanjavur Corporation was constituted by Hon'ble Chief Minister of Tamil Nadu on 19.2.2014 comprising of 51 wards with a population of 2,22,619 and the extent is 36.31 sq. km with an annual average income of ₹53.95 Crore.

During the year 2013-14, the following works have been taken up for implementation.

- Under Tamil Nadu Urban Road Infrastructure Project, a sum of ₹17.60 Crore was sanctioned for restoration of 60.52 Km BT Roads. Out of 71 works, 51 works have been completed at a cost of ₹13.34 Crore and the balance 20 works are under progress in various stages.

- Under IUDM, a sum of ₹0.81 crore was sanctioned for Biomethanation Plant.
- Under O&M gap filling fund ₹0.24 crore was sanctioned for Aanganwadi Maintenance works.
- Under Infra gap filling fund, IUDM and State fund, a sum of ₹0.75 crore was sanctioned for construction of Namma Toilets.
- Under O&M gap filling fund, a sum of ₹0.24 crore was sanctioned for construction of Slaughter Houses.
- Under O&M gap filling fund, a sum of ₹4.00 crore was sanctioned for construction of sanitary workers quarters.

2.20.11 Dindigul Corporation

Dindigul Corporation was constituted by Hon'ble Chief Minister of Tamil Nadu on 19.2.2014 comprising of 48 wards. The population of Dindigul Corporation as per 2011 census is 2,07,225 and the extent is 14.01sq. kms with an average annual income of ₹34.82 crore.

During the year 2013-14, the following works have been taken up for implementation:

- Under Tamil Nadu Urban Road Infrastructure Project, a sum of ₹2.00 crore has been sanctioned for the restoration of 8.75 km of damaged roads due to the implementation of UGSS works. All the works are completed.
- Under IUDM, a sum of ₹1.86 crore was sanctioned for Water Supply Improvement Scheme.
- Under IUDM, a sum of ₹0.81 crore was sanctioned for Biomethanation Plant.
- Under Infra gap filling fund, IUDM and State fund, a sum of ₹0.45 crore was sanctioned for construction of Namma Toilets.

2.21 Honourable Chief Minister's Best ULB Award

In the year 2012-13, the Government instituted "Hon'ble Chief Minister's Award" to be presented to the best performing Municipal Corporation/ Municipalities.

For the year 2013-14, the Erode Corporation was adjudged the best among the Corporations (Cash Prize of ₹25 lakhs) and Udumalpet, Bodinayakkanur and Arcot

Municipalities were declared first, second and third respectively among the Municipalities (Cash Prize of ₹15 lakhs, ₹10 lakhs and ₹5 lakhs respectively)

The Hon'ble Chief Minister distributed the cash prizes with a citation to the ULBs during the Independence Day Celebrations for the year 2013.

3. Chennai Corporation

The Corporation of Chennai, established on 29th September 1688, is the oldest Municipal Institution in the Country and second oldest in the world. The population of Chennai Corporation as per 2011 census is 67.27 lakhs. With the expansion of area from 174 sq.Kms. to 426 sq.Kms in 2011 by inclusion of 42 local bodies, it is the 4th largest Municipal Corporation in the country. With its 325 years of history, it carries good mix of heritage as well as modern infrastructure facilities. It derives its statutory authority from the Chennai City Municipal Act, 1919. It is governed by an elected Council which is headed by a directly elected Mayor.

There are 200 wards and 15 zones in the Corporation. For administrative convenience, these zones have been organised into 3

Regions, namely, North Region, Central Region and South Region each comprising of 5 Zones and headed by I.A.S. Officers in the rank of Deputy/Joint/Additional Commissioners.

In addition to this, Government have sanctioned the creation of 784 additional posts subsequent to this expansion to augment the human resources for catering to additional responsibilities in an effective manner. This has facilitated quick response in decision making as well as grievance redressal to the satisfaction of public.

The number of assessees of Property Tax is 11,62,578 and that of Professional Tax is 1,30,806. Demand for property tax in Chennai Corporation is ₹550 crore. The overall revenue receipts in the year 2013-14 is ₹2066 crore, of which property tax collection is ₹469.32 crore compared to ₹411.07 crore in 2012-13. Due to

various initiatives and responsibilities of Corporation, the capital expenditure of Corporation has reached to an unprecedented level of ₹1393 crore during 2013-14 as against ₹733 crore in 2012-13.

Income of the Corporation over the past three years is given in the table below.

Year	Income ₹Crore	% Increase	Per Capita Income
2011-12	1239.13	17.37	2647.10
2012-13	1591.41	28.43	3373.35
2013-14	2066.13	29.83	4345.63
Average	1632.22	25.21	3455.36

Consequent to the expansion, the policy of the Corporation has been oriented to providing adequate infrastructure facilities on par with the erstwhile City area in the expanded areas as well by deployment of adequate human and financial resources.

3.1 Amma Unavagam

In order to provide nutritious food in hygienic environment to the poor and vulnerable people at subsidised price, the Corporation of Chennai has set up 203 Amma Unavagam till date, one each of the 200 wards of the Corporation and 3 in Government Hospitals. Establishment of additional 204 Amma Unavagams are in process. Provision of one Idly at ₹1/-, Pongal and variety rice at ₹5/- each, Curd rice at ₹3/- and 2 Chappathis and Dhal at ₹3/- for dinner at these Amma Unavagams has been welcomed by everyone, especially the poor people due to its affordability during the trying times of ever rising inflation. Till June 30th, 2014, 2,86,03,575 Chappathis, 12,65,58,316 Idlies and 5,36,21,871 variety rice have been provided through these centres. About 2.5 Lakh people are getting benefitted everyday under this scheme. Many experts world over have

showered their praise on this scheme as an outstanding scheme due to the boost it has given to the overall socioeconomic development.

3.2 Chennai Mega City Development Mission

With the view of achieving the vision of developing Chennai as a world class city with infrastructure of international standard, the Hon'ble Chief Minister has announced a path breaking scheme called Chennai Mega city Development Mission (CMCDM).

Under this special scheme, the Government has sanctioned an unprecedented amount of ₹1161 Crore over the last 3 years to the Corporation of Chennai for taking up works for roads of about 847 Km length, storm water drain network for a length of 530 Km, footpaths for a length of 276 Km, 10,500 streetlights and various modern vehicles and equipments for

solid waste management. Till now, works for roads to a length of 572.11 km, storm water drain network for a length of 114.49 km and footpaths for a length of 180.30 km besides installation of 10,500 streetlights have been completed at the cost of ₹689.83 crore. All the balance work will be completed and put into use for the citizens within a period of next 3 months. Due to effective and speedy implementation of this scheme, the long awaited aspirations of the people living in the extended areas of Chennai Corporation of having infrastructure at par with the core city areas are being fulfilled adequately.

3.3 Road Maintenance Programmes

The Corporation of Chennai maintains 471 Bus Route Roads for a length of 387.39 Km and 30790 Interior Roads for a length of 4930.09Km.

During the last 3 years, the Corporation of Chennai has completed the restoration of 235 Bus Route Roads for a length of 147.80 Km at a cost of ₹98.41 crore under Tamil Nadu Urban Road Infrastructure project (TURIP) and 138 Bus Route Roads for a length of 32 Km at a cost of ₹42.71 crore under Capital Funds of Corporation.

For the first time in the history of Corporation of Chennai, out of total number of about 30,790 interior roads for a length of about 4,930 km, the Corporation has taken up restoration of about 17,500 damaged roads at an estimated cost of ₹2,575 crore. Out of this, restoration work for 8,996 roads at a cost of ₹1,144 Crore has been completed in all aspects. Remaining works will also be completed in next four months.

During the year 2013-2014 alone, 8,784 interior Bituminous roads to a length of 1,363 Kms at a cost of ₹1,064 crore and 2,158 interior Cement Concrete Roads to a length of 288 Kms at a cost of ₹304 crore were taken up, of which 3,533 interior Bituminous roads to a length of 482 Kms at a cost of ₹300 crore and 514 interior Cement Concrete Roads to a length of 56 Kms at a cost of ₹75 crore were completed and balance road works are under progress.

3.3.1 Promotion of Non Motorised Transport

In order to promote Non Motorised Transport (NMT) to reduce pedestrian-vehicle conflict, pollution and traffic congestion, Corporation of Chennai has undertaken a project for widening the footpaths. To ensure the rights of pedestrians, especially the weaker

sections of the society such as elderly, women, children and differently abled, the Corporation has taken up footpath improvement along 55 Bus Route Roads to a length of 70 km at a cost of ₹50 crore and work on foot paths in 26 Bus Route Roads are on the verge of completion, which are being widely appreciated by the citizens. With implementation of Cycle Sharing System and Parking Management System in the coming financial year Chennai Corporation is moving in the direction of becoming the first Municipal Corporation in India adopting and implementing Non-Motorised Transport (NMT) Policy.

3.4 Bridges

In order to ensure hassle free movement of traffic, the Corporation of Chennai maintains 243 over bridges and 22 subways. During last 3 years Chennai Corporation has completed

construction of bridges and subways at 9 locations at a cost of ₹85.77 Crore.

Works completed during 2013-2014

1. Pedestrian cum two wheeler subway at Rangarajapuram railway junction at a cost of ₹1.74 Crore.
2. RUB at M.C. Road at a cost of ₹15.76 crore.
3. Vallalar Nagar Grade Separator at a cost of ₹23 crore.

Ongoing Works during 2013-2014

1. Retrofitting and Improvement works at Kodambakkam Over Bridge at a cost of ₹10.03 crore.
2. Construction of 4 Box culverts at a cost of ₹2.23 crore.
3. Refurbishment of 6 flyovers at a cost of ₹2.86 crore.

Works to be taken up during 2014-2015

1. Improvement to 3 existing bridges at a cost of ₹2.18 crore.

2. Demolition and reconstruction of Bridge across Otteri nallah at Stephenson road at a cost of ₹9.90 crore.
3. Demolition of existing causeway and construction of Box culvert at Padikuppam Road in JJ Nagar in Zone-7 at a cost of ₹1.44 crore.
4. Limited Use Vehicular Subway at Bojaraja Nagar-works to be executed by Railways.

3. 5 Street Lighting

With the objective of providing uniform quality street lighting throughout the city for safety of citizens, especially the women and old age people, the Corporation of Chennai is maintaining 2,15,460 streetlights. In addition to that, for providing street lighting in the newly added areas of the city on par with the erstwhile city area, a project for setting up 1,10,000 energy efficient L.E.D. streetlights has been taken up at an estimated cost of ₹322 Crore. Out of this, work for erecting 38,404 streetlights has already been completed at a

cost of ₹85.47 Crore. This is a record of sorts by any Municipal Corporation in the country for erecting energy efficient L.E.D. streetlights. Installation of remaining 71,596 LED streetlights will be completed before March 2015.

3.6 Storm Water Drains

In order to prevent flooding in Chennai City, Corporation of Chennai maintains a total Storm Water Drain Network of 1858.06 Km comprising of 7247 drains. Besides this, the Corporation also maintains 30 canals for a total length of 48.803 km that include Kodungaiyur Canal (5.28 Km), Captain Cotton Canal (3.04 Km), Padi Kuppam Canal (2.778 Km) to mention a few.

The Storm Water Drain network which was about 850 km in the erstwhile Chennai city was taken up for expansion under JnNURM by

the Chennai Corporation in association with the Public Works Department at a cost of ₹1448 crore of which the Corporation component was ₹704.80 crore. The progress under this scheme for the Corporation component is shown below :-

Name of Basin	Project Cost (₹ cr)	Executable Balance Works		Works Completed		Works in progress	
		km	Amt	km	Amt	km	Amt
Northern	231.02	95.97	191.59	93.49	137.36	2.48	54.23
Central	247.59	83.41	198.93	77.32	142.00	6.09	56.93
Eastern	119.26	81.63	87.34	79.02	75.11	2.61	12.23
Southern	106.93	48.16	81.58	43.92	63.28	4.24	18.30
Total	704.80	309.17	559.44	295.59	417.75	13.58	141.69

As a result of adding 343 km network of storm water drains over last 3 years at a cost of ₹480 crore, the number of flood prone areas in the Chennai Corporation has reduced to below hundred from about 300 earlier.

In accordance with the policy of Corporation of Chennai to provide adequate infrastructure facilities on par with erstwhile City area in the expanded areas with the objective of avoiding water inundation by safe disposal of rainwater, integrating the available tanks and lakes for disposal of the rainwater, rainwater harvesting and recharging of ground water, up-gradation in environmental conditions and improvement in overall hygiene for sound health, the Corporation has prepared detailed project report for adding another 1069.40 km of storm water drain network at an estimated cost of ₹4034.3 crore.

The Corporation will begin the work for this major project in the coming financial year by availing funds from various sources.

3.7. Buildings

For providing proper avenue for catering to the cultural and recreational needs of the

people, the Corporation of Chennai has constructed a 900 seat state-of-the-art air conditioned auditorium at Shenoy Nagar at a cost of ₹18.05 crore. Besides this, the buildings department has also completed various buildings for the benefit of people at a cost of ₹71 crore over last three years.

In addition to this, the following works will be taken up during the year 2014-15 at an approximate estimated cost of ₹120.00 crore.

1. Construction of Zonal Office-IV with all facilities.
2. Construction of Shopping Complex in Shenoy Nagar.
3. Construction of Zonal Office and Community Centre in Zone-IX.
4. Provision of mobile toilets for the use of public in Ripon Building campus and all Zonal Offices.
5. Construction of Multi-Storeyed Shopping Complex and Automatic Vehicle Parking in Basement Floor in Zone-X.

6. Construction of Staff Quarters for Staff's and workers working in Chennai Corporation.

3.8 Animal Birth Control

Animal Birth Control Programme is being implemented by Corporation of Chennai. The Stray Dogs are caught based on specific complaints from the public and handed over to NGO's like Madras Society for Prevention of Cruelty to Animals (Madras SPCA), Blue cross of India and People for Animals. They conduct sterilization, post operative care and immunization against rabies, the dogs are released in the same area from where they were picked up after making necessary ear clipping as identification mark. The entire programme is conducted based on the Animals Birth Control (Dogs) Rules, 2001, notified by Government of India.

The details of the number of stray dogs sterilized by the NGO's from April 2013 to March 2014 is as follows :-

SL. No	Name of the Non-Governmental Organization	Total number of dogs sterilized
1)	Blue Cross of India	12848
2)	People for Animals	13247
3)	Madras Society for Prevention of Cruelty to Animals	410*
	Total	26505

*due to renovation work SPCA could not perform to full extent

A total of 6 dog raiding vehicles are deployed for dog catching operation. Private dog catchers are engaged and rewarded ₹50/- per dog caught.

Further, 8 number of new dog catching vehicles have been deployed for the extended and intensive raiding programme which has been commenced from 11.03.2013 onwards in all the Zones. On an average, 140-150 number

of stray dogs are being caught daily and handed over to Non-Governmental Organisations, such as Blue Cross of India, People for Animals and Madras Society for Prevention of Cruelty to Animals.

3.9 Parks

Having regard to the fact that parks play a very important role in improving the quality of life of the citizens by providing fresh air, facilities for daily exercise and play equipments for children, the Corporation of Chennai has taken up work on 200 parks over a period of last 3 years in addition to the existing 260 parks at an estimated cost of ₹63.79 crore. Out of this, work for 104 parks at a cost of ₹19.38 crore has already been completed and the remaining parks will be completed over next six months.

Besides this, work on 100 new parks will be taken up during the year 2014-15.

3.10 Eradication of Open Defecation

After lot of concerted efforts by Corporation of Chennai, open defecation has been controlled in Chennai City except in few pockets abutting river areas. At present 904 public conveniences have been constructed and maintained by Corporation of Chennai, mostly in slum areas, abutting slum clearance board tenements, near bus stands, railway stations and market areas. Corporation of Chennai has constructed 78 nos. of baby toilets abutting slum areas to prevent open defecation. 116 sites have been identified with open defecation. Construction of 51 new toilets and renovation of 65 existing toilets have been taken up at a cost of ₹11.17 crore in these sites; out of which, construction of 22 new

toilets have been completed and the remaining works are in various stages of progress.

Now, Corporation of Chennai has proposed to construct Prefabricated Modular Toilet to control open defecation.

3.11 Solid Waste Management

The generation of municipal solid waste in Chennai city has increased to 5000 metric tonne per day. At present the Corporation is managing the solid waste by deploying 322 compactors, 37 haulage tipper trucks, 177 tipper lorries, 12 mechanical sweepers, 57 skid steer loaders and 25 front end loaders.

The Corporation deploys about 17026 sanitary workers directly and through outsourcing. A detailed route chart for compactor vehicles and tricycles has been drawn up to effectively supervise solid waste

management activities. A Short Message Service (SMS) pattern of reporting has been evolved for the field staff.

Meanwhile, a major initiative is underway to tackle the problem of solid waste management for three distinct aspects relating to solid waste management in Chennai city, namely,

1. setting up Integrated Municipal Solid Waste processing facilities for the city of Chennai and local bodies in close proximity to Chennai.
2. Remediation and scientific closure of two major dump yards at Kodungaiyur and Perungudi.
3. Street cleaning, door-to-door collection of garbage and transportation to integrated processing facilities site in a phased manner.

In order to ensure safe working conditions for the sanitary workers, they have been provided with masks, gum boots, reflective dresses for night conservancy etc.

In order to ensure the overall efficiency through supervision by the people themselves, the Corporation has also started a unique initiative called 'rate your conservancy' on its website.

4. Directorate of Town Panchayats

Preamble

Town Panchayats form the third tier of Urban Administration. The population of the Town Panchayats, as per Census 2011, is 80,90,847, accounting for 11.21% of the total population of the State and 23.17% of the urban population and the annual growth rate is 1.45%. The total area under the Town Panchayats is 6,388.204 Sq.km which constitutes 62.56% of the total urban area of the State.

The Town Panchayats Administration is striving to improve the standard of living of the people in Town Panchayats by providing better civic services, development of infrastructure facilities and promotion of employment

opportunities in view of rapid growth of urban population.

4.1 Administrative Setup

There are 528 Town Panchayats in the State and they are governed by the Tamil Nadu District Municipalities Act, 1920. The Town Panchayats are classified into four grades based on their annual income and population as depicted below:-

Sl. 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 upto ₹ 20.00 lakh.	222
3.	Grade- I	Above ₹8.00 lakh upto ₹16.00 lakh.	214
4.	Grade- II	Above ₹ 4.00 lakh upto ₹8.00 lakh	80
		Total	528

The Director of Town Panchayats is the Head of the Department. 17 Assistant Directors of Town Panchayats are looking after the

administration at the zonal level and the Collectors of the respective Districts are entrusted with supervising the affairs of the Town Panchayats. Many of Town Panchayats are of tourism, pilgrimage and heritage importance.

4.2 Elected Representatives in Town Panchayats

In tune with the 74th Amendment of Constitution of India, Elections to Town Panchayats were held on the 17th and 19th of October 2011. Chairpersons of the Town Panchayats were directly elected by the electors. 528 Chairpersons comprising of 56 SC (General), 28 SC (Women), 2 ST (General), 1 ST (Women), 148 Women (General) and 293 others were elected and assumed office on 25.10.2011. Similarly, 8288 Ward members comprising of 741 SC (General), 666 SC (Women) 3 ST (General), 22 ST (Women),

2074 Women (General) and 4782 Others were elected.

4.3 Functions and Core Services

Town Panchayats play vital role in rendering civic services to the public. They provide a wide range of civic services to the public such as drinking water, street lights, sanitation, solid waste management, road connectivity, drains and pavements, burial grounds and slaughter houses. This apart, construction and maintenance of bus stands, community halls and markets are also undertaken by Town Panchayats. 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 Financial Resources

Property Tax, Professional Tax, Fees, Lease, Rents and User charges etc., are the major sources of revenue of the Town Panchayats. The other important sources of assigned revenue are Surcharge on Stamp duty, apportionment of entertainment tax, State and Central Finance Commission Devolutionary Grants. These apart, grants from various schemes make substantial contribution to the total revenue of the Town Panchayats.

Foremost among the schemes is the Integrated Urban Development Mission an exemplary scheme announced by the Hon'ble Chief Minister especially for creation of urban infrastructure. Other schemes include, Tourism Development Projects, Hill Area Development Programme, Western Ghats Development

Programme, NABARD Assistance, Solid Waste Management Fund, TURIP etc.

4.5 Financial Outlay

The financial outlay for the year 2013-14 for 528 Town Panchayats comes to ₹2031.28 crore which consists of SFC Devolution grant of ₹833.67 crore, Development schemes of ₹703.32 crore, Salaries and allowances to Directorate of Town Panchayats and Assistant Director of Town Panchayats ₹7.24 crore, Own Revenue of Town Panchayats ₹486.87 crore and allotment towards Hon'ble CM Award ₹18.00 lakh.

Total income of the Town Panchayats during the last 5 years is as follows:

Year	Total income (₹ in crore)	% Increase	Per capita income (₹)
2009-10	921.27	7.90	1204.84
2010-11	1138.31	23.60	1488.69

2011-12	1757.71	54.40	2030.77
2012-13	1939.44	10.30	2383.72
2013-14	2031.27	4.70	2510.58

The Annual average per capita income in Town Panchayats is ₹1923.72. From the year 2011-2012, per capita income increased due to grants received from the schemes such as IUDM, NABARD, EPRED and TURIP.

4.6 Infrastructure Development

Rapid urbanization and a high growth rate of urban population due to the migration from the neighboring rural areas in search of employment, education, health and quality of life has resulted in increased demand for the provision of basic amenities such as water supply, solid waste management, underground sewerage schemes, roads, street lights, crematoriums, slaughter houses, parks and playfields etc. in Town Panchayats. Apart from

encouraging the urban local bodies to improve their own resource base, the state government apart from transferring SFC devolution is also supporting creation of urban infrastructure projects through its flagship mission mode programme viz Integrated Urban Development Mission (IUDM), NABARD Loan assistance, Minimum Needs Programme etc.

4.7 Integrated Urban Development Mission (IUDM)

The Hon'ble Chief Minister has unveiled the Flagship Scheme of IUDM during the year 2011 to cater to the infrastructure needs of the Urban Local Bodies.

All type of infrastructure works required for Town Panchayats are being implemented through Integrated Urban Development Mission. A sum of ₹785.00 crore has been provided to Town Panchayats for taking up various

infrastructure works required during the years 2011-2012 to 2013-2014 covering UGSS, Water Supply Improvement, Road improvement and Storm Water Drain works under the above programme as follows.

Year	No of Works		Allotment (₹ in crore)	Expenditure (₹ in crore)
	Taken up	Completed		
2011-2012	5275	5273	250.00	241.20
2012-2013	569	535	248.04	214.05
2013-2014	1044	501	286.96	48.53
Total	6888	6309	785.00	503.78

For the year 2014-2015, a sum of ₹250.00 crore is allocated.

4.8 Water Supply

The Government is committed to provide minimum 70 LPCD of protected drinking water

supply to the people in all Town Panchayats. The Town Panchayats maintain stand alone water supply schemes. The combined water supply schemes are being maintained by TWAD Board.

Out of 528 Town Panchayat, 508 Town Panchayats are supplying 70 LPCD and above and 20 Town Panchayats are supplying below 69 and above 40 LPCD drinking water on daily basis. The following are the details of Water Supply level in Town Panchayats:-

Sl. No	LPCD supplied per day	No of Town Panchayats	Demand (MLD)	Supply (MLD)	Gap (MLD)
1	40- 69 LPCD	20	20.59	17.81	2.78
2	Above 70 LPCD	508	547.41	581.39	0.00

Measures have been taken to improve Water Supply in the following Town Panchayats which supplies below 70 LPCD is as follows :-

Sl. No	Town Panchayats	Present LPCD	Scheme	Status
1	Coimbatore district Sarkarsamakulam	67	UIDSSMT - Pillur II Scheme Estimate ₹112.87 Lakh	Works will be completed by December 2014.
2	Coimbatore District - Vedapatti	51	Thondamuthur CWSS. Estimate ₹466.26 Lakh	To be retendered.
3	Coimbatore district No.4 Veerapandi	65	JnNURM - Pillur II Scheme Estimate ₹333.11 Lakhs	Works will be completed by December 2014.
4	Cuddalore district Parangipettai	63	Minimum Needs Programme - CWSS from Kollidam Estimate ₹234.59 lakhs	Tender settled
5	Dindigul district Kannivadi	64	Cauvery CWSS Estimate ₹223.84 lakhs	Works will be completed by August 2014.
6	Dindigul district Vedasandur	68	Cauvery CWSS Estimate ₹256.26 lakhs	Works will be completed by August 2014.

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Sl. No	Town Panchayats	Present LPCD	Scheme	Status
7	Perambalur District Poolambadi	56	IUDM 2013-14 Water Supply Improvement Scheme. Estimate ₹210.00 Lakh.	Works will be completed by January 2015
8	Ramanathapuram district RS Mangalam	68	Construction of 1.00 Lakh litre sump under General fund 2013-2014 Estimate: 14.00 lakhs Providing Bore well 2013-2014 in MLA Scheme Estimate : ₹3.80 Lakh	Works under final stages of completion.
9	Salem District Nangavalli	60	Attur -Narasingapuram CWSS Estimate ₹33.00 Lakh	Works will be completed by November 2014.
10	Salem District Thammampatty	60	Attur -Narasingapuram CWSS Estimate ₹254.00 Lakh	Works will be completed by November 2014.
11	Salem district Vanavasi	64	Attur -Narasingapuram CWSS Estimate ₹21.00 Lakh	Works will be completed by November 2014.
12	Sivaganga district Ilayangudi	67	Infra Gap Filling Fund 2012-13 Construction of 4.00 lakh litre OHT Estimate ₹114.91 Lakh	Works will be completed by August 2014
13	Sivaganga district Singampunari	62	Melur combined water supply scheme Estimate ₹1580.00 Lakh	Works will be completed by September 2014.

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Sl. No	Town Panchayats	Present LPCD	Scheme	Status
14	Thanjavur district Vallam	68	Pudukottai District - 1751 Villages and Vallam Town Panchayat - Kollidam CWSS. Estimate ₹1850.00 Lakh	Works will be completed by September 2015
15	Thiruvarur district Muthupettai	64	3 R.O Plants have been taken up at an estimated cost of ₹18.00 lakh	Works under final stages of completion.
16	Vellore district Odugathur	66	Vellore CWSS Estimate ₹6.92 lakh	Works will be completed by January 2015.
17	Virudhunagar district Seithur	62	Tamirabarani CWSS Estimate ₹683.00 Lakh	Works will be completed by November 2014.
18	Virudhunagar district - Sundara pandiam	60	Virudhunagar CWSS Estimate ₹1307.00 Lakh	Works will be completed by November 2014.
19	Virudhunagar district S.Kodikulam	66	Tamirabarani CWSS. Estimate ₹390.00 Lakh	Works will be completed by November 2014.
20	Virudhunagar District W.Pudupatti	53	Virudhunagar CWSS. Estimate ₹378.00 Lakh	Works will be completed by November 2014.

Further, in the year 2013-14, 1795 works have been taken up under various schemes at an estimated cost of ₹83.26 crore. Out of these 1229 works have been completed and 566 are under progress. On completion of these works an additional capacity of 11.50 MLD will be added.

4.9 Under Ground Sewerage (UGSS)

Provision of the underground sewerage system is indispensable for upkeep of sanitation and protection of environment in Town Panchayats which endeavor to provide safe sanitation to the residents. Hence, the Under Ground Sewerage Schemes are being taken up in Town Panchayats in phased manner by dovetailing the financial assistance from various sources such as Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) and Integrated Urban Development Mission (IUDM). At present,

UGSS is being executed in 5 Town Panchayats viz. Mamallapuram, Thirumazhisai, Thiruchendur, Orathanadu and Sriperumbudur at an out lay of ₹128.05 crore taken up during the year 2011-2012.

Further Administrative Sanction has been given to implement UGSS schemes in 29 Town Panchayats vide G.O (D) No. 225, MAWS dept. dated 05.09.2012, G.O (D) No.492, MAWS dept. dated 19.09.2013 and G.O (D) No. 580, MAWS dept. dated 21.11.2013.

4.9.1 Septage Management

In view of the small size of the population It is proposed to take up Septage Management in 17 town panchayats Viz., Mamallapuram, Chengam, Alangayam, Pennagaram, Kaveripattinam, Jalagandapuram, Alampalayam, Kunnathur, Needamangalam, Kurumbalur,

Paravai, Mudhukulathur, Seithur, Sambavarvadakarai, Pennadam, TNPL pugalur and Alwarthirunagari.

Kanadukathan Town Panchayat was not considered as there is no sullage flow into the drains. For the above 17 Town Panchayats, Septage management works will be taken up at a cost of ₹197.34 crore.

4.9.2 Conventional Under Ground Sewerage Scheme

Conventional UGSS has been taken up in 11 Town Panchayats viz., Thiruporur, Ponneri, Ulundurpettai, Periyanaickanpalayam, Perundurai, Manachanallur, Ayakudi, Vallam, Velankanni, Palanichettipatti and Kanyakumari at a cost of ₹394.96 crore.

4.10 Roads

Town Panchayats maintain 18562.93 Km of various types of roads which are as follows:

Sl. No.	Type	Length (Km)
1	BT Roads	9306.69
2	CC roads	4711.50
3	Paver block roads	954.09
4	Earthen roads	3590.65
	Total	18562.93

During the year 2011-2012 to 2013-14, improvement of roads have been taken up under various schemes as detailed below:

Sl No	Year	Total No of Roads	Total length (in Km)	Amount (₹ in crore)
1	2011-2012	2009	1561.44	284.70
2	2012-2013	1022	1163.81	334.78
3	2013-2014	747	793.86	163.47
	Total	3778	3519.11	782.95

Out of 3778 road works, 3241 works have been completed and put in use for public. Remaining 537 works are under progress at various stages. Totally 3519.11 km of roads have been upgraded as BT, CC, and paver block road.

4.10.1 NABARD RIDF – Rural Infra-structure Development Fund

During the years 2011-2012 to 2013-14, a sum of ₹438.42 crore has been allocated for 1653 works such as Improvement of Road, Construction of Bridge, Storm Water Drain, construction of sanitary complex, improvement of water bodies and construction of slaughter house under this scheme as follows.

SI No	Year	No. of works	Amount (₹ crore)	Remarks
1	2011-2012	221	97.90	All the works completed
2	2012-2013	976	200.52	All the works completed
3	2013-2014	456	140.00	137 works completed and the remaining works are under progress.
	Total	1653	438.42	

During the year 2014-15, it is proposed to allocate a sum of ₹150.00 crore for following works.

SI No	Sector	No of Works	Estimate (₹ in Crore)
1	Formation of New Roads	273	101.63
2	Construction of Bridge	29	13.69
3	Storm Water Drain	105	34.68
	Total	407	150.00

4.10.2. The Tamil Nadu Urban Road Infra Structure Project (TURIP)

With a view to upgrade the urban roads in the State to International standards, "Tamil Nadu Urban Roads Improvement Project" is being implemented since 2011-2012. Under this scheme, in addition to improving all roads in Town Panchayats, roads have been provided with pavements and storm water drainage.

During the year 2011-2012 to 2013-14, Improvement of roads to the length of 627.95 Km has been taken up at a cost of ₹150.85 crore, out of which 665 works have been completed and the remaining 12 works are under progress. All the works will be completed by 15.08.2014.

SI No	Year	No. of Roads	Length (in Km)	Amount (₹ crore)
1	2011-2012	339	247.00	50.57
2	2012-2013	191	221.56	50.00
3	2013-2014	147	159.39	50.28
	Total	677	627.95	150.85

A sum of ₹81.76 crore is provided during the year 2014-2015.

4.10.3. Plastic Roads

Plastic in different forms is found to be almost 5% in solid waste, which is toxic in nature. It is a common sight in both urban and rural areas to find empty plastic bags and other type of plastic packing material littering the roads as well as drains. Due to its poor biodegradability, it creates stagnation of water and associated hygiene problems. In order to curtail this problem, Plastic waste has been used in laying of Roads.

From the year 2011-2012 to 2013-14, a sum of ₹44.50 crore was allotted to 181 Roads for laying 236.154 Km of plastic roads under this scheme, out of which 178 works have been completed and the remaining 3 works are under progress. All the works will be completed by 15.08.2014.

SI. No.	Year	No. of Roads	Length (in Km)	Amount (₹ crore)
1	2011-2012	90	108.756	18.00
2	2012-2013	69	96.748	20.00
3	2013-2014	22	30.650	6.50
	Total	181	236.154	44.50

4.11 Solid Waste Management

At present, 1789.06 MT garbage is generated per day in the Town Panchayats of which Bio-degradable waste constitutes 1162.89 MT and remaining 626.17 MT is non-biodegradable. The per capita generation of

waste varies from 325 grams to 400 grams per day. The physical composition of the garbage in various Town Panchayats has been analyzed and the ranges are tabulated below:-

Sl. No.	Type of Waste	In percentage
1	Biodegradable	60 – 70
2	Plastics	4 – 8
3	Paper	2 – 5
4	Rubber	1 – 2
5	Glass	1 – 3
6	Silt	15 – 20
7	Metal	2 – 3
8	Cloth	3 – 5

For effective implementation of SWM in Town Panchayats, 4719 SHG members are involved in both Collection and Segregation of waste and 7056 sweepers are deployed in street sweeping of the Town Panchayats. Further the Town Panchayats are taking various measures to improve Solid Waste Management in tune with the “Municipal Solid Waste (Management & Handling) Rules 2000”.

4.11.1 Waste to energy

The innovative Waste to energy projects have already been implemented in Mamallapuram and Thiruneermalai Town Panchayats. The energy generated through biomethanation of food waste/ sewage is used to burn street lights in these Town Panchayats. The above initiative will be extended to other Town Panchayats during this year.

4.11.2 Vermi Composting

At present, vermi composting is being done successfully in 49 Town Panchayats. In last three years, 198.52 Mt Vermi compost were produced and have been sold for Rs 5.76 lakh in above Town Panchayats. Vermi composting method will be extended in other Town Panchayats during this year.

4.11.3 Solid Waste Management Fund

During the year 2013-14, 77 Town Panchayats which are generating more than 5 MT per day of solid waste, have been sanctioned comprehensive solid waste management projects involving door to door collection, segregation, composting, and scientific land fill. Government have sanctioned a sum of ₹43.728 crore under the Special Solid Waste Management Fund vide G.O(D) No.38, MA&WS Department, dated.03.02.2014, and tenders have been called for.

4.12 Part II Scheme

During the year 2011-2012 to 2013-14, a sum of ₹26.41 crore has been allocated for 620 works such as Construction of Office building, Water supply improvement works, Purchase of computers, software and hardware, Purchase of dumper placer with bins, construction of Bridge, Storm Water Drain,

sanitary complex, and Slaughter House under this scheme as follows.

Sl. No	Year	No. of works	Amount (₹ crore)	Remarks
1	2011-2012	13	8.41	All the works completed
2	2012-2013	588	10.42	All the works completed
3	2013-2014	19	7.58	8 works completed and the remaining 11 works are under progress
Total		620	26.41	

A sum of ₹0.84 crore has been allocated in the Budget Estimate 2014-15 under this scheme.

4.13 Infrastructure Gap Filling Fund

The financial allocation under above programme aims to bridge the gap in providing Infrastructure facilities in Town Panchayats.

During the years 2011-2012 to 2013-14, a sum of ₹122.85 crore has been allocated for 354 works such as construction of office building, water supply works, Solid Waste

Management, Storm Water Drain, Slaughter House, Crematorium, Community hall, Bus stand, Burial ground Improvement and ULB Contribution to the water supply scheme etc., under this scheme as follows.

Sl. No	Year	No. of works	Amount (₹ crore)	Remarks
1	2011-2012	155	20.99	All the works completed
2	2012-2013	94	25.62	
3	2013-2014	105	76.24	76 works completed and the remaining 29 works are under progress
Total		354	122.85	

A sum of ₹ 85.38 crore has been provided in the Budget Estimate 2014-15 under this Scheme.

4.14 Operation and Maintenance Gap Filling Fund

Financial allocation is made from out of the Devolution Grant to bridge gap under above funds by way of providing Infrastructure facilities to Town Panchayats.

During the year 2011-2012 to 2013-14, a sum of ₹61.41 crore has been allocated for 360 works such as construction of office building, water supply works, Solid Waste Management, Storm Water Drain, Community hall, Bus stand, Burial ground Improvement and ULB Contribution to the water supply scheme etc., under this scheme as follows :-

Sl. No.	Year	No. of works	Amount (₹ crore)	Remarks
1	2011-2012	84	13.99	All the works completed
2	2012-2013	169	17.09	
3	2013-2014	107	30.33	85 work completed and the remaining 22 works are under progress
Total		360	61.41	

A sum of ₹ 34.24 crore has been provided in the Budget Estimate for the year 2014-15 under this Scheme.

4.15 Swarna Jayanthi Sahari Rozgar Yojana (SJSRY)

There are 4,48,193 BPL families, 11,984 NHGs, 223 CDs and 15,467 SHGs in 528 Town

Panchayats. Out of which 6480 BPL families have been benefitted under USEP Component and 10061 SHGs have been benefitted under UWSP & UWSP (RF) Component. During year 2012-13, 26153 beneficiaries were trained and benefitted by providing Computer education, Tailoring, Beautician and catering under Step-up Training.

Similarly, 70,341 beneficiaries were benefitted under UWEP. 657 campaigns have been conducted and 23,972 persons were benefitted under UCDN component. The allocation details under SJSRY for the year 2013-2014 as follows :-

Sl. No.	Name of the Component	Physical Target	Allotment (₹ crore)
1	Urban Self Employment Programme (USEP)	2012	5.70
2	Urban Women Self-Help Programme (UWSP)	1472	4.28
3	Urban Women Self-Help Programme (UWSP-RF)	3073	1.43

4	Skill Training for Employment Promotion amongst Urban Poor (STEP-UP)	43078	15.81
5	Urban Community Development Network (UCDN)	-	2.85
Total		49635	30.07

4.16 13th Finance Commission Grant

The 13th Finance Commission grant is being allotted annually by Government of India to the Town Panchayats for the period from 2010-11 to 2014-15. The allotment has been provided by way of two components, (viz) General Basic Grant and General Performance Grant. During the year 2013-14, a sum of ₹101.81 crore was allotted under Basic Grant. The above grant is utilized towards payment of contribution to Water supply, UGSS, payment of E.B. Charges and payment of water charges.

A sum of ₹121.78 crore under Basic Grant and ₹82.88 crore under Performance Grant has been provided in the Budget Estimate 2014-15.

4.17 Rain Water Harvesting

Rain Water Harvesting Programme launched in 2001 has created impressive impact in ground water recharging. Amendments made to Section 215 (a) of the Tamil Nadu District Municipalities Act, 1920 and Building Rules 1973, have made it mandatory to provide RWH structures in all new buildings. To consolidate the gains, various measures have been taken up for rejuvenation of RWH structures created already in both public and private buildings, besides creating new ones. IEC activities will be continued in the Town Panchayats to sensitize all the stake holders to sustain the momentum.

There are 1916 water bodies maintained by Town Panchayats with an extent of 6286.84 acres. Total number of buildings in Town Panchayats is 23,92,457 out of which 22,94,342 buildings are provided with Rain

Water Harvesting facilities as mentioned in the following table.

Sl. No	Type of Buildings	No. of Buildings	No. of Buildings having RWH Structures
1.	Government Buildings	24,116	23,190
2.	Residential Buildings	22,08,377	21,14,294
3.	Commercial Buildings	1,48,170	1,45,064
4.	Industrial Buildings	11,794	11,794
	Total	23,92,457	22,94,342

In order to restore the 243 water bodies ₹55.52 crore has been allocated for the years 2011-12 and 2012-2013 under IUDM and NABARD.

Sl. No	Name of the Scheme	Year	No. of works taken up	Amount allotted (₹ in crore)
1.	IUDM	2011-12	9	1.20
2.	NABARD	2012-13	234	54.32
		Total	243	55.52

Similarly, during 2013-2014, 561 improvement works such as desilting and

strengthening of bund and sluice works have been taken up at a cost of ₹18.40 crore under General fund. Due to the above efforts the ground water recharge potential is 4.13 TMC.

Out of 1916 water bodies, 804 No. of water bodies have been renovated. Remaining 1112 water bodies will be renovated in phased manner.

4.18 Animal Birth Control

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.

In order to implement these Rules in letter and spirit, a survey was conducted and stray dogs in all the Town Panchayats were estimated as 92,578. Out of which 73,220 were sterilized during 2012-2013 & 2013-2014. During 2014-15, action is being taken to

sterilize and vaccinate the remaining 19,358 dogs.

4.19 Satellite Town

Sriperumbudur Town Panchayat of Kancheepuram District has been selected as a Satellite Town under the Centrally Sponsored

Scheme of Urban Infrastructure Development Scheme for Satellite Town (UIDSST). 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. 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 have been taken up at a cost of ₹123.75 crore and all the works are in progress at various stages.

Sl. No.	Name of the work	Project Cost (₹in crore)	Stage of Progress
1	Solid Waste Management infrastructure	4.44	Works will be completed by August 2014
2	Comprehensive Water Supply Scheme	42.20	Works will be completed by March 2015
3	Comprehensive Sewerage Scheme	77.11	Works will be completed by October 2015
	Total	123.75	

4.20 Implementation of GIS based Property Tax in Town Panchayat

As a prelude to the implementation of e-governance in Town Panchayats, Government in principle have introduced GIS based on property Tax system with a view to augment the property tax source by way of identifying un-assessed and under- assessed properties for improving collection of tax through GIS and have sanctioned a sum of ₹36.00 lakh during the year 2013 for implementation of GIS based property tax in Ponneri Town Panchayat on a pilot basis. Survey work and software developing works are completed. All the work will be completed by September 2014.

4.21 Eradication of Open defecation

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 have undertaken a massive programme of construction of public toilets, repairs to existing toilets as well as an effective IEC campaign. During the surveys conducted by Town Panchayats open defecation has been noticed at 1095 locations.

The details of works taken up under various schemes are as follows:-

Sl. No.	Year	Scheme	Const. of New Toilets	Renovation of Toilets	Project Cost (₹in crore)
1	2011-12	Open defecation free toilet scheme	52	75	5.53
2	2011-12	IUDM	80		6.04
3	2012-13	Open defecation free toilet scheme	160	221	22.60
4	2012-13	NABARD (RIDF) Scheme	376		45.20
5	2013-14	Open defecation free toilet scheme	174		22.60
6	2013-14	Government funds	77		10.01

Sl. No.	Year	Scheme	Const. of New Toilets	Renovation of Toilets	Project Cost (₹in crore)
7	2013-14	Renovation of Toilets under General fund		401	8.01
		Total	919	697	119.99

Out of 919 new community toilets, 594 community toilets have been completed and remaining 325 are under progress at various stages. Similarly, out of 697 renovation of toilets, 491 have been completed and remaining 206 are under progress at various stages.

A sum of ₹22.60 crore has been provided in the Budget Estimate for the year 2014-15 under this Scheme.

4.22 Street Lights

There are 3,90,111 street lights including 881 High mast lights, 3375 mercury lights, 44,140 sodium lights, 2,62,849 Tube lights, 72,854 CFL lights, 5236 Solar lights and 776 LED lights are maintained by Town Panchayats.

All the street lights will be replaced by energy efficient lights in a phased manner.

Action is being taken to replace the existing street light with LED street light in 101 Town Panchayats covering 4 districts namely Erode, Tiruppur, Coimbatore and The Nilgiris at an estimate of ₹60.90 crore. Field survey work is under progress by the Transaction Advisor for conversion of street lights in to energy efficient lights.

4.23 Award

Government with a view to motivate the Town Panchayats to achieve bench mark service levels in provision of sanitation, water supply, solid waste management and other urban services, have instituted Awards to the best three Town Panchayats with an Award money of ₹10.00 lakh, ₹5.00 lakh and ₹3.00 lakh respectively.

For the year 2013-14 the first 3 prizes have been awarded to Avinashi in Tiruppur District, Uthamapalayam in Theni District and Kaveripattinam in Krishnagiri District.

Accordingly, 3 Town Panchayats will be selected for the year 2014-15 and honored during the Independence Day celebration.

5. Chennai Metropolitan Water Supply and Sewerage Board

Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) was constituted in August 1978 to cater to the growing needs of water supply and sewerage services in the Chennai Metropolitan Area. The Board contributes towards the enhancement of quality of life of the citizens of Chennai by providing them with adequate supply of potable water. It also provides sewerage services including treatment and reuse of waste water.

Chennai Metropolitan Water Supply and Sewerage Board is currently engaged in providing services to the Corporation of Chennai spread over an area of 426 Sq.Km with a population of 67.27 lakhs (as per 2011 census). It also provides services to other local bodies in the Chennai Metropolitan area and certain industrial consumers. CMWSSB provides water

supply and sewerage services through 15 Area Offices and 200 Depot Offices.

Local bodies and bulk consumers of CMWSSB

Sl. No.	Bulk consumers	Quantity (in MLD)
1	Pallavaram Municipality	2.90
2	Pammal Municipality	3.00
3	Anakaputhur Municipality	1.90
4	Avadi Municipality	1.10
5	Pozhichalur Village Panchayat	1.20
6	Cowl Bazaar Village Panchayat	0.25
7	Railways & Government Hospital	10.00
8	Aavin	0.40
9	Cantonment (Defence Offices & Quarters)	1.60
	Total	22.35

5.1 Drinking water sources to Chennai city

Chennai depends on multiple sources for its drinking water needs. It draws on surface,

ground water, desalination and distant sources to quench its thirst.

5.1.1 Surface water

Surface water sources remain the mainstay of water supply to Chennai city. Four proximate viz. Poondi, Cholavaram, Redhills (Puzhal), Chembarambakkam and one distant reservoir Veeranam serve the city. The water storage in the proximate reservoirs is a combination of water flows from the reservoirs' own catchments and also receipts from the Telugu Ganga canal.

Reservoirs supplying water to Chennai

SI.No	Reservoir	Storage Capacity (in Mcft)
1	Poondi	3,231
2	Cholavaram	881
3	Redhills (Puzhal)	3,300
4	Chembarambakkam	3,645
5	Veeranam	1,465
	Total	12,522

The Telugu Ganga Project, conveys Krishna river water from the Kandaleru reservoir situated in Andhra Pradesh to Chennai City. The agreement between the Governments of Tamil Nadu and Andhra Pradesh provides for 12 TMC of water to be supplied to Chennai for its drinking water requirements. In previous years, the water receipts were between 4.5 TMC to 8.2 TMC.

The rainfall during 2012-13 and 2013-14 has been less than normal and this is the second consecutive year of deficit rainfall. This has caused a serious strain on the ability of the board to maintain water supply in the city.

Rainfall in the catchment areas of the city reservoirs (in mm)

Monsoon	Normal	Actual	Deficit
South West 2012	451.60	358.67	-20.58%
North East 2012	722.37	598.13	-17.20%
North East 2013	728.35	363.07	-50.15%

5.1.2 Desalination Plants

Surface water availability is dependent on the vagaries of the monsoon. Any deficit in rainfall leads to acute shortages in water storage and thereby affects supply. The lack of perennial rivers near Chennai adds to the challenge. To drought proof the drinking water requirements of the growing Metropolis of Chennai, the Hon'ble Chief Minister in a farsighted move announced the setting up of desalination plants way back in 2003-04.

Minjur desalination plant

As part of this initiative a 100 MLD (Million litres per day) desalination plant was commissioned at Kattupalli, Minjur. This project was implemented on public private partnership mode on Design Build Own Operate and Transfer (DBOOT) basis. The plant is now operational and water is being supplied to the northern parts of Chennai city.

Nemmeli desalination plant

A 100 MLD desalination plant at Nemmeli was constructed with an outlay of ₹854.52 Crore with Government of India assistance. This plant was inaugurated by the Hon'ble Chief Minister on 22.02.2013. The plant is now fully operational and water is being supplied to the southern parts of Chennai city.

During the last two years when Chennai was faced with a deficit monsoon, the two Desalination plants have stood the city in good stead and have helped in easing the water supply situation.

5.1.3 Ground water

Water from ground water aquifers at Minjur, Tamaraipakkam, Poondi and Neyveli supplement the water supply to Chennai. These sources on an average yield about 60 MLD.

5.1.4 New Veeranam Project

The Veeranam Water Supply Project was implemented as an additional source of water to Chennai City. The Project was commissioned in the year 2004 and supplies 180 MLD of water from Veeranam Lake to the city. This lake receives water from the Cauvery River system through Lower Anicut and Vadavar Canal besides inflows from its own catchment area. The capacity of the lake is 1465 Mcft. This water is normally available to Chennai for about 9 months in a year.

5.1.5 Operations and Maintenance of Water supply

Due to the consecutive failure of the monsoons in the years 2012 and 2013, the city's water supply has been reorganized and the Board currently supplies 600 MLD (Million litres per day) of water to Chennai city. CMWSSB is also simultaneously taking up

various projects to provide comprehensive water supply and sewerage services to the newly added areas of the city.

The Board maintains an elaborate network of facilities to provide these services. Since its inception in 1978, the Board has improved its services and the infrastructure it maintains has seen a manifold increase. The Board operates water treatment plants at Kilpauk, Redhills, Chembarambakkam, Surapattu and Vadakuthu and the details are provided in the table below.

Capacity of water treatment plants

Water treatment plants	Capacity in MLD
Kilpauk	270
Redhills	300
Chembarambakkam	530
Vadakuthu	180
Surapattu	14
Total	1294

The water supply operations of the Board have increased enormously since inception. The details are :-

Growth in Water supply operations

Description	In 1978	In 2014
Operational area (sq.km)	174	426
Population (in lakh)	28.60	70.68
Water Supply (MLD)	240	600
Length of water mains (Km)	1,250	6,518
Distribution stations	3	74
Water treatment capacity (MLD)	182	1,494
Consumers	1,16,000	6,24,631

The estimated expenditure for Operation and Maintenance during the year 2013-14 is ₹890.89 Crore. The total estimated income of the Board is ₹469.31 Crore. Of this, the income from Water and Sewerage Taxes is ₹113.29 Crore, water and sewerage charges is ₹314.54 Crore and other income is ₹41.48 Crore. The

Government of Tamil Nadu provides grants to the Board for purchase of desalinated water and other purposes. The grants received during 2013-14 is ₹190.66 crore.

5.2 Water supply – New Schemes

CMWSSB is taking up various schemes for augmenting water supply to underserved areas with special focus on covering the 42 newly added areas to Chennai Corporation.

5.2.1 Desalination Plants

400 MLD Desalination Plant at Perur along ECR, Chennai

The Hon'ble Chief Minister of Tamil Nadu has announced on the floor of assembly that a 400 MLD desalination Plant at Pattipulam along the East Coast Road in South Chennai would be constructed. It was found that the land proposed for the project was the subject matter

of a dispute. The location was therefore shifted to a nearby site at Perur on the East Coast Road to the South of Chennai.

The Board has appointed a consultant to conduct feasibility studies and prepare a Detailed Project Report, bid documents and evaluation of tenders etc. The Detailed Project Report has since been received and the proposal is under process in Government.

5.2.2 150 MLD Desalination Plant at Nemmeli along ECR Chennai

The Hon'ble Chief Minister of Tamil Nadu has made an announcement under rule 110 on the floor of assembly on 16.04.13 that a 150 MLD capacity desalination plant will be set up in the vacant land of 10.50 acres available in the premises of the existing 100 mld desalination plant at Nemmeli at a cost of ₹1000 Crore. A Detailed Project Report has been prepared and the proposal is under process in Government.

5.2.3 Laying of water supply transmission mains to Tambaram, Pallavaram and Pammal areas

The Government has sanctioned a sum of ₹93.48 Crore from the Infrastructure and Amenities Fund to lay a 1200 mm dia meter Mild Steel (M.S) transmission main from Poonamallee bye-pass junction to Tambaram for a length of 22 Kms. This work will extend the water supply to Tambaram, Pallavaram, Pammal and other nearby Urban Local Bodies. This work is under progress and is likely to be completed by October 2015.

5.2.4 Second water transmission main from Chembarambakkam to Poonamallee bye-pass junction

In order to convey the full quantity of 530 mld of treated water from Chembarambakkam, to the city, Government has accorded Administrative sanction for laying a second Mild Steel (MS) pipe line of 2000 mm diameter from Chembarambakkam Water

Treatment Plant to Poonamallee bye-pass junction for a length of 6.5 Kms at an estimated cost of ₹41.35 Crore. This work is likely to be completed by December 2014.

5.2.5 Water Supply Schemes under the Chennai Mega City Development Mission

The Hon'ble Chief Minister launched the Chennai Mega City Development Mission to improve infrastructure and basic amenities in Chennai City with special focus on the newly added areas.

Water supply works taken up under CMCDM

Sl. No	Name of the scheme	Est. cost (₹ in Crs)	Status of works
2011-12			
1	Laying of water supply lines in uncovered areas of Slums	23.56	works will be completed by August 2014
2	Providing Under Ground Tanks and Water filling points in Newly Added areas	12.23	Works will be completed by August 2014
3	Replacement of choked water mains / PVC mains	20.71	Works will be completed by August 2014

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2012-13			
4	WSS to Nolambur	18.00	Works will be completed by August 2015
5	WSS to Karambakkam	20.56	Works will be completed by August 2015
6	WSS to Ramapuram	32.54	Works will be completed by February 2016
7	WSS to Manapakkam	10.92	Works will be completed by February 2016
8	WSS to Nandambakkam	6.00	Works will be completed by August 2015
9	WSS to Okkiyam-Thoraipakkam	46.00	Works will be completed by February 2016
10	WSS to Injambakkam	22.30	Works will be completed by August 2015
11	WSS to Sholinganallur-Karapakkam	35.70	Works will be completed by September 2015

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12	WSS to Edayanchavadi	28.21	Works will be completed by May 2016
13	WSS to Sadayankuppam		
14	WSS to Kadapakkam		
2013-14			
15	WSS to Manali	21.33	Works will be completed by May 2016
16	WSS to Pallikaranai	42.82	Works will be completed by June 2016
17	WSS to Mugalivakkam	31.37	Works will be completed by June 2016
18	WSS to Chinnasekkadu	11.00	Works will be completed by May 2016
19	WSS to Kottivakkam	23.00	Works will be completed by March 2016
20	WSS to Perungudi	45.00	Works will be completed by March 2016
21	WSS to Palavakkam	30.00	Works will be completed by March 2016

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22	WSS to Vadaperumbakkam & Theeyambakkam	20.00	Works will be completed by May 2016
23	WSS to Surapattu	82.61	Work will be completed by May 2016.
24	WSS to Kathirvedu		
25	WSS to Puthagaram		
26	WSS to Puzhal		
Total		583.86	

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5.2.6 Jawaharlal Nehru National Urban Renewal Mission

The Government of India gives a grant of 35% and the State Government contribution is 15%. The schemes taken up are as follows :-

Sl. No	Name of the scheme	Est. cost (₹ in Crs)	Status of works
1	Improvement works to water supply system in Chennai city	322.00	Works will be completed by August 2014
2	Maduravoyal	23.30	Completed
3	Ullagaram-Puzhuthivakkam	24.24	Works will be completed by November 2014
4	Thiruvotriyur	85.11	Completed
5	Alandur - improvement works	64.39	Completed
6	Ambattur	267.08	Completed
7	Nerkundram	19.17	Works will be completed by December 2014
Total		805.29	
Deposit works for other Local Bodies			
	Avadi	103.84	Works will be completed by August 2014
Total		103.84	

5.2.7 Japan International Cooperation Agency (JICA) Funds

Madhavaram water supply scheme has been taken up with JICA assistance. The detail is as follows :-

Scheme	Est. cost (₹ in Crore)	Status of works
Madhavaram	55.00	Works will be completed by December 2014
Total	55.00	

5.3 Sewerage services

CMWSSB provides sewerage services including waste water treatment and promotes reuse of treated water. Chennai has an installed capacity of 649 MLD for treatment of sewage generated.

The sewage generated from houses and other buildings is collected through the sewerage system of a length of about 3,989 kms. This sewage is taken to 219 sewage

pumping stations. The sewage system of the city is divided into 5 zones with independent zonal collection, conveyance, treatment and disposal facilities. The collected sewage from pumping stations is conveyed to 12 Sewage Treatment Plants.

Sewage Treatment Plants

Sl. No.	Treatment Plant	Capacity in mld
1	Nesapakkam (3 units : 23+40+54 mld)	117
2	Kodungaiyur (3 units : 110+80+80 mld)	270
3	Koyambedu (2 units : 34+60 mld)	94
4	Perungudi (2 units : 79+72 mld)	151
5	Villivakkam (1 unit : 5 mld)	5
6	Alandur (1 unit : 12 mld)	12
Total (12 units)		649

Sewage Treatment Plants under construction

Sl. No.	Location	Capacity in mld	Estimate cost (₹ in Crore)	Present stage
1	Thiruvotriyur	31	26.33	Works will be completed by September 2014
2	Sholinganallur	18	33.71	Works will be completed by October 2014
3	Koyambedu	120	116.10	Works will be completed by September 2014
Total		169	176.14	

The sewerage services of the board have increased manifold since its inception in 1978.

Increase in sewerage services

Sl. No.	Description	In 1978	In 2014
1	Length of sewer mains (in Km)	1,223	3,989
2	No. of pumping stations	58	219
3	Sewage treatment capacity (MLD)	57	649
4	No. of consumers	1,14,000	7,71,168

5.3.1 Sewerage Schemes taken up under the Chennai Mega City Development Mission

The Hon'ble Chief Minister launched the Chennai Mega City Development Mission to improve infrastructure and basic amenities in Chennai City with special focus on the newly added areas. Following schemes have been taken in the newly added areas.

Sl. No	Name of the scheme	Estimate cost (₹ in Crore)	Status of works
2011-12			
1	Laying of force mains between pumping stations	9.26	Works will be completed by August 2014
2	Enlargement of Sewage Pumping Mains	32.43	Works will be completed by December 2014
3	Re-routing of Sewage Pumping Mains	22.98	Works will be completed by December 2014
4	Insertion of manholes in Mogappair, construction of Roadside pumping stations with submersible pumpsets	15.61	Works will be completed by December 2014
5	Improvement to existing Sewage Pumping stations	11.24	Works will be completed by August 2014

6	Procurement of 35 Nos. of Jet Rodding and 50 Nos. of Desilting machines	9.90	Procured - In operation
7	Enlargement of sewer mains	31.18	Works will be completed by August 2014
2012-13			
8	UGSS to Kathivakkam	86.15	Works will be completed by February 2016
9	UGSS to Ramapuram	48.50	Works will be completed by August 2016
10	UGSS to Sholinganallur-Karapakkam	110.90	Works will be completed by March 2016
11	Procurement of sewerage maintenance equipments	15.20	Procured - In operation
2013-14			
12	UGSS to Mugalivakkam	54.79	Works will be completed by November 2016
13	UGSS to Nolambur	26.01	Tender under evaluation
14	UGSS to Thiruvottiyur (Annai Sivagami Nagar)	8.51	
15	UGSS to Surapattu	35.00	
16	UGSS to Puthagaram & Kathirvedu	60.00	
Total		577.66	

5.3.2 Jawaharlal Nehru National Urban Renewal Mission

The Government of India gives a grant of 35% and the State Government contribution is 15%. The schemes taken up are:

UGSS schemes taken up under JnNURM

Sl. No	Name of the Scheme	Est. cost (₹in Crore)	Status of works
1	Providing water supply and sewerage facilities along Rajiv Gandhi Salai	41.77	Completed
2	Ullagaram-Puzhuthivakkam UGSS	28.08	Works will be completed by November 2014
3	Ambattur UGSS	130.91	Works will be completed by March 2015
4	Maduravoyal UGSS	57.45	Works will be completed by August 2014
5	Porur UGSS	38.29	Works will be completed by August 2014
6	Perungudi UGSS	20.19	Works will be completed by December 2014

7	Pallikaranai UGSS	58.61	Works will be completed by October 2014
Total		375.30	
Deposit works for other local bodies			
8	Avadi Municipality	158.05	Works will be completed by September 2014
9	Tambaram Municipality	160.97	Works will be completed by December 2014
10	Thirumazhisai Town Panchayat	20.47	Works will be completed by August 2014
Total		339.49	

5.3.3 Tamil Nadu Urban Development Project - III

TNUDP-III assistance has been provided for executing the following three works.

Works Taken up under TNUDP-III

Sl. No	Name of the Scheme	Est. cost (₹in Crore)	Status of works
1	Thiruvotriyur	87.63	Works will be completed by September 2014
2	Madhavaram	50.22	Completed

3	Ambattur Phase – I	65.75	Works will be completed August 2014
	Total	203.60	

5.3.4 Power generation from sewage treatment plants

CMWSS Board has commissioned 6 Nos. of Sewage Treatment Plants (STPs) with a total capacity of 378 mld in the last 8 years. Bio gas produced in these plants is used to generate electricity which is in turn used to meet the power requirements of the sewage treatment plants.

Power generation from Sewage treatment Plants

Sl. No.	Sewage treatment plant	Treatment capacity in mld	Power Produced in Kwh/day	Total power requirement in Kwh/day	Percentage of requirement over production
1	Kodungaiyur	110	14,000	13,500	103.70
2	Koyambedu	60	5,000	9,000	55.55
3	Nesa pakkam-I	40	5,800	5,800	100.00

4	Nesa pakkam-II	54	3,000	9,000	33.33
5	Perungudi I	60	7,200	8,500	84.71
6	Perungudi II	54	7,000	8,500	82.35
	Total	378	42,000	54,300	77.35

This has reduced 77% of dependence of the STPs on electricity drawn from the TANGEDCO Grid. In the last 7 years electricity worth ₹34.98 Crore has been produced. It is proposed to continue this initiative in upcoming Sewage Treatment Plants wherever found to be feasible.

The utilization of biogas for production of power reduces the emission of green house gases such as Methane (CH₄) and Carbon dioxide (CO₂) into the atmosphere and also consumption of Electricity from TANGEDCO.

5.3.5 Mechanisation of sewer cleaning operations

Now CMWSSB engaged in deploying machines in sewer cleaning. CMWSSB has procured adequate number of machines and is presently maintaining 119 Jet Rodding machines, 190 Desilting machines, 28 Jetting cum suction machines and 43 Super Sucker machines for effective maintenance of its sewer system.

5.3.6 Preventive maintenance of sewer system

CMWSSB serves a total 7,71,168 consumers by maintaining the sewer lines for a length of 3989 km which includes 6,24,631 consumers having water connections by maintaining 6518 km length of water main. Maintaining the sewerage system is a challenging task, more so because of the flat terrain.

With the present fleet of machines, CMWSSB has now programmed to have preventive maintenance work for cleaning the sewer network. Sewers have been classified according to their requirement for periodical cleaning. Some may require monthly maintenance, some bi monthly, some once in six months and some once in a year. The maintenance schedule is then worked out for the days of the month and taken up.

The implementation of Preventive maintenance plan has resulted in significant reduction of Sewer blocks in the city. The number of Sewer block complaints received every month was reduced by 20%.

5.3.7 Plugging of sewage outfalls

In the Budget 2012-13, it was proposed to plug 337 sewage outfalls to prevent untreated sewage from entering into the Chennai City Water Ways and to treat this

sewage before letting it out at a cost of ₹300.00 Crore.

In the first phase, an amount of ₹150.00 crore was sanctioned under Infrastructure and Amenities Fund for carrying out works necessary to plug 179 outfalls of the 337 outfalls and work is under progress.

Now in the Second Phase a Detailed Project Report has been prepared for ₹163.00 crore to plug the remaining 158 sewage outfalls into the Chennai City Water Ways. The proposal is under process for issuing administrative sanction.

5.3.8 Reuse of raw sewage and secondary treated water in Industries

CMWSSB is supplying about 3.5 MLD of raw sewage to M/s. GMR Vasavi Power Plant. In addition to this, CMWSSB is supplying 36 MLD of secondary treated water to M/s. Chennai Petroleum Corporation Ltd.,

M/s. Madras Fertilizer Ltd., and M/s. Manali Petro Products Ltd. The average revenue to the Board towards sale of this is ₹13.00 crore per annum.

5.3.9 Recycling of waste water - 45 MLD TTRO Plant

The proposed 45 MLD capacity TTRO plant to supply treated water to the industries in Irungkattukottai/ Sriperumbudur/Orgadam etc., at a cost of ₹400 crore has been approved by the Government of India. Work on the project would commence during this financial year after obtaining administrative sanction.

5.4 Water and Sewerage services in newly added areas

42 local bodies have been added to Chennai City Corporation. Projects are being taken up by the Board to improve and provide water supply and sewerage services to these areas.

5.4.1 Water supply

Out of the 42 local bodies added with the Chennai city, Water supply schemes were already implemented in 7 added local bodies namely Kathivakkam, Alandur, Valasaravakkam, Porur, Thiruvotriyur, Ambattur and Maduravoil.

Water supply schemes are under progress in 13 added local bodies. Water supply schemes in Nerkundram, Ullagaram Puzhuthivakkam have been taken up at a cost of ₹43.41 crore under JnNURM funding. In Madhavaram work has been taken up at a cost of ₹55.00 crore under JICA fund. In Meenambakkam work has been taken up at a project cost of ₹0.39 Crore under Chennai Mega City Development Mission fund 2011-12. Similarly, water supply schemes in Ramapuram, Nolambur, Karambakkam, Manapakkam, Nandambakkam, Sholinganallur, Karapakkam, Injambakkam and Okkiyum Thoraipakkam have been taken up under

Chennai Mega City Development Mission fund 2012-13 at a project cost of ₹192.02 crore.

During 2013-14, CMWSS Board has taken up the implementation of water supply schemes in 16 added areas viz Edayanchavadi, Sadayankuppam, Kadapakkam, Thiyambakkam, Vadaperumbakkam, Manali, Surapattu, Kathirvedu, Puthagaram, Puzhal, Pallikaranai, Kottivakkam, Chinnasekkadu, Mugalivakkam, Perungudi and Palavakkam at an estimated cost of ₹327.97 Crore under JnNURM scheme and Chennai Mega City Development Mission Fund 2013-14. Work orders issued in May 2014 for the above works. These will be completed within a period of 24 months from the date of award of contract.

Preparation of Detailed Project Report for the remaining 6 added local bodies viz. Mathur, Neelankarai, Madipakkam, Jalladampettai, Semmenchery and Uthandi will be taken up

after finalisation of land required for the construction of head works.

5.4.2. Sewerage services

Out of the 42 local bodies recently added to Chennai Corporation city limits, underground sewerage facilities have been provided to 3 added local bodies namely Valasaravakkam, Alandur and Madhavaram.

Sewerage schemes are under progress in 12 added local bodies. Sewerage schemes for Maduravoyal, Perungudi, Porur, Ullagaram-Puzhuthivakkam, Pallikaranai and Ambattur (part) areas are under progress at a cost of ₹333.53 crore under JnNURM. Sewerage schemes for Thiruvottiyur and Ambattur (part) areas are under progress at a cost of ₹153.38 crore under TNUDP-III. Under Ground Sewerage Scheme for Meenambakkam at a project cost of ₹3.50 crore was taken up under Chennai Mega City Development Mission Fund for the year 2011-12. Under Ground Sewerage

Schemes in Kathivakkam, Ramapuram, Sholinganallur and Karapakkam taken up at a Project cost of ₹245.55 crore under Chennai Mega City Development Mission-2012-13, are under progress.

During 2013-14, Work order is issued for Mugalivakkam sewage scheme. Implementation of sewerage schemes is taken up in 4 added local bodies namely Surapattu, Puthagaram, Kathirvedu, Nolambur and Thiruvottiyur (Annai Sivagami Nagar) at a project cost of ₹129.52 crore under JnNURM and Chennai Mega City Development Mission for the year 2013-14. For the implementation of above sewerage schemes, tenders have been invited. After completion of evaluation the scheme will be taken up and completed within a period of 30 months.

Preparation of Detailed Project Report for the remaining 22 added local bodies namely

Manali, Chinnasekkadu, Puzhal, Nandambakkam, Edyanachavadi, Sadayan-kuppam, Kadapakkam, Theeyambakkam, Mathur, Vadaperumbakkam, Karambakkam, Nerkundram, Manapakkam, Kottivakkam, Palavakkam, Neelankarai, Injambakkam, Okkiyam-Thoraipakkam, Madipakkam, Jalladam -pettai, Semmencherry and Uthandi will be taken up after finalization of land required for the construction of sewage pumping stations.

5.5 Grievance Redressal

In order to improve service delivery, improve transparency and provide speedy redressal to grievances of consumers, the Board has taken the following steps.

5.5.1 24x7 Complaints Registration & Monitoring System

A state of the art Complaint Cell is functioning 24x7 at the Head Office to register and monitor the grievances of the consumers. 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. On an average 85 complaints are being registered in the compliant cell on a daily basis and these complaints are being attended to immediately.

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. After

redressal of the complaint, action taken is informed to the consumer through SMS.

5.5.2 Complaint redressal through website

Consumers can register their complaints through the Board's website i.e. www.chennaietrowater.tn.nic.in. The registered complaints are forwarded to the respective Area Offices and the same are redressed as per Citizens' Charter.

5.5.3 Open House Meeting

To improve service delivery, the Board conducts Open House Meetings in all the Area Offices between 10.00 A.M. and 1.00 P.M. on every 2nd 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 Rain water harvesting

Tamil Nadu is the pioneer in the field of Rain Water Harvesting, **thanks to the visionary efforts taken by the Hon'ble Chief Minister.** To popularize Rain Water Harvesting among the residents of Chennai City, the following measures were taken by Chennai Metropolitan Water Supply and Sewerage Board.

To get new/renewal of water and sewer connections, installation of Rain Water Harvesting structure has been made mandatory for all the buildings irrespective of size and area. Before 2012 a total number of 8 lakh rainwater harvesting structures have been constructed. During 2012-13 a total number of 10,000 Nos. of rainwater harvesting structures were constructed and during the year 2013-14 a total number of 9,185 rainwater harvesting structures were constructed. As on date a total number of 8,19,185 rainwater

harvesting structures were constructed in Chennai city.

Following the implementation of the Rain Water Harvesting scheme, ground water levels and its quality is improving every year, especially during the monsoon period.

In Chennai city about 7,10,000 buildings exist with a total no. of 8,19,185 RWH structures. Recharge potential from the Rain Water Harvesting structures is 2.25 TMC. Awareness campaigns and special camps are conducted periodically to encourage the consumers to maintain the structures properly. The Area/Depot Engineers are monitoring the installation and maintenance of Rainwater Harvesting Structures in Chennai city.

6. Tamil Nadu Water Supply and Drainage Board

Tamil Nadu Water Supply and Drainage Board was formed as a statutory body on 14.04.1971 with the objective of providing protected water supply to the Rural and Urban population as well as Under Ground Sewerage Schemes to the urban local bodies in Tamil Nadu excluding Chennai Corporation. The Board office at Chennai is headed by the Managing Director supported by 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

- a. Planning, Investigation, Design, Implementation and Commissioning of Water Supply and Sewerage Schemes in Rural and Urban areas.

- b. Operation and Maintenance of Combined Water Supply Schemes.
- c. Water Quality Monitoring and Surveillance Programme.
- d. Sustainability of Drinking Water Sources.
- e. Training Activities.

6.2 Rural Water Supply Programme

The Government of India considering that 40 lpcd has been the norm over the last 40 years, as an interim measure has enhanced the service level to 55 lpcd for the 12th Five year Plan. By 2017, it is targeted that at least 50% of Rural Population in the Country shall have access to 55 lpcd within their household premises or within 100 metres radius (and within 10 metres elevation in hilly areas) from their households.

Water Supply schemes to Rural Habitations is implemented based on surveys to assess the gap between current supply and the service standard. Rural Water Supply Schemes

are being implemented with State Government Funds under the Minimum Needs Programme (MNP) and with the Central Government Funds under the National Rural Drinking Water Programme (NRDWP).

The Rural water supply includes implementation of Individual Power Pump schemes for the prioritized Rural Habitations involving creation of water source (borewell/open well), construction of Service Reservoir and laying of pipe line for transmission and distribution. When the beneficiary is an individual local body, the scheme is handed over to the local body for maintenance on completion of the scheme and when the scheme is meant for more than one local body, the scheme is maintained by TWAD Board. Besides providing water supply schemes to rural habitations, TWAD Board is also implementing schemes to provide water supply to Government Schools, Anganwadis,

Government Hostels and Primary Health Centres in rural areas.

In Tamil Nadu, as on 01.04.2013, there are 98,179 rural habitations. Out of this, 76,704 habitations are fully covered with water supply at 40 lpcd and 21,475 habitations are partially covered, including 540 Quality affected habitations. During 2013-14, 5,705 habitations have been fully covered with water supply at 55 lpcd including 245 Quality affected habitations. Apart from this 8,414 partially covered habitations (including 295 quality affected habitations) have been taken up in the ongoing Combined Water Supply Schemes. It is proposed to cover the remaining 7,356 partially covered rural habitations in the coming years.

6.3. Rural Water Supply during 2013-14

During 2013-14, **6,000** partially covered Rural Habitations have been taken up at a cost of **₹1,190.72 Crore** and 5,705 Rural

Habitations have so far been covered. The details are given below:

Sl. No.	Description	Habitations covered
1	Coverage through Individual Power Pump Schemes	4,391
2	Coverage of Quality Affected Habitations	245
3	Coverage through Combined Water Supply Schemes	1,069
Total		5,705

The remaining 295 Quality Affected Habitations which are proposed to be covered in Major Combined Water Supply Scheme in Nagapattinam District will be completed during the current financial year.

6.4 Rural Water Supply Programme for 2014-15

During the year 2014-15, **4,805** Rural habitations are proposed to be covered through Individual Power Pump Schemes and Combined

Water Supply Schemes at a cost of **₹831.83 Crore**. The details are as below.

Sl. No.	Description	No. of Habitations to be covered
1	Coverage through Individual Power Pump Schemes	1,510
2	Coverage through Combined Water Supply Schemes	3,295
Total		4,805

6.5 Source Sustainability

Besides implementation of water supply schemes, TWAD Board has taken measures to augment ground water sources towards source sustainability by creating recharge structures such as check dam, recharge shafts, percolation ponds etc., under the Government of India and State Government Assisted Programmes.

During 2011-12 and 2012-13, 1,628 Recharge Structures have been constructed at a cost of **₹93.42 Crore**. During 2013-14, **1,039 Recharge Structures** were taken up and

completed at a cost of **₹78.68 crore**. During the year 2014-15, it is proposed to take up **680 Recharge Structures** at an estimated cost of **₹56.14 crore**.

6.6 Combined Water Supply Schemes

In order to provide sustainable and potable water supply to the public, 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. Combined Water Supply Schemes are implemented by TWAD Board benefitting both urban and rural local bodies.

During 2013-14, **43 such schemes** were under implementation at an estimated cost of **₹910.62 crore** to benefit **33.60 lakh** people 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 **9 Combined Water Supply Schemes**, have been completed at an estimated cost of **₹30.75 crore**, benefiting **3.10 lakh** people.

Sl. No.	Name of scheme	Estimate amount (₹ in crore)	Population benefitted
1	CWSS to Melmaiur and 12 other habitations in Kattankolathur Union of Kanchepuram District.	0.98	7,357
2	CWSS to Sumaithangi and 13 other habitations in Walajah Union of Vellore District.	0.99	11,231
3	CWSS to 79 habitations in Melpuram and Providing Treatment Plant for the 3 existing CWSS in Kanyakumari District.	16.70	1,86,347
4	CWSS to Manmangalam and 71 other habitations in Karur union of Karur District.	2.38	24,232
5	CWSS to Chithamur and 27 habitations in Anakkavur Union of Tiruvannamalai District.	1.85	13,756
6	CWSS to Korakkai & T.Endal (Quality affected habitations) and 11 Other wayside habitations in Mangalore union of Cuddalore District	1.32	10,068
7	CWSS to Padavedu and 46 other habitations in Polur Union of Tiruvannamalai District.	3.03	17,445
8	CWSS to 11 habitations in Thirupparaithurai Panchayat and one habitation in Perugamani Panchayat in Anthanallur Union of Trichy District.	0.49	6,210
9	CWSS to Thekkampatty and 31 other habitations in Karamadai Union of Coimbatore District.	3.01	33,693
	Total	30.75	3,10,339

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Further, the following **28 CWSS** at a cost of ₹ **695.49** crore to benefit a population of **27.18 lakh** are in progress.

Sl. No	Name of Scheme	Estimate Amount (₹ in Crore)	Population (in Lakh)	Physical progress
1	CWSS to Vedasandur, Palayam, Oddanchatram (now upgraded as Municipality) Kannivadi, Srirampuram Town Panchayats with bulk provision to 739 rural habitations in Dindigul District and 25 rural habitations in Karur District. (Phase -I)	38.01	3.58	Trial Run completed in the Pumping Main and Water Supply effected to Oddanchatram Municipality, Vedasandur and Kannivadi Town Panchayats. Water Supply will be effected to Srirampuram and Palayam Town Panchayats by September 2014.

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Sl. No	Name of Scheme	Estimate Amount (₹ in Crore)	Population (in Lakh)	Physical progress
2	CWSS to 101 rural habitations in Thoppampatti Union (under Vendasandur CWSS in Dindigul District)	4.11	0.43	The contractual and legal issues are being sorted out to put the schemes into beneficial use during March 2015.
3	CWSS to 235 habitations in Gujiliamparai, Vendasandur and Oddanchatram Unions in Dindigul District	5.55	0.73	
4	CWSS to 93 habitations in Oddanchatram union (under Vendasandur CWSS in Dindigul District)	9.36	0.37	
5	CWSS to 109 rural habitations in Oddanchatram Union (under Vendasandur CWSS in Dindigul District)	4.08	0.59	
6	CWSS to 201 rural habitations in Reddiachatram Union (under Vendasandur CWSS in Dindigul District)	8.98	0.86	

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Sl. No	Name of Scheme	Estimate Amount (₹ in Crore)	Population (in Lakh)	Physical progress
7	CWSS to 254 Rural habitations in Vadamadurai and Vendasandur Unions Under Dindigul CWSS in Dindigul District	9.91	2.58	Trial run. Water supply effected to 223 Habitations
8	CWSS to 40 Habitations in Pallapalayam, Andankoil East, and Andankoil West Panchayats in Thanthoni Union of Karur District	6.43	0.29	97% works completed
9	CWSS to 306 rural habitations in Perambalur, Veppanthattai, and Alathur Unions, Arumbavur and Poolambadi Town Panchayats in Perambalur District	61.11	0.95	92% works completed.
10	CWSS to Koodappalli and 129 habitations of Musiri and Manachanallur Unions in Trichy District	16.16	0.73	90% works completed.
11	CWSS to 116 Quality affected habitations of Kumbakonam and Thiruvudaimaruthur Unions in Thanjavur District	17.00	0.69	80% works completed.

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Sl. No	Name of Scheme	Estimate Amount (₹ in Crore)	Population (in Lakh)	Physical progress
12	CWSS to 6 Habitations of Keelanatham Panchayat in Tirunelveli District	0.99	0.09	85% works completed.
13	CWSS to Udangudi Town Panchayat and 30 Habitations in Alwarthirunagari (Part), Thiruchendur (part), Sathankulam (part) and Udangudi (part) Unions in Thoothukudi District	9.19	0.30	32% works completed.
14	CWSS to 90 Rural Habitations in Karungulam (Part), Srivaikundam (Part) and Thoothukudi (Part) Unions in Thoothukudi District	17.17	0.48	47% works completed.
15	CWSS to 34 Rural Habitations in Manur union and Palayamkottai Union in Tirunelveli District	6.35	0.22	20% works completed.

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Sl. No	Name of Scheme	Estimate Amount (₹ in Crore)	Population (in Lakh)	Physical progress
16	CWSS to 170 Rural Habitations in Manur union (Part) and Palayamkottai Union(Part) in Tirunelveli District	32.40	1.13	20% works completed.
17	Augmentation of Water supply to 147 Rural Habitations of Alangulam-Sankarankoil CWSS in Tirunelveli District	31.32	1.56	15% works completed.
18	CWSS to Keelapavoor Town Panchayat (Part) and 163 Rural Habitations in Pappakudi (Part), Kadayam and Keelapavoor Unions in Tirunelveli District	46.55	1.55	15% works completed.
19	Providing Combined Water Supply Scheme to 248 rural habitations in Kovilpatti (Part), Kayathar (Part), Ottapidaram (part), Vilathikulam (part) and Pudur (Part) unions in Thoothukudi District	94.04	1.25	15% works completed.

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Sl. No	Name of Scheme	Estimate Amount (₹ in Crore)	Population (in Lakh)	Physical progress
20	CWSS to Vellakoil, Kangayem Municipalities and 528 Rural habitations in Erode and Tiruppur Districts.	91.40	3.95	5% works completed.
21	CWSS to 130 habitations in Perundurai and Chennimalai Unions in Erode District.	14.94	0.29	15% works completed.
22	CWSS to 93 Habitations in Erode Union in Erode District	11.30	0.47	10% works completed.
23	CWSS to Uthukuli Town Panchayat and 238 rural habitations in Uthukuli union in Tiruppur District	27.57	0.63	15% works completed.
24	CWSS to 212 Rural Habitations in Andhanallur, Manikandam and Manapparai Unions with river Cauvery as source in Trichy District	48.67	1.14	5% works completed.

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Sl. No	Name of Scheme	Estimate Amount (₹ in Crore)	Population (in Lakh)	Physical progress
25	CWSS to 327 Rural Habitations in Edapadi, Konganapuram and Magudanchavadi Unions of Salem District	46.45	0.91	5% works completed.
26	Improving the existing CWSS to 43 and 45 habitations with River Tamirabarani as source to enhance the water supply to the existing beneficiaries and to provide water supply to 1196 Tsunami houses in Mappillai yoorani Panchayat in Thoothukudi District	9.47	0.06	2% works completed.
27	CWSS to 281 rural habitations of Jeyankondam Union in Ariyalur District	26.06	1.09	Tender stage for replacing old pipes with new pipes.
28	CWSS to 23 Habitations of Painkulam Panchayat in Kanyakumari District.	0.92	0.26	8% works completed.
	Total	695.49	27.18	

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The following **6 Combined Water Supply Schemes** to benefit a population of **3.32 lakh** at a total cost of **₹184.37 crore** are under Tender Stage.

Sl. No.	Name of Scheme	District	Estimate amount (₹ in crore)	Population (in lakh)
1.	CWSS to Zamin Uthukuli Town Panchayat and 63 Rural Habitations	Coimbatore	15.47	0.41
2.	CWSS to 158 Rural Habitations in Gudimangalam and Udumalaipettai Unions	Tiruppur	54.14	1.23
3.	CWSS to Mulligur and 54 rural habitations in Mulligur, Italar and Nanjanadu Village Panchayats in Udthagamandalam union	The Nilgiris	25.85	0.20
4.	CWSS to Athangaraipatty and 14 Habitations in Kadamalaikundu - Myiladumparai Unions	Theni	2.65	0.81

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Sl. No.	Name of Scheme	District	Estimate amount (₹ in crore)	Population (in lakh)
5.	CWSS to 60 quality affected and 59 wayside habitations in Kattumannarkoil Union and Lalpettai Town Panchayat	Cuddalore	18.16	0.60
6.	CWSS to Koodankulam and 12 other VPs (100 Habitations) of Radhapuram and Valliyoor Unions situated around Koodankulam Nuclear Power Plant	Tirunelveli	68.10	0.07
	Total		184.37	3.32

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6.7 Major Combined Water Supply Schemes

The following 14 Major Combined Water Supply Schemes at a total cost of ₹4,890.32 Crore are taken up for implementation to benefit a total population of 118.85 lakh and programmed to complete the schemes during 2014-15, 2015-16 and 2016-17.

Sl. No	Name of Scheme	Estimate Cost (₹ in crore)	Population (in Lakh)	Physical progress in Percentage
Schemes to be completed during 2014-15				
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 Singampunari Town Panchayat in Sivagangai District	784.00	15.92	88

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Sl. No	Name of Scheme	Estimate Cost (₹ in crore)	Population (in Lakh)	Physical progress in Percentage
2	Augmentation of Water Supply to Palladam Municipality, 23 Town Panchayats and 965 Rural Habitations in 8 Unions of Coimbatore and Thiruppur Districts	224.92	12.29	81
3	Combined Water Supply Scheme to 7 Town Panchayats and 395 Rural Habitations in Virudhunagar District.	173.00	4.82	88
4	Combined Water Supply Scheme to 755 Rural Habitations in Virudhunagar District	234.00	6.51	33
5	Combined Water Supply Scheme to 637 Rural Habitations in Virudhunagar District	190.00	4.24	88
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	56

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Sl. No	Name of Scheme	Estimate Cost (₹ in crore)	Population (in Lakh)	Physical progress in Percentage
7	Combined Water Supply Scheme to Attur & Narasingapuram Municipalities, 20 Town Panchayats and 1,345 Rural Habitations in 12 Unions of Salem District.	270.00	13.09	96
8	Combined Water Supply Scheme to Vellore Corporation, 11 Municipalities, 5 Town Panchayats and 944 Wayside Rural Habitations of Vellore District.	1,295.00	24.46	81
	Sub Total-I	3276.62	85.03	
	Schemes to be completed during 2015-16			
9	CWSS to Cuddalore Municipality, Bhuvanagiri and Parangipettai Town Panchayats and 812 Rural Habitations in Cuddalore District	260.54	7.75	13

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Sl. No	Name of Scheme	Estimate Cost (₹ in crore)	Population (in Lakh)	Physical progress in Percentage
10	CWSS to 1,751 Rural Habitations in Gandarvakottai, Pudukottai (Part), Viralimalai (Part), Kunnandarkoil (Part), Annavasal (Part), Aranthangi, Thiruvarankulam, Karambakudi Unions in Pudukottai District and Vallam Town Panchayat in Thanjavur District	315.70	7.63	18
11	CWSS to 1,766 Rural Habitations in Pudukottai (Part), Viralimalai (Part), Kunnandarkoil (Part), Annavasal (Part), Ponnamaravathi, Thirumayam and Arimalam Unions in Pudukottai District and 125 habitations in S.Pudur and Sakkottai Unions of Sivagangai District.	301.50	6.65	15
12	CWSS to 1153 Rural Habitations in 9 unions and to Peravurani, Adhirama pattinam and Perumagalur Town Panchayats in Thanjavur District	495.70	7.00	5
	Sub Total-II	1373.44	29.03	

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Sl. No	Name of Scheme	Estimate Cost (₹ in crore)	Population (in Lakh)	Physical progress in Percentage
Schemes to be completed during 2016-17				
13	CWSS to Thondamuthur, Pooluvapatty, Thenkarai, Vedapatti, Dhaliyur, Alandurai and Perur Town Panchayats and 134 rural habitations in Thondamuthur union of Coimbatore District	130.46	1.83	Tender stage
14	CWSS to Azhagiyapandipuram, 8 Town Panchayats, 246 habitations in Kanyakumari District	109.80	2.96	Tender stage
Sub Total-III		240.26	4.79	
Grand Total		4890.32	118.85	

6.8 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 or 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 level to the beneficiaries. During 2013-14, **627 revamping works** have been taken up under MNP/NRDWP Assistance at a **cost of ₹48.41crore and completed.**

The category wise works completed are as below.

Sl. No.	Category	No. of works	Estimate cost (₹ in crore)
1	Source Improvement	20	2.63
2	Booster Pumping Stations	14	1.11
3	Sumps	16	1.66
4	Replacement of aged Pumpsets	105	5.30
5	Valves	73	3.26
6	Replacement of dilapidated Over Head Tanks	5	0.26
7	Replacement of Pipelines damaged due to road widening	287	24.54
8	Providing Separate Power Feeder Mains/4 th Wire	24	6.46
9	Providing Surge Protection System	2	0.05
10	Providing Water Meter	81	3.14
	Total	627	48.41

During 2014-15, **690 revamping works** will be taken up under MNP / NRDWP Assistance at a **cost of ₹133.85 crore.**

6.9 Special Programmes

Provision of safe drinking water to Government Schools, Anganwadis, Government

Hostels and Primary Health Centres is the avowed policy of the Government. The achievement under this programme during 2013-14 is as mentioned below:

- Water supply to **6,275** Anganwadis.
- Water Supply to **138** Government Schools in Rural Areas
- Water supply to **26** Government Hostels in Rural Areas.
- Water supply to **5** Primary Health Centres in Rural Areas.

Further under the Special Programme in the year 2014-15, it has been proposed to provide Water Supply to all the remaining uncovered Anganwadis, Government Schools and Primary Health Centres in Rural areas as follows.

- **578** Anganwadis
- **272** Government Schools in Rural Areas
- **13** Primary Health Centres in Rural Areas.

6.10 Water Quality Surveillance and Monitoring

In order to achieve the objective of ensuring safe water supply to the public, TWAD Board has established one State level, 31 District level and 51 sub division level laboratories. These laboratories have facilities for testing all the basic chemical and bacteriological 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 is graded as an ISO 9001: 2008 certified Laboratory. This laboratory has been recognized as State Referral Institute for Tamil Nadu by the Government of India.

During the year 2013-14, 2.46 lakh rural drinking water samples have been tested in the laboratories. 12,524 Field water testing kits were supplied to the Panchayats. Further the State and District level laboratories were also

upgraded and 15,000 grass root level workers were trained. ₹13.47 Crore was incurred under the NRDWP for the above activities.

During 2014-15, it is proposed to test 2.46 lakh rural drinking water samples, upgradation of State & District level laboratories, supply of 12,524 Field water testing kits to panchayats (one kit per panchayat), supply of 4000 Field water testing kits to schools and 5000 Field water testing kits to Drinking Water Safety Week Campaign and impart training to 15,000 grass root level workers at a cost of ₹17.50 Crore under NRDWP.

6.11 Drinking water Safety Week Campaign

Considering the safety of ensuring the quality of drinking water, the Govt of TamilNadu have ordered for a week long campaign on water quality vide G.O.(D)

No.577 M.A.&W.S. (WS 2) Department, dated 21.11.2013. **The Hon'ble Chief Minister of Tamil Nadu has inaugurated the National Rural Drinking Water Awareness Week** campaign in Tamil Nadu on 19.02.2014.

Under this programme nearly 5.26 lakh samples in 11 Corporations, 124 Municipalities, 528 Town Panchayats & 12,524 panchayats (98,179 rural habitations) have been tested during February 2014 and quality mapping was done. Since this campaign has created a mass awareness among public on drinking water quality, this campaign will be conducted every year during pre and post monsoon period.

6.12 Urban Water Supply Programme

The Urban water supply include implementation of stand-alone water supply scheme to the urban local bodies involving creation of water source, construction of Service Reservoirs, laying of pipe line for

transmission and distribution according to the population. The maintenance of the urban water supply scheme is decided depending upon the number of beneficiary local bodies.

6.12.1 Urban stand alone Water Supply Improvement Schemes under Implementation

In the year 2013-2014, Water Supply Improvement Schemes were under implementation in 52 Urban local bodies covering 21 Municipalities and 31 Town Panchayats, to benefit a population of 18.65 lakh, at a total cost of **₹669.78 crore**. Out of which, the following Water Supply Improvement Schemes (WSIS) benefiting a population of **3.86 lakh** in **11 Towns** (3 Municipalities and 8 Town Panchayats) at an estimated cost of **₹90.01 crore** have been completed.

(₹ in Lakhs)

Sl. No	Name of Town	District	Estimate cost	Population
I. Municipalities				
1.	Tiruvanna malai	Tiruvanna malai	3,666.00	1,49,500
2.	Devakkottai	Sivagangai	832.00	40,497
3.	Kadayanallur	Tirunelveli	2,141.00	75,612
II. Town Panchayats				
4	Aappakudal	Erode	70.00	10,610
5	Uppiliya puram	Trichy	24.90	7,705
6	Mettu palayam	Trichy	16.18	7,550
7	Vettaikaran pudur	Coimbatore	54.55	17,392
8	Melachokka nathapuram	Theni	636.00	11,669
9	Anthiyur	Erode	324.00	21,086
10	Thiruchendur	Tuticorin	1,192.00	32,200
11	Avalpoon thurai	Erode	44.70	11,700
Total			9,001.33	3,85,521

The status of the **35 Urban** Stand alone Water Supply Improvement Schemes to benefit a population of **13.48 lakh** at a cost of **₹447.33 crore** is as below:

Sl. No	Name of Town	Est. Cost (₹ In Crore)	Population (in Lakh)	Physical progress in percentage
I.	Municipalities			
1	Mettur	12.472	0.528	85
2	Pallipalayam	11.660	0.421	85
3	Coonoor	13.850	0.541	85
4	Edappady	18.520	0.602	85
5	Palani	21.600	0.795	50
6	Thanthoni	25.160	0.620	65
7	Karur	24.670	0.849	65
8	Chidambaram	7.170	0.621	72
9	Udhagamandalam	27.200	1.040	50
10	Cumbum	18.800	0.681	15
11	Kovilpatti	81.820	0.950	6
12	Inam Karur	18.570	0.820	50
13	Anaiyur	7.880	0.383	90
14	Theni-Allinagaram	68.830	0.994	5

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Sl. No	Name of Town	Est. Cost (₹ In Crore)	Population (in Lakh)	Physical progress in percentage
II.	Town Panchayats			
15	Nandhivaram-Guduvancheri	2.800	0.441	100
16	Periyaneagamam	8.830	0.071	83
17	Odayakulam	0.963	0.134	87
18	Suleeswaranpatti	7.600	0.201	76
19	Pathamadai	0.900	0.166	25
20	Mondaikadu	0.284	0.133	90
21	Alanganallur	0.730	0.123	15
22	Palamedu	0.930	0.105	10
23	Jagathala	1.641	0.144	60
24	Pandamangalam	0.893	0.072	35
25	Kunnathur	0.348	0.087	30
26	Nambiyur	2.415	0.164	75
27	Ayyampettai	7.090	0.163	30
28	Karamadai	11.470	0.352	42

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Sl. No	Name of Town	Est. Cost (₹ In Crore)	Population (in Lakh)	Physical progress in percentage
29	Sholavandan	5.530	0.226	25
30	P.Velur	2.530	0.250	2
31	Dharasuram	10.980	0.153	55
32	Thirunageswaram	11.340	0.151	50
33	Kottur	1.410	0.266	45
34	Thiruporur	8.080	0.137	15
35	Ammapettai	2.360	0.097	30
	Total	447.326	13.481	

The following **6** Water Supply Improvement Schemes to benefit a population of **2.58 lakh**, at a total cost of **₹132.43 crore** are under tender stage.

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Sl. No	Name of town	District	Estimate cost (₹ in crore)	Population
I.	Municipalities			
1	Tindivanam	Villupuram	52.45	72,796
2	Arani	Thiruvannamalai	36.26	63,628
3	Thiruvathipuram	Thiruvannamalai	13.44	37,802
4	Periakulam	Theni	15.53	42,976
II.	Town Panchayats			
5	Kothagiri	Nilgiris	10.60	28,207
6	Karunkuzhi	Kancheepuram	4.15	12,485
	Total		132.43	2,57,894

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6.13 Hogenakkal Water Supply and Fluorosis Mitigation Project

6.13.1 Water Supply Component

The Successful Completion of the Hogenakkal Water Supply and Fluorosis Mitigation Project is a major achievement and a boon to the People living in the fluoride affected areas of Dharmapuri and Krishnagiri Districts. This project is meant to cover 3 Municipalities, 17 Town Panchayats and 6,755 Rural habitations in 18 Panchayat Unions in both the Districts to benefit a population of 33.87 Lakh (Census-2011) at an estimated cost of **₹1,928.80 Crore.** Subsequently, 961 new rural habitations were added to this Project and the total rural beneficiary will be 7716 habitations.

This project has been inaugurated by Hon'ble Chief Minister on 29.5.2013. Presently water supply has been given to 3 Municipalities,

16 Town Panchayats and 6008 Rural habitations benefiting a population of 29.50 lakhs. Water supply to 43 habitations with River Cauvery as source and the inaccessible 29 habitations located in deep reserve forest area with local sources, totalling 72 habitations have been already covered. On an average, 106 Million litres of water per day is being supplied under this project. Water supply to 42 habitations in Uthangarai Union near Samalpatti Railway crossing will be supplied shortly. Water supply to 122 habitations in Uthangarai & Mathur Unions, affected due to pipe laying works under Vellore CWSS and 131 habitations in Thally & Kelamangalam forest areas affected due to Forest permission to provide power supply connections, will be supplied by August 2014.

Water supply to 869 habitations in Bargur Union and Bargur town Panchayat which is delayed due to widening of National Highway,

96 habitations in Sitheri and Sittling hill areas of Pappireddypatti and Harur Union respectively in Dharmapuri District as well as the 376 new habitations taken up will be supplied by September 2014.

6.13.2 Fluorosis Mitigation Component

Fluorosis Mitigation Component is implemented on comprehensive three-pronged i.e., Hospitals, Schools and Community based approaches in coordination with Medical and Education Departments along with the District Administration to assess the level of incidence of Dental, Skeletal and Non-Skeletal fluorosis among the public in both Dharmapuri and Krishnagiri districts and to undertake mitigation measures through awareness and life style modification, nutritional supplementation and medical treatment.

All Government Doctors in both the Districts were trained to diagnose the fluorosis

among the patients and to prescribe preventive measures. School teachers were also trained. The prevalence of dental fluorosis among 4,24,047 students have been assessed and it was identified that 3% were severe and 10% were moderate.

100% household health survey on 6,54,551 households covering the present population of 30 lakh in both Dharmapuri and Krishnagiri districts was completed by engaging the Village Health Nurses and Village Voluntary members from NGOs. Analysis and assessment of health status regarding the prevalence of fluorosis shows that of the total population, 1.7% are affected by severe Dental Fluorosis, 5% affected by Moderate Dental Fluorosis, 0.9% affected by Skeletal Fluorosis and 1.5% affected by Non-Skeletal Fluorosis.

Micro nutrients tablets of 106 lakh numbers procured at a cost of **₹11.52 lakhs**

were supplied to the Public Health Centres and now distributed to the Fluorosis affected persons. 4 Ion meters with two electrodes and chemicals have been distributed for the 4 Government Hospitals in Dharmapuri and Krishnagiri Districts at a cost of **₹32.50 lakh**.

In the next phase, Medical intervention through corrective surgery for dental and skeletal Fluorosis case has been planned on all possible cases.

6.14 Operation and Maintenance of CWSS

The CWSS covering more than one local body are being maintained by TWAD Board as per G.O. (Ms) No.84, Municipal Administration and Water Supply Department, dated 10.03.1994. At present, 554 Combined Water Supply Schemes covering 7 Corporations, 53 Municipalities, 292 Town Panchayats, 33,338 Rural habitations and 586 Industries/Institutions, benefiting a population

of 3.22 crore are maintained by the TWAD Board.

At present, **1,494 MLD** of water is supplied through the above **554 Combined Water Supply Schemes**. The expenditure for the Operation & Maintenance during the year 2013-14 is **₹317.41 crore**. The Revenue collected through water charges is **₹197.51 crore**.

6.15 Part -II Schemes

6.15.1 Providing SCADA System for CWSS under Maintenance by TWAD Board

The Supervisory Control And Data Acquisition system (SCADA) is used to monitor and control the entire water works system consisting of pumping stations, treatment plants, control devices like valves and various other flow/ pressure monitoring and regulating facilities.

SCADA systems have been provided in 19 CWSS maintained by TWAD Board. Further one SCADA system taken up during 2013-14 for the CWSS to Nanguneri, Thisayanvilai and 344 Habitations in Tirunelveli District is under progress.

6.15.2 Construction of office building at Tirunelveli

Construction of office building at Tirunelveli has been sanctioned for ₹300.00 lakhs under Part-II scheme for the year 2013-14. The work is under progress and will be completed before the end of December 2014.

6.16 Investigation and Preparation of Detailed Project Reports for Water Supply Schemes

TWAD Board has prepared Detailed Project Reports for **45 Water Supply Schemes** during 2013-14 at a cost of ₹5053.29 Crore benefiting a total population of

68.50 lakh. Out of the above 45 Schemes, **19 Water Supply Schemes**, covering **3 Municipalities, 28 Town Panchayats and 5,121 Rural Habitations**, to benefit a population of **25.62 Lakh** were sanctioned at a total cost of **₹1,715.35 Crore**. Balance 26 schemes covering 3 Municipalities, 42 Town Panchayats and 6968 Rural habitations to benefit a population of 42.88 lakh at an estimated cost of **₹3,337.94 crore**, are in various stages of sanction.

In addition to the above, DPR for 10 water Supply Schemes to cover one Corporation, 11 Municipalities, 29 Town Panchayats and 5,682 Rural habitations to benefit a population of 52.88 lakh are under preparation.

6.16.1 Desalination Plant

As announced by the Hon'ble Chief Minister of Tamil Nadu in the Assembly during 2013-14 to install Desalination Plant of 100 MLD capacity each in Ramanathapuram and Thoothukudi Districts, Consultant has been fixed to conduct planning study and preparation of feasibility report and the study is in progress. Tentative cost of these projects is ₹3,500.00 Crore and the population to be benefitted is 24.03 Lakh.

6.17 Under Ground Sewerage Schemes

TWAD Board is implementing Under Ground Sewerage Schemes in selected District Head quarters and other than District Head quarter towns.

In line with the objective of the Tamil Nadu Government to provide Under Ground Sewerage Scheme to all the Urban local bodies, TWAD Board has prepared 636 **Detailed Project Reports** at an estimated cost of **₹20,820.00 Crore** to provide UGSS to **3**

Corporations, 117 Municipalities and 516 Town panchayats.

6.17.1 UGSS for Municipalities

During 2013-14, Under Ground Sewerage Schemes for 13 Municipalities to benefit a population of 7.63 lakh have been sanctioned at a total Cost of ₹965.05 Crore. The details are as follows.

SI No.	Name of Municipality	UGSS DPR Cost (₹ in crore)	Population	Present stage
1	Arakkonam	95.52	82,600	Tender stage
2	Thirupathur	104.01	84,437	
3	Chidambaram	75.62	65,600	
4	Periyakulam	26.61	44,950	
5	Sattur	37.66	32,575	
6	Mettur	73.09	55,200	
7	Bodinaickanur	71.10	78,100	
8	Jolarpet	79.00	30,600	
9	Rameswaram	41.35	48,120	Under Proof checking
10	Sathiya mangalam	54.26	39,000	
11	Karaikudi	111.41	1,10,030	
12	Kodaikkanal	140.00	39,000	
13	Rasipuram	55.42	52,500	
	Total	965.05	7,62,712	

6.17.2 UGSS for Town Panchayats

During 2013-14, Detailed Project Report for providing UGSS to 28 Town Panchayats benefiting a population of 5.26 lakh, have been sanctioned at a total Cost of ₹811.69 Crore. Detailed Project Reports are under Proof Checking stage. Septage Management for smaller towns is also under consideration.

6.18 Status of the Underground Sewerage Schemes under implementation by TWAD Board

- **Underground Sewerage Schemes to Ramanathapuram, Thiruvannamalai, Dharmapuri, and Perambalur Municipalities to benefit a population of 2,94,744 at an estimated cost of ₹123.83 Crore** are completed.
- **19 Underground Sewerage Schemes to benefit a population of 15.63 lakh at an estimated cost of ₹786.71 Crore** are under various stages of progress as shown below.

Sl. No.	Name of UGSS	Estimate Cost (₹ in crore)	Population benefited (in lakh)	Percentage of achievement	
				Collection System (CS)	Sewage Treatment Plant (STP)
1	Cuddalore Municipality	65.14	1.59	99	99
2	Pudukottai Municipality	48.16	1.14	100	85
3	Sivagangai Municipality	23.40	0.40	95	Stay order by NGT
4	Virudhunagar Municipality	27.85	0.72	96	99
5	Thiruvarur Municipality	53.07	0.56	100	99
6	Thoothukudi Corporation	95.00	2.89	97	PPP Mode by Corporation
7	Nagapattinam Municipality	79.31	0.93	98	STP-I – 74 STP-II – 53
8	Krishnagiri Municipality	37.32	0.65	95	89
9	Theni Municipality	42.09	0.85	92	100
10	Thiruvallur Municipality	54.79	0.46	93	10
11	Villupuram Municipality	49.36	1.16	100	STP-I – 99 STP-II – 99
12	Ariyalur Municipality	27.50	0.28	79	60
13	Mamalla puram Town Panchayat	6.08	0.12	100	93

Sl. No.	Name of UGSS	Estimate Cost (₹ in crore)	Population benefited (in lakh)	Percentage of achievement	
				Collection System (CS)	Sewage Treatment Plant (STP)
14	Thiruchendur Town Panchayat	14.48	0.29	85	65
15	Nagercoil Municipality	76.04	2.79	19	Stay order by NGT
16	Orathanadu Town Panchayat	18.25	0.10	65	Works commenced
17	Udumalpet Municipality	56.07	0.60	25	2
18	Ariyalur Municipality (Ommited areas)	3.30	0.03	15	--
19	Perambalur Municipality (Ommited areas)	9.50	0.07	20	--
Total		786.71	15.63		

6.19 Hydrogeological Activities

Scientific Source Finding Activities are carried out for identification of sources for providing Water Supply to the various schemes taken up and implemented by TWAD Board. The State of Art of Technology – Remote

Sensing and GIS (Geographical Information Systems) are extensively utilized in Scientific Source Finding Activities and identification of suitable locations for Recharge Structures to be taken up under Sustainability Component.

The Project on Ground Water Prospect Maps sanctioned by the Ministry of Drinking Water and Sanitation, Government of India has been taken up as District-wise ATLAS for Tamil Nadu and completed. Further, the District wise Groundwater Quality Maps are under preparation and will be completed during the year 2014-15. The HGM Maps have been sent to the field officers and also District Collectorate for source creation and for identification of Recharge Structures. The Feed-back of usage of HGM Maps is encouraging.

6.20 Management Information System

The Tamil Nadu Water Supply and Drainage Board has implemented TWAD Board

integrated E-Governance System (TWADNEST) to manage data flow relating to all the schemes, Project Management, Financial Accounting, Human Resource, etc. Online information is provided for physical and financial progress and performance of all water supply and sewerage, maintenance schemes, recharge structures, etc. The daily pumping quantity, from the head works of various water supply schemes maintained by TWAD Board is also uploaded and monitored online.

Online e-tendering is being implemented in TWAD Board. CAD Software for the design of water distribution network and sewer network design analysis, Structural Analysis etc. are used for the purpose of optimum planning and design.

The TWADNEST is enhanced from time to time based on the current requirement of the Board. Further, the hardware required is also well maintained and upgraded. This makes

better co-ordination and effective monitoring of all the activities of the TWAD Board.

Online scheme progress monitoring and reporting through Mobile Phone (android) based web driven server based application is under implementation. Also an exclusive web based Water Quality sample data collection and test result entry application is launched for continuous monitoring of Water Quality for all Water Supply Scheme implemented by TWAD Board.

7. Tamil Nadu Urban Development Fund (TNUDF)

Tamil Nadu Urban Development Fund (TNUDF) was established 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 facilitates 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 the improvement in quality of life of the in urban area of 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 The objectives of TNUDF are as follows:

- Finance to 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. It 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 the 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 at present the Fund is operating four external lines of credit, viz the Tamil Nadu Urban Development Project III (TNUDP-III) assisted by World Bank, the Sustainable Municipal Infrastructure Financing – Tamil Nadu (SMIF-TN) Program, Phase I & II 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 ₹3419.26 crore (Table 1).

Table: 1 Size of External Lines of Credit

(₹ in crore)

Sl. No.	Components	TNUDP-III	SMIF-TN		TNUIP	Total
			Phase I	Phase-II		
1	Institutional Development Component	115.00	0.00	0.00	0.00	115.00
2	Loan to ULBs	602.60	271.20	289.08	180.50	1343.38
3	Capital Grants to ULBs	811.90	150.80	289.08	102.73	1354.51
4	Technical Assistance Grant	41.40	13.00	0.00	27.40	81.80
5	Grants to traffic and transportation	188.60	0.00	0.00	0.00	188.60
6	Others	236.90	65.00	0.00	34.07	335.97
	Total	1996.40	500.00	578.16	344.70	3419.26

7.2. World Bank assisted projects

a) Tamil Nadu Urban Development Project III (TNUDP III):

The TNUDP-III which was launched on 19.10.2005 was completed on 31.03.2014. A sum of ₹1816.98 Crore has been sanctioned for 120 projects (110 projects implemented in

ULBs and 10 projects implemented by CMDA) under urban investment component (Table 2).

Table: 2 Projects funded under TNUDP-III
(₹ in crore)

S. No	Sector	No. of Projects	Project Cost	Amount Sanctioned		
				Loan	Grant	Total
I Project for ULBs						
1	Under Ground Sewerage Schemes	25	1217.71	302.06	550.94	853.00
2	Water Supply Schemes	21	613.92	227.22	251.39	478.61
3	Solid Waste Management schemes	32	26.33	10.43	5.56	15.99
4	Bus Stands	7	29.30	16.53	1.19	17.72
5	Roads	24	408.68	245.71	50.64	296.35
6	River Improvement	1	31.23	18.74	9.37	28.11
Total – I		110	2327.17	820.69	869.09	1689.78
II Projects for CMDA						
1	Roads	5	90.34	0.00	90.34	90.34
2	Foot over bridges	5	36.86	0.00	36.86	36.86
Total – II		10	127.20	0.00	127.20	127.20
Grand Total		120	2454.37	820.69	996.29	1816.98

Of the above 120 projects, 93 projects (83 projects of ULBs, 10 projects of CMDA) have

been completed and 27 projects of ULB are under progress, of which 23 projects will be completed during the financial year 2014-15 and 4 projects will be taken to the proposed Tamil Nadu Sustainable Urban Development Program. The World Bank will disburse the funds under TNUDP-III up to 31.07.2014.

b) Tamil Nadu Sustainable Urban Development Program (TNSUDP)

The World Bank assisted TNUDP-III was closed on 31.03.2014. Hence considering the fund requirement for implementing urban infrastructure projects, a proposal for seeking financial assistance from World Bank for the proposed "Tamil Nadu Sustainable Urban Development Program (TNSUDP)" with an outlay of US\$ 600 million (World Bank assistance of US \$ 400 million) has been sent to the Government of India during November 2013. The Government of India has recommended the proposal to the World Bank

during March 2014. The appraisal for funding is under process by the World Bank and will be completed during the year 2014-15.

The World Bank has initiated the appraisal of the Project. As per the requirement of Government of India, the World Bank has requested to identify sub-projects for 30% of total funding, before negotiation. Accordingly, 11 sub-projects have been identified at an estimated cost of ₹1917.51 crores.

7.3. KfW assisted projects

a) Sustainable Municipal Infrastructure Financing–Tamil Nadu (SMIF–TN) Program

The Sustainable Municipal Infrastructure Financing –Tamil Nadu (SMIF – TN) Program 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 mission period is 5 years. Considering the time required for completion of projects under implementation, the completion period of the project has been extended up to 31st December 2014.

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 earmarked for the Water and Sanitation Pooled Fund for development of Municipal Bond.

b. Sustainable Municipal Infrastructure Financing in Tamil Nadu Phase II – Part-1 (SMIF-TN II-1) Program

The Sustainable Municipal Infrastructure Financing –Tamil Nadu Phase-II – Part-1

(SMIF – TN-II-1) Program with the assistance of KfW, the German funding agency, was launched in 2012 with an objective to contribute towards improvement of environment and preservation of natural resources and the living conditions of the urban population. The project implementation period is from December 2012 to June 2018.

The total outlay of the project is Euro 80 million (equivalent to about ₹578.16 crore) towards development loan for financing of urban infrastructure projects, to be passed on to ULBs as loan and capital grant. Considering the project outlay of SMIF-TN Program and SMIF-TN-II-1 Program a sum of ₹808.36 crore has been committed for 17 projects (Table 3)

Table: 3 Projects funded under SMIF-TN Program and SMIF-TN-II-1 Program

(₹ in crore)

Sl. No.	Name of the ULB	Sector	Project Cost	Amount Sanctioned		
				Loan	Grant	Total
1	Chennai Corporation	Bridges	162.51	38.88	0	38.88
2	Villupuram Municipality	UGSS	36.35	12.32	14.15	26.47
3	Panruti Municipality	Roads & Storm Water Drains	3.34	2.00	0.75	2.75
4	Trichy Corporation	Roads & Storm Water Drains	24.30	16.87	5.00	21.87
5	Tiruppur Corporation	Roads & Storm Water Drains	40.00	25.97	9.98	35.95
6	Tiruvanna malai Municipality	WS	36.66	12.00	7.00	19.00
7	Tirunelveli Corporation	WS	22.87	6.75	5.96	12.71
8	Kadayanallur Municipality	WS	21.41	8.65	5.33	13.98
9	Erode Corporation	UGSS	218.27	71.14	62.77	133.91
10	Karur Municipality	WS	24.67	14.80	7.40	22.20
11	Karur Municipality (Inam Karur)	WS	18.57	11.14	5.57	16.71

12	Karur Municipality (Thanthoni)	WS	25.16	10.18	7.55	17.73
13	Pallipalayam Municipality	WS	11.66	6.99	3.50	10.49
14	Udhaga mandalam Municipality	WS	27.20	16.32	8.16	24.48
15	Vellore Combined Water Supply Scheme	WS	1044.90	250.00	0	250.00
16	Tirunelveli Corporation	WS	230.00	69.00	46.00	115.00
17	Chennai Corporation	Street Lights	51.37	30.82	15.41	46.23
		Total	1999.24	603.83	204.53	808.36

(UGSS- Under Ground Sewerage Schemes, WS – Water Supply)

The projects under Sl.No. 1 to 8 have been completed and projects under sl.no.9 to 15 are spill over projects of SMIF-TN program and are to be partly financed under SMIF-TN-II-1 program. The projects under sl.no. 16 and 17 are funded under SMIF-TN-II-1 program. The projects under sl.no.9 to 17 are under various stages of implementation / procurement.

7.4. Tamil Nadu Urban Infrastructure Project (TNUIP)

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

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). Considering the project outlay and exchange rate variation, a sum of ₹473.21 crore has been committed for 10 water supply projects under TNUIP (Table 4).

Table: 4 Water Supply Projects funded under TNUIP

(₹ in crore)

Sl. No.	Name of the ULB	Project Cost	Amount Sanctioned		
			Lon	Grant	Total
1	Trichy Corporation	221.42	111.25	66.43	177.68
2	CMWSSB (Madhavaram)	55.00	33.00	16.50	49.50

3	Palani Municipality	21.60	12.96	6.48	19.44
4	Coonoor Municipality	13.85	8.30	4.16	12.46
5	Idappadi Municipality	18.52	10.00	6.67	16.67
6	Devakkottai Municipality	8.32	4.99	2.49	7.48
7	Tuticorin Corporation	282.44	70.61	70.61	141.22
8	Dindigul Corporation	70.50	21.15	14.10	35.25
9	Mettupalayam Municipality	9.16	2.75	1.83	4.58
10	Udumalpet Municipality	17.87	5.36	3.57	8.93
	Total	718.68	280.37	192.84	473.21

All the above ten projects are under various stages of implementation / procurement.

7.5 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 from capital markets. 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 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 ₹222.30 crore (Table 5) has been mobilized by way of issue of bonds by WSPF.

Table: 5 Details of resources mobilized by issue of Bonds

Sl.No.	Details	₹ in crore
1	9.20%, 15 year Non-Convertible Redeemable Bonds Taxable bonds issued by pooling the	30.41

	requirements of 13 ULBs in the year 2002.	
2	7.25%, 10 year Tax Free Non-Convertible Redeemable Bonds under PFDF Scheme 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	7.50%, 10 year Tax Free Non-Convertible Redeemable Bonds under PFDF Scheme 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
4	10.60%, 10 year Non-Convertible Redeemable Bonds Taxable bonds (first tranche) issued by pooling the requirements of 10 ULBs in the year 2012 under SMIF-TN Program	51.00
5	8.71%, 10 year Non-Convertible Redeemable Bonds Taxable bonds (second tranche) issued by pooling the requirements of 10 ULBs in the year 2013 under SMIF-TN Program	51.00
	Total	222.30

7.6. 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 (COC) and Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) to implement various urban infrastructure and basic services 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.

The project costing ₹2315.79 crore has been sanctioned for which grant of ₹1492.10 crore has been committed up to 2013-14. A sum of ₹1000 crore has been allotted by Government for the financial years 2011-12 to 2013-14 of which a sum of ₹648.77 crore has been disbursed to Corporation of Chennai and CMWSSB (Table 6).

Table: 6 Funds committed under CMCDM

(₹ in crore)

Sl. No	Name of the Agency	No. of projects / Roads / Equipments	Project Cost	Grant Committed	Grant Disbursed
1	COC	5055	1160.59	805.50	390.44
2	CMWSSB	42	1155.20	686.60	258.33
	Total	5097	2315.79	1492.10	648.77

The status of the projects are furnished in Table-7

Table:7 Status of projects under CMCDM

(₹ in crore)

Sl.No	Name of the Agency & Scheme	Status of projects							
		Completed		Ongoing		Under Procurement		Revised/ dropped/ cancelled	
		No.	Project Cost	No.	Project Cost	No.	Project Cost	No.	Project Cost
I	COC								
a)	Integrated Roads	2303	506.67	1299	418.14	53	14.37	413	146.93
b)	Solid Waste Management	158	35.33	50	10.00	752	3.70	27	25.45
	Total – I	2461	542.00	1349	428.14	805	18.07	440	172.38
II	CMWSSB								
a)	Water Supply	0	0.00	22	499.88	4	82.61	0	0.00
b)	Sewerage	1	9.90	10	383.45	5	179.36	0	0.00
	Total-II	1	9.90	32	883.33	9	261.97	0	0.00
	Grand Total I+II	2462	551.90	1381	1311.47	814	280.04	440	172.38

7.7 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.

8. Chennai Rivers Restoration Trust

The State is committed to improve the ecological conditions of rivers and water bodies and at the outset restoration of Cooum, Adyar and Kosasthalaiyar rivers, the Buckingham Canal along with other smaller canals and water bodies in the Chennai Metropolitan Area has been taken up. The Government of Tamil Nadu have directed Chennai Rivers Restoration Trust to carry on its primary function of identifying, planning, coordinating and monitoring along with arranging for funds for the restoration activities of rivers and water bodies within Chennai Metropolitan Area. The approach to restoration of water bodies and rivers has to be an integrated one and all the Line Departments have to be on board. To achieve the target set for it, Chennai Rivers Restoration Trust has taken various initiatives.

8.1 Ecological Restoration of Adyar Creek – Phase I

The Government of Tamil Nadu conceived an ambitious and pioneering project in wetland conservation in the restoration of 358 acres Adyar creek and estuary. In the first phase, Government restored a portion of Adyar creek to an extent of 58 acres.

The eco-park is functioning as a centre for environmental education and research activities. To impart knowledge on environment to the community, particularly for school children, regular environmental education programmes are being conducted. Till March 2014 a total of 40,736 students and 2,799 teachers from 598 schools have visited the Eco-park and experienced the concept of eco restoration.

In order to evaluate the restoration progress, regular ecological and biodiversity

monitoring are being taken up. A study on the Impact Assessment was carried out by the Centre for Water Resources, Anna University and concluded that vegetation in the Adyar Poonga is well established and facilitated the development of micro habitats and colonization of insects and avian fauna in the Adyar creek.

Faunal Diversity in Adyar Poonga

Fauna	2007-08	2009 - 10	2011-12	2013 -14
Molluscan	-	-	-	6
Crabs	-	-	4	9
Dragonflies	-	-	12	15
Butterflies	-	-	51	55
Fishes	14	27	27	19
Amphibian	7	10	10	10
Reptiles	19	19	19	19
Birds	88	90	98	100
Mammals	13	13	13	15
Total	141	159	234	248

8.2 Eco-restoration plan for Adyar Estuary (300 acres) Phase II

In continuation of the restoration activities, the Government of Tamil Nadu have accorded permission to restore the Phase II Adyar Creek and Estuary (300 acres) for the estimated cost of ₹24.93 crore vide GO (D) No. 106, Municipal Administration and Water Supply (MC1), dated 01.03.2013. An eco-restoration plan for this programme has been prepared and the important activities proposed are to remove the debris, plastics and sludge in the creek, plantation of mangroves and native species, bioengineering technique to stabilize bunds and to enhance the biodiversity in the Adyar Creek and Estuary. Necessary clearance has been obtained from National Coastal Zone Management Authority, MoEF, GoI vide letter F.no.11-71/2013-IA.III dated 12.03.2014. It is anticipated that the project will be completed by March 2016.

8.3 Integrated Cooum River Eco-Restoration Plan

The Cooum River originates from the surplus course of Cooum tank in Tiruvallur District. It runs east for a distance of about 65 Km and confluences with Bay of Bengal below Napier Bridge, traversing a distance of 16 Km within Chennai city limits. As the river flows through peri-urban areas, municipalities and Chennai City, there are increasing problems of water quality, severely impacting the riverine ecosystem. To revive the river and reinstate the importance of the river in the urban area among the community, the Government of Tamil Nadu directed CRRT to prepare an Integrated Cooum river eco restoration plan from Parithipattu to river mouth (32 km). The eco restoration plan for this stretch of the river is being prepared and the major components proposed are interception and diversion of wastewater, solid waste management plan,

flood management plan, rehabilitation and resettlement plan, biodiversity management plan and riverfront development plan. The Draft final report of the Integrated Cooum River Eco restoration Plan has been completed. The overall cost of the works proposed for the Integrated Cooum River Eco-Restoration Plan is for ₹3,833.62 crore. The tentative cost breakup is as follows:-

Sl. No.	Sectors / Sub-Projects	Amount (₹ In crore)
i.	Sewerage and Sanitation Projects	360.84
ii.	Solid Waste Management Projects	10.52
iii.	River Channel Improvement	86.66
iv.	Major Drain Improvement	600.00
v.	Construction of tenements	1978.35
vi.	River-front Development	282.81
vii.	Other Expenditure	514.44
	Total Project Cost	3833.62

In the budget for the year 2014-2015 ₹500 crore is allocated for the implementation of Integrated Cooum River Eco restoration Plan.

8.4 Master Plan for Phase III Adyar River Restoration from Origin to Mouth

Adyar River has its origin from Aadanur tank near Guduvancheri and surplus water from Chembarampakkam tank joins near Thiruneermalai. The river flows 42 km through Kanchipuram and Chennai District and confluences in the Bay of Bengal near Adyar. It usually carries flood water during rainy days. Due to urbanization and modernization of its environment, Adyar River has been under heavy anthropogenic disturbance for a very long duration and is highly degraded. The Government have decided to restore the Adyar River from Aadanur tank to river mouth with following objectives and an Eco Restoration Plan is being prepared.

- To ensure effective abatement of pollution and protection of river by adopting a sustainable approach to promote inter-sectoral co-ordination through

comprehensive planning and management.

- To maintain minimum ecological flow in the river with the aim of ensuring water quality and sustainable development.
- To improve and maintain the flood-carrying capacity of river.
- To create a River Front Development within urbanized areas, wherever possible.
- To identify projects / sub projects for pollution abatement.
- To explore the future use of the river after restoration.

The Final report of the Phase III Adyar River Restoration from Origin to Mouth is expected by December 2014.

8.5 Master Plan for Waterways and Water bodies in Chennai Metropolitan Area

Chennai Metropolitan Area (CMA) is abound with lakes, tanks, rivers and waterways. Due to rapid urbanization and change in land use within the CMA, the water

bodies and the waterways have been degraded due to misuse as dumping ground and disposal of wastewater. To revive the water bodies and to rejuvenate its ecosystem, the Government of Tamil Nadu has announced to restore about 214 kms of waterways and 42 water bodies in Chennai Metropolitan Area by desiltation, interception and diversion of sewage, scientific solid waste management, embankment protection, development of walkways for public use and other works/activities as required under the aegis of the Chennai River Restoration Trust (CRRT).

The Government have decided to have an holistic approach in restoring the degraded water bodies & waterways and instructed CRRT to prepare Master Plan for Restoration and Protection of Water bodies & Waterways within Chennai Metropolitan Area covering an area of about 1189 Sq.km in a phased manner. The

report of the study is expected by December 2014.

8.6 Detailed Project Report for Restoration and Protection of Water bodies

The Government of Tamil Nadu has taken up an initiative to revive and rejuvenate the following water bodies in Chennai Metropolitan Area and Detailed Project Reports are being prepared:

Department/ Organization	Name of the Waterbodies	Status
Chennai Rivers Restoration Trust	Zamin Pallavaram Periya Eri, Kilkattalai Eri Narayanapuram Eri	DPR expected by August 2014
Corporation of Chennai	Kadambakkam Panchayat Lake Nesavalur Nagar Lake	Consultant will be appointed shortly.
Chennai Metropolitan Water Supply and Sewerage Board	Kolathur Lake Velachery Lake	
Chennai Metropolitan Development Authority	Nanmangalam Eri Kovilambakkam Eri	

9. Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited (TUFIDCO)

Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited (TUFIDCO) was created by the State Government in 1990 with the aim to financing for the development of Infrastructure in the Urban Local Bodies of the State. The Government of Tamil Nadu appointed TUFIDCO as the Nodal Agency for the following schemes.

1. Jawaharlal Nehru National Urban Renewal Mission - Urban Infrastructure and Governance (JnNURM-UIG).
2. Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).
3. Urban Infrastructure Development Scheme for Satellite Towns (UIDSST)
4. Metropolitan Infrastructure Development Fund (MIDF)
5. Integrated Urban Development Mission (IUDM)

TUFIDCO is acting as a Fund Manager for the Entertainment Tax Compensatory Fund (ETCF), Education Fund (Corporation/ Municipality School Student Fund), Infrastructure Gap Filling Fund (IGFF) and Operation and Maintenance Gap Filling Fund (O&MGFF).

9.1 Jawaharlal Nehru National Urban Renewal Mission (JnNURM)

The Government of India had launched a mission mode Urban Infrastructure development programme in 65 selected cities namely Jawaharlal Nehru National Urban Renewal Mission (JnNURM) on 03.12.2005. The development works are taken up under the following 3 Sub-Missions and Programmes:-

1. a. Urban Infrastructure and Governance (UIG)
- b. Basic Services to the Urban Poor (BSUP)

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

The mission period was initially 7 years and extended for further two years. i.e up to 31.03.2014.

9.1.1 Urban Infrastructure and Governance (UIG)

Under this reform-linked programme, Chennai, Madurai and Coimbatore City Municipal Corporations are covered. Besides the Corporation area, surrounding Urban agglomeration areas are covered under this programme. The funding pattern details are as follows:

City	Grant		Loan from Financial Institutions/ Own Fund
	Centre	State	
Chennai	35 %	15 %	50 %
Madurai & Coimbatore	50%	20%	30%
Desalination plants	80%	10%	10%

The components eligible to get assistance under this programme are Urban Renewal, water supply including setting up de-salination plants, Sewerage and Solid Waste Management, Construction and improvement of drains/storm water drains, Urban Transport etc.

Projects Sanctioned

Under JnNURM–UIG, 48 projects were sanctioned by GOI. The details are as below.

(₹ in crore)

Name of the Cities	No. of Projects sanctioned	Approved Cost	GOI Share	GoTN Share	ULB/Parastatal agencies 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
Total	48	5250.15	2126.76	866.36	2257.03

Out of 48 projects sanctioned, 24 projects were completed and the remaining 24 projects are expected to be completed by 2014-15.

Projects sanctioned during Transition phase (2013-14)

The Government of India sanctioned the following 17 projects for an amount of ₹867.83 crore under JnNURM-UIG.

(₹ in crore)

Sl. No	Name of the ULB/Project	Project Cost
1	Coimbatore Water Supply	451.66
2	Chinnasekkadu Water Supply-CMWSSB	10.20
3	Perungudi Water Supply-CMWSSB	24.90
4	Kottivakkam Water Supply-CMWSSB	19.96
5	Manali Water Supply-CMWSSB	19.47
6	Mugalivakkam Water Supply-CMWSSB	29.04
7	Palavakkam Water Supply-CMWSSB	22.99
8	Pallikaranai Water Supply-CMWSSB	36.78

9	Vadaperumbakkam and Theeyambakkam- Water Supply - CMWSSB	15.36
10	Puzhal, Surapattu, Puthagaram and Kathirvedu- Water Supply - CMWSSB	69.60
11	Edayanchavadi, Sadayankuppam & Kadapakkam- Water Supply - CMWSSB	22.84
12	Anakaputhur Water Supply	13.57
13	Poonamallee Water Supply	20.00
14	UGSS to Nolambur-CMWSSB	24.57
15	UGSS to Surapattu-CMWSSB	33.00
16	UGSS to Mugallivakkam-CMWSSB	46.31
17	UGSS to Annai Sivagami Nagar in Thiruvottiyur-CMWSSB	7.60
	Total	867.83

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

The Urban Infrastructure Development Scheme for Small and Medium Towns is a centrally sponsored scheme launched on 3.12.2005. The eligible components for funding under the scheme are water supply and

sanitation, roads, solid waste management, drains and improvement of storm water drains and development of heritage area in towns. This scheme covers all the cities/towns except the three mission cities Chennai, Madurai and Coimbatore.

Out of the total project cost, the Government of India grant is 80%, State Government grant is 10% and the balance 10% is the local bodies contribution. The mission period was initially 7 years and extended for two more years. i.e up to 31.03.2014

Projects Sanctioned :

The Government of India sanctioned 122 projects under this scheme.

(₹ in crore)

	No. of projects sanctioned	Approved Cost	Govt.of India share	State share	ULB share
Corporations	5	24.13	19.31	2.41	2.41
Municipalities	49	673.45	538.76	67.35	67.34
Town Panchayats	68	185.14	148.11	18.51	18.52
Total	122	882.72	706.18	88.27	88.27

Out of the sanctioned 122 projects, 98 projects were completed and the remaining 24 projects are expected to be completed during 2014-15.

Projects sanctioned during Transition phase (2013-14)

The Government of India approved the following 13 projects under UIDSSMT for the transition phase for an amount of ₹507.41 crore.

(₹ in crore)

Sl.No	Name of the ULB/Project	Project Cost
1	Mettur-UGSS	56.52
2	Thirupathur-UGSS	76.83
3	Arakkonam -UGSS	77.45
4	Jolarpet -UGSS	33.99
5	Chidambaram -UGSS	57.38
6	Sattur -UGSS	29.58
7	Periyakulam -UGSS	17.13
8	Kangeyam - Water Supply	14.24
9	Arani - Water Supply	32.28
10	Periyakulam - Water Supply	13.50
11	Thiruvathipuram - Water Supply	11.21
12	Tindivanam - Water Supply	45.07
13	Kodaikanal-Water supply	42.23
	Total	507.41

9.2 Urban Infrastructure Development scheme for Satellite Towns (UIDSST)

Satellite Towns are small or medium-sized town near a large urban center which attracts people from the mother towns for the economic and societal activities. To improve the infrastructure development in the satellite towns, the Government of India launched the UIDSST scheme during July 2009. The Sriperumpudur Town Panchayat has been approved as a Satellite Town in Tamil Nadu.

Objective:

The objective is to develop urban infrastructure facilities such as transport, drinking water, sewerage, drainage and solid waste management etc., at satellite towns to provide all the basic needs of the people.

Out of the total project cost, the Government of India grant is 80%, State Government grant is 10% and Sriperumpudur

Town Panchayat provides 10% as the local bodies contribution.

(Rs. in Crore)

Name of the Project	Approved cost	GOI Share	GOTN Share	Own Fund
Water Supply Scheme	40.71	32.57	4.07	4.07
Under Ground Sewerage	56.22	44.98	5.62	5.62
Solid Waste Management	4.43	3.55	0.44	0.44
Total	101.36	81.10	10.13	10.13

All the three sanctioned projects are under implementation.

9.3 Metropolitan Infrastructure Development Fund - (MIDF)

The Megacity programme was phased out by Government of India and launched JnNURM during 2005. The Megacity programme guideline mandated to create revolving fund from the contributions of Central and State share and to develop Infrastructure on a sustainable basis in the Megacities. TUFIDCO has created ₹1474.43 crore as source fund for

the Metropolitan Infrastructure Development Fund.

The Government of India directed that the Megacity programme guideline is applicable for Metropolitan Infrastructure Development Fund. Hence this fund is entirely earmarked for Chennai Metropolitan area.

Under MIDF, TUFIDCO had sanctioned 31 projects for a sum of ₹717.84 crore.

The MIDF is used for part funding to the JnNURM-UIG projects. Out of the 31 projects, 15 projects have been completed. The remaining 16 projects are in progress. Under MIDF, ₹756.59 crore is available for sanction of new projects / part funding projects.

9.4. Integrated Urban Development Mission

The State Government launched a flagship programme called Integrated Urban Development Mission (IUDM) during 2011. The

intention of the scheme is to finance basic infrastructure projects in Corporations (Except Chennai Corporation), Municipalities and Town panchayats.

The eligible projects under this programme are water supply, sewerage, solid waste management, Roads, Storm water drains, Street lights, Parks, Eradication of open defecation etc.

Projects Sanctioned

The sector wise sanctions of projects from 2011-12 to 2013-14 are tabulated below.

shall henceforth be known as	Total No. of Works	(Rupees in crore)		
		Project Cost	ULB Share/ Others	IUDM Grant Committed
Water Supply	1037	4116.34	3584.42	531.92
Sewerage	90	4930.44	4614.56	315.88
Roads	3709	916.73	77.36	839.37
Storm Water Drains	2060	351.77	64.09	287.68

Solid Waste management	1092	231.71	3.84	227.87
Street Lights	2961	370.89	211.03	159.86
Eradication of Open Defecation	1122	110.31	74.01	36.30
Others	401	47.62	1.31	46.31
Total	12472	11075.81	8630.62	2445.19

Status of Projects :

The sector wise status of projects taken under IUDM is as below:

Sector	Total No. of Works	No of Works		
		Completed	In progress	Tender stage
Water Supply	1037	757	149	131
Sewerage	90	9	32	49
Roads	3709	3316	240	153
Storm Water Drains	2060	1943	114	3
Solid Waste management	1092	1058	31	3
Street Lights	2961	2840	9	112

Eradications of Open Defecation	1122	862	260	0
Others	401	391	3	7
Total	12472	11176	838	458

9.5 TUFIDCO Infrastructure Funding Scheme (TIFS)

Considering the financial requirement of the Urban Local Bodies, Boards, Statutory authorities and other Government agencies TUFIDCO has launched Infrastructure Funding Scheme called "TUFIDCO's Infrastructure Funding Scheme". The source of fund for this scheme is from share capital, reserves and surplus of TUFIDCO, loan from banks and deposits from the public. Under this scheme, fund may be provided for the entire project cost as well as part funding of other scheme.

The Urban Local Bodies, Boards and other Government agencies are getting loan under this scheme. During 2013-14, under this scheme ₹651.31 crore has been sanctioned.

9.6 Fund Manager for State Government Schemes

The State Government appointed TUFIDCO as a fund manager for Entertainment Tax Compensatory Fund, Education Fund (Corporation/Municipality School Student Fund), Infrastructure Gap Filling Fund and Operation and Maintenance Gap Filling Fund. The above funds are released to the Urban Local Bodies to develop basic Infrastructure.

TUFIDCO has released ₹54.42 crore under Infrastructure Gap Filling Fund, ₹34.39 crore under Operation and Maintenance Gap Filling Fund, ₹0.14 crore under Education Fund (Corporation/Municipality School Student Fund) during the year 2013-14.

10. New Tirupur 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 Tirupur Area Development Corporation Limited (NTADCL). The Agreement was to implement a 185 million litre 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.**

Cost of the project is ₹1023 crore. Equity contributed by 15 institutions is

₹322.70 crore and debt funded by 19 financial institutions is ₹700.30 crore.

This water supply project is catering to the domestic water supply requirements of Tiruppur Corporation (about 38.2 MLD). In addition, 8 Village Panchayats and about 600 rural habitations covered in 5 Panchayat Unions on the wayside are benefitted by the project (about 17 MLD). A domestic sewerage system in major parts of Tiruppur Corporation has also been completed and functioning. Presently, around 6 MLD of sewage received from 13,000 sewer connections is being treated. Low cost sanitation facilities (31 sanitary complexes) have also been implemented for the urban poor.

The water demand for industries in Tiruppur had substantially reduced since February 2011 consequent to closure of dyeing and bleaching industries due to Hon'ble Madras High Court Order dated 31.01.2011 and

subsequent introduction of common effluent treatment facilities resulting in reuse of water. Notwithstanding this, NTADCL has been maintaining its committed quantum of supply to the domestic sector – both to Tiruppur Corporation and wayside villages.

The poor financial situation of New Tirupur Area Development Corporation Limited, resulting from low offtake of water by industries, has been tackled through the Corporate Debt Restructuring (CDR) package, under which the lenders rescheduled the debt, reduced the interest rate and converted 15 per cent of the debt into equity and the Government assured to buy up to 100 mld of water additionally for domestic usage from the company. Presently, around 35 MLD of additional water is being supplied to Tiruppur Corporation.

Government had agreed for a capital infusion by way of equity share capital of ₹150

crore out of which ₹126 crore has been released till date.

The industrial / institutional water supply is 25 MLD currently and is slowly picking up.

The assistance provided by the Government of Tamil Nadu in the form of equity capital infusion, purchasing additional quantity of water of around 35 MLD by Tiruppur Corporation and the decision of allowing the company to meet the industrial demand outside the Tiruppur Local Planning Area by increasing the project service area has paved the way for the Company to revive itself. This has enabled the Company to serve the public in the area continuously.

Further, Detailed Project Report (DPR) is being prepared to augment the water supply and sewerage facilities in Tiruppur Corporation.

11. Tamil Nadu Water Investment Company Limited

Tamil Nadu Water Investment Company Limited was formed as a Special Purpose Vehicle on 27.01.2000 under Companies Act, 1956 by Infrastructure Leasing and Financial Services Limited (ILFS) and Government of Tamil Nadu as an investment Company to implement an Integrated Water Supply and Sewerage Project and to promote infrastructure development projects jointly with Government Institutions and Local Bodies. Tamil Nadu Water Investment Company Limited is the promoter of New Tiruppur Area Development Corporation Limited. Government of Tamil Nadu holds 46.15% of Share Capital of Tamil Nadu Water Investment Company Limited. In addition to investment in New Tiruppur Area Development Corporation Limited, the Tamil Nadu Water Investment Company Ltd may invest in other

institutions implementing infrastructure projects. The objectives of the Tamil Nadu Water Investment Company Limited are to provide for carrying on other water related activities in addition to the business of merely an investment company, developing and financing of infrastructure projects (including Public Private Projects) in the water and waste water sector.

The Company has undertaken consulting services for water in respect of following projects:

SI No	Name of the Projects	Nature of work	Project Cost (₹in crore)
1	Water Supply Project for Erode Corporation	Preparation of DPR	392.00
2	Water Supply Improvement Project for Nelliyalam Municipality Combined	Preparation of DPR	43.00

3	Hogenakkal Water Supply Project	Proof Checking of DPR	1200.00
4	Combined Water Supply in Pudukottai District	Proof Checking of DPR	610.00
5	Sewerage improvements to TNHB colony in Ayyappakkam Near Ambattur	Preparation of DPR and also evaluation of the bids for the Project.	12.00
6	Improvements to Water Supply Distribution System in 23 Municipalities.	Preparation of DPR	319.50
7	Water Management Plan to Arcot Municipality	Preparation of DPR	45.00
8	Water Supply Improvement Scheme to extended area of Coimbatore Corporation	Preparation of DPR	42.60
9	UGSS for 12 Towns	Proof Checking of DPR and issuing certificate	806.90
10	Water Supply Improvement scheme - Transmission main & Distribution System for Vellore Corporation	DPR for preparation	75.00

The Company provides Operation & Maintenance services to seven Zero Liquid Discharge (ZLD) Common Effluent Treatment Plants (CETPs) in Tirupur. Tamil Nadu Water Investment Company Limited has gained rich experience in the area of effluent treatment, water supply and sewerage systems.

The Government of Tamil Nadu have decided that the expertise gained by the Company in the area of water supply and waste water management projects should be utilised and vide G.O (MS.) No. 132 dated 31.12.2012, Government of Tamil Nadu ordered to nominate the Tamil Nadu Water Investment Company Limited as Programme Management Agency (PMA) for implementing on behalf of the Government of Tamil Nadu for the following:

- a. Dedicated Agency for development and operation and maintenance of Common Effluent Treatment Plants
- b. Industrial Water Supply through reuse of sewerage water and desalination.

The turnover of the company from Operation and Maintenance Contract has gone up from ₹6.14 crore in the year 2012-13 to ₹12.8 crore in the year 2013-14. Further, the turnover from consultancy services has gone up from ₹1.21 crore in 2012-13 to ₹2.49 crore in 2013-14 signally robust growth.

S.P.VELUMANI

Minister for Municipal Administration,
Rural Development, Law, Courts and Prisons

MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT

LIST OF PART-II SCHEMES FOR THE YEAR 2014-15

(₹ in lakhs)

Sl. No	Name of the Schemes	Amount
I	Secretariat - Municipal Administration and Water Supply Department	
1.	Purchase of Server for 8 Computers with UPS and Network Printer	9.45
II	Director of Town Panchayats	
1.	Component-I Construction of Community Halls in Town Panchayats	84.00

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2	Component-II Establishment of Liquid Resource Management at Elampillai Town Panchayat in Salem District	236.75
3	Study on impact of application of human waste on soil health and ground water quality for promotion	3.97
III	Tamil Nadu Water Supply and Drainage Board	
1.	Feasibility study to utilise the defunct quarry as Rain Water Harvesting cum Water Supply pond in Tamil Nadu	48.20
IV	Chennai Metropolitan Water Supply and Sewerage Board	
1.	Treatment of waste water of sewage of by Dewatts system into Coovam River by constructing 1.3 MLD capacity Sewage Treatment Plant at the junction of Link Road and Dam Road in Area 5 by Chennai Metropolitan Water Supply and Sewerage Board.	300.00
	Total	682.37

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DEMAND No.34**MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT
Estimate of the amounts required for Expenditure in 2014-2015****BUDGET ESTIMATE 2014-2015****(₹ in Thousands)**

	Revenue	Capital	Loan	Total
DEMAND FOR GRANT - Voted	6,710,48,45	3,318,20,62	148,96,74	10,177,65,81
APPROPRIATION - Charged	3	-	-	3

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Net Expenditure Rupees in Thousands

Head of Account		2012-2013 Accounts	2013-2014 Budget Estimate	2013-2014 Revised Estimate	2014-2015 Budget Estimate
2215	Water Supply and Sanitation	186,08,16	259,04,51	416,91,26	287,96,59
2217	Urban Development	840,23,00	1,417,02,07	1,638,71,33	1,223,93,33
2251	Secretariat - Social Services	5,78,10	6,64,58	7,12,60	7,67,99
2515	Other Rural Development Programmes	12,91,44	15,35,38	15,77,15	7,74,50
2551	Hill Areas	1,44,50	1	---	1
3475	Other General Economic Services	29,32,24	28,42,83	98,87,60	36,03,37
3604	Compensation and Assignments to Local Bodies and Panchayat Raj Institutions	3,968,47,23	4,702,57,49	4,377,68,84	5,147,12,68
4215	Capital Outlay on Water Supply and Sanitation	1,297,08,78	1,172,02,33	1,273,73,75	1,281,06,58

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4217	Capital Outlay on Urban Development	82,361,86	1,632,57,06	1,696,11,91	1,907,14,04
4515	Capital Outlay on Other Rural Development Programmes	153,36,54	158,75,41	171,82,53	130,00,00
6215	Loans for Water Supply and Sanitation	69,52,88	31,45,00	131,44,99	22,66,74
6217	Loans for Urban Development	100,00,00	200,98,00	301,88,00	125,00,00
7610	Loans to Government Servants etc.	...	50,00	94,36	50,00
7615	Miscellaneous Loans	10,88	1	80,00	80,00

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DEMAND No.34
MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT
BUDGET ESTIMATE 2014 -2015
(₹ In Thousands) (Gross)

Sl. No	Head of Department		Revenue	Capital	Loan	Total
1	34 01 Secretariat	Charged	1	...	...	1
		Voted	7,76,40	...	50,00	8,26,40
2	34 02 Commissionerate of Municipal Administration	Charged	1	...	...	1
		Voted	4,492,53,59	1,917,45,04	125,80,00	6,535,78,63
3	wife of Thiru34 03 Directorate of Town Panchayats	Charged	1	...	...	1
		Voted	1,475,83,23	142,14,00	.....	1,617,97,23
4	34 04 Tamil Nadu Water Supply and Drainage Board	Voted	48,24	983,04,11	22,66,74	1,006,19,09
5	34 05 Chennai Metropolitan Water Supply and Sewerage Board	Voted	215,30,87	275,57,47	490,88,34

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6	34 06 Tamil Nadu Urban Finance & Infrastructure Development Corporation Ltd.,	Voted	518,56,12	518,56,12
	Total	Charged	3	...	...	3
		Voted	6,710,48,45	3,318,20,62	148,96,74	10,177,65,81