



# **Municipal Administration and Water Supply Department**

## **Policy Note 2012 - 2013**

**Demand No. 34**

**Thiru. K.P. MUNUSAMY**

Minister for Municipal Administration  
and Rural Development



Government of Tamil Nadu  
2012

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

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

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

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

- Water Quality Monitoring and Surveillance Programme.
- Activities on Sustainability of Drinking Water Sources.
- Training Activities.

## **6. 2 Rural Water Supply Programme**

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

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

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

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

### **6.2.2 Source Sustainability**

With a view to enhance the Sustainability of the drinking water Sources, the TWAD Board has taken up construction of Recharge Structures under the Government of India and State Government Assisted Programmes.

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

### **6.2.3 Combined Water Supply Schemes**

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

During 2011-12, 34 such schemes were under implementation with financial assistance from the Minimum Needs Programme (MNP), the National Rural Drinking Water Programme (NRDWP), Jawaharlal Nehru National Urban Renewal Mission (JnNURM) / Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).

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

Sl. No.	Name of the scheme	Estimate amount (₹ in lakh)	Population benefitted
1	<b>CWSS to Konur and 16 other Habitations</b> in Reddiarchatiram Union in Dindigul District	49.80	8,355
2	<b>CWSS to Subramaniapuram and 6 other Habitations</b> in Aranthangi union in Pudukottai District.	29.00	5,151
3	<b>CWSS to Kadanadu and 3 other Village Panchayats</b> in Udhagamandalam Union in The Nilgiris District.	1,854.00	35,855
4	<b>CWSS to 53 habitations in Pillapalayam and 6 other panchayats</b> in Krishnarayapuram union in Karur District.	621.00	30,225
5	<b>CWSS to 17 Habitations in Brammadesam and 3 other Village Panchayats</b> in Ambasamudram Union in Tirunelveli District.	96.31	14,175
6	<b>WSIS to 10 Rural Habitations</b> in Vilpatty Panchayat of Kodaikanal union in Dindigul District.	75.00	3,559

Sl. No.	Name of the scheme	Estimate amount (₹ in lakh)	Population benefitted
7	<b>WSIS to 4 Rural Habitations in Vilpatti panchayat</b> in Kodaikanal union in Dindigul District.	39.68	1,822
8	<b>CWSS to Moovanur and 44 Habitations</b> in Musiri and Manachanallur Union in Trichy District	554.00	22,426
9	<b>CWSS to Vellur and 24 habitations</b> in Musiri union in Trichy District	322.60	13,031
10	<b>CWSS to Thenpoondipattu</b> and 9 other Habitations in Cheyyar union in Thiruvannamalai District.	83.39	4,048
11	<b>CWSS to 706 Rural habitations</b> in Arimalam, Aranthangi, Avudayarkoil and Manamelkudi Unions and Aranthangi Municipality in Pudukottai District with Bulk Provision to 120 Habitations in Pudukottai and Thanjavur Districts.	3,909.09	2,01,335

Sl. No.	Name of the scheme	Estimate amount (₹ in lakh)	Population benefitted
12	<b>CWSS to Chengam, Pudupalayam Town Panchayats</b> with bulk provision to 40 wayside habitations in Chengam, Pudupalayam unions in Thiruvannamalai District.	888.00	36,400
	<b>Total</b>	<b>8,521.87</b>	<b>3,76,382</b>

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

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

The Government have sanctioned an amount of ₹ 12.25 crore in G.O.Ms. No.2, MA&WS(WS4), dated 09.01.2012 to take up works for providing separate feeder main and 4<sup>th</sup> Wire Connection to the following CWSS which are under trial run/ Contractor's maintenance to ensure the designed quantity of water supply.



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

### 6.2.5 Major Combined Water Supply Schemes

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

Sl · N o.	Name of the scheme	Estimate Cost (₹ in crore)	Population benefitted (in lakh)
1	Combined Water Supply Scheme to Melur and 2 Other Municipalities, 6 Town Panchayats and 1,430 Rural Habitations in 8 Unions of Madurai District and 1 Town Panchayat in Sivagangai District with River Cauvery as source.	784.00	15.92
2	Augmentation of Water Supply to Palladam Municipality, 23 Town Panchayats and 965 Rural Habitations in 8 Unions of Colmbatore and Tiruppur Districts with Pillur Dam as source.	224.92	12.29
3	Combined Water Supply Scheme to 7 Town Panchayats, 395 Rural Habitations in Rajapalayam, Srivilliputhur, Watrap(Part) and Sivakasi (Part) unions in Virudhunagar District, with River Tamiraparani as source, near Mukkudal.	173.00	4.82
4	Combined Water Supply Scheme to 637 Rural Habitations in Aruppukkottai, Karlyapatti, Thiruchuli, Narikkudi and Virudunagar (Part) Unions in Virudhunagar District with River Tamiraparani as source near Vallanadu	190.00	4.24

5	Combined Water Supply Scheme to 755 Rural Habitations in Sattur, Vembakkotai, Sivakasi, Virudhunagar(Part). Watrap(Part), Srivilliputhur(Part) and Aruppukkottai(Part) Unions in Virudhunagar District with River Tamiraparani as source near Seevalaperi	234.0	6.51
6	Combined Water Supply Scheme to 295 Quality affected Habitations and 315 wayside Habitations in Sirkali, Kollidam, Sembanarkoil and Mayiladuthurai Unions in Nagapattinam District	105.70	3.70
7	Combined Water Supply Scheme to Athur and Narasingapuram Municipalities, 20 Town Panchayats and 1345 Rural Habitations in 12 Unions of Salem District	270.00	13.09
8	Combined Water Supply Scheme to Vellore Corporation, 11 Municipalities, 5 Town Panchayats and 944 Rural Habitations of Vellore District with Cauvery as source	1,295.00	24.46
	<b>Total</b>	<b>3,276.62</b>	<b>85.03</b>

## 6.2.6 Revamping of Combined Water Supply Schemes

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

During 2011-12, **943 revamping works covering 4,952 habitations** have been completed under MNP / NRDWP Assistance at a **cost of ₹101.69 crore.** The category-wise works completed are as below:

Sl. No.	Category	No. of works	Estimate cost (₹ in crore)
1	Source Augmentation	33	5.45
2	Booster Pumping Stations	18	2.73
3	Sumps	91	7.41
4	Replacement of aged Pumpsets	111	4.15

Sl. No.	Category	No. of works	Estimate cost (₹ in crore)
5	Air Valves	170	5.27
6	Replacement of dilapidated Over Head Tanks	8	0.29
7	Replacement of Pipelines Damaged due to Road widening	330	49.00
8	Providing Separate Power Feeder Mains/4 <sup>th</sup> Wire	174	26.35
9	Providing Surge Protection System	8	1.04
	<b>Total</b>	<b>943</b>	<b>101.69</b>

### 6.2.7 Special Programme

The provision of safe drinking water to Government Schools, Anganwadis and Government Hostels is the avowed policy of the Government. The achievement under this programme in 2011-12 is as below:

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

## 6.2.8 Financial Achievement during 2011-12

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

## 6.2.9 Rural Water Supply Programme for 2012-13

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

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

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

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

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

- |  |              |
|--|--------------|
| • <b>Check Dams</b>                    | - <b>919</b> |
| • <b>Percolation ponds</b>             | - <b>45</b>  |
| • <b>Recharge Shafts</b>               | - <b>245</b> |
| • <b>Oorani improvements</b>           | - <b>234</b> |
| • <b>Hydrofracturing in Bore wells</b> | - <b>125</b> |

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

In order to achieve the objective of ensuring quality water supply to the public, the TWAD Board has established one State level, 31 District level and 51 Sub divisional level laboratories. These laboratories have facilities for testing all the basic water quality parameters and for effective

surveillance and monitoring of water supply sources in both Rural and Urban areas. It is pertinent to note that the State Level Laboratory, Chennai which was awarded ISO 9001-2000 Certification during January 2004, has now been upgraded to ISO 9001:2008 certification. This laboratory has been recognized as the State Referral Institute for Tamil Nadu by the Government of India.

- **2.46 lakh** Rural drinking water sources have been tested during 2011-12 under the NRDWP and the water quality data has been updated in the Integrated Management Information System (IMIS).
- During the year 2012-13, it is proposed to test the quality of **2.46 lakh** Rural drinking water sources.

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

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



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

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

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

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

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

Sl. No	Name of Town	District	Estimate cost (₹ in Lakh)	Population benefitted
	<b>Municipalities</b>			
1	Rasipuram	Namakkal	825.25	46,330
	<b>Town Panchayats</b>			
1	Gandhinagar	Vellore	29.15	9,487
2	Katpadi	Vellore	489.00	14,912
3	Chengam	Tiruvannamalai	501.40	23,223
4	Pudupalayam	Tiruvannamalai	240.00	10,005
5	Sankarapuram	Villupuram	63.00	12,263
6	Gingee	Villupuram	1,463.70	21,251
7	Thittacheri	Nagapattinam	49.00	8,490
8	Kuthalam	Nagapattinam	49.60	13,444
9	Labbaikudikadu	Perambalur	45.25	8,741
10	Keeranur	Pudukottai	14.20	10,509
11	Sithayankottai	Dindigul	65.00	12,099
12	Ganguvarpatti	Theni	98.36	10,592
	<b>Total</b>		<b>3,932.91</b>	<b>2,01,346</b>

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

### **6.3.2 Integrated Urban Development Mission**

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

### **6.4 Hogenakkal Water Supply and Fluorosis Mitigation Project**

#### **6.4.1 Water Supply Component**

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

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

Pack age No.	Description of works	Achievement in percentage (%)
I	Head Works, Water Treatment Plant, Raw Water and Clear Water Transmission Main and Master Balancing Reservoir (MBR) at Madam	59
II	Trunk Main from MBR and Feeder Mains- 2,387 Km. covering 1,653 Habitations of 5 Unions, 2 Town Panchayats and Dharmapuri Municipality in Dharmapuri and Krishnagiri Districts	64
III	Branch Trunk Main 1,572 Km. covering 1083 Habitations in 3 unions and 5 Town Panchayats in Dharmapuri District	47
IV	Pumping Main from Moongilpatti-3107 Km. covering 1720 Habitations in 5 unions, 3 Town Panchayats and Hosur Municipality in Krishnagiri District	54
V	Trunk main from MBR to Bargur and Feeder Main - 2950 Km, covering 2299 habitations in 5 Unions, 7 Town Panchayats and Krishnagiri Municipality in Dharmapuri and Krishnagiri Districts.	53

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

#### **6.4.2 Fluorosis Mitigation Component**

The Fluorosis Mitigation Component is implemented based on a comprehensive three-pronged approach, involving Hospitals, Schools and the Community. It is implemented in coordination with the Director of Medical and Rural Health Services, the Department of Public Health and Preventive Medicine, the Department of Medical Education, the Department of Education and the District Administration so as to assess the level of incidence of dental, skeletal and non-skeletal fluorosis amongst the public, in both Dharmapuri and Krishnagiri districts. The project also seeks to undertake mitigation measures through awareness and life style modification, nutritional supplementation and medical treatment in selected cases. All Government Doctors in the two districts have been trained to diagnose the incidence of fluorosis among the patients and to prescribe preventive measures. School teachers have been

trained to assess the status of dental fluorosis amongst the students. 100% House-hold health survey will be conducted to assess the prevalence of fluorosis amongst the 30 lakh population of both the districts.

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

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

### **6. 5 Operation and Maintenance of Combined Water Supply Schemes**

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

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

To have an effective remote monitoring and supervisory control of all the components of CWSS, which have a large number of pumping stations and distribution networks, the Supervisory Control and Data Acquisition (SCADA) Telemetry System is being installed in the following two CWSS at a cost of ₹ 3 Crore under the Part-II Scheme for 2011-12.

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

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

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

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

During the onslaught of December 2011 Thane Cyclone, 11 CWSS in Cuddalore District benefitting 1 Municipality, 1 Town Panchayat and 127 Rural habitations and 7 CWSS in Villupuram District benefitting 1 Municipality, 4 Town Panchayats and 150 Rural Habitations were severely affected and became non-functional. The TWAD Board under-took remedial measures on a war footing and restored water supply in all the 18 CWSS within a record time of 48 hours.

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

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

Out of the above 46 Schemes, 11 Water Supply Schemes, covering 5 Town Panchayats and 225 Rural Habitations, benefitting a population of



2.05 Lakh were sanctioned at a cost of ₹ 33.71 crore. They have been taken up for implementation during 2011 - 12.

Sl. No.	Name of the scheme	Estimate Cost (₹ in Crore)	Population benefitted
1	CWSS to Chithamur and 27 habitations in Anakkavur Union in Thiruvannamalai District	1.85	13,756
2	CWSS to Padaveedu and 46 Habitations in Polur Union in Thiruvannamalai District	3.03	17,445
3	Replacement of Distribution System to Kaveripattinam Town Panchayat in Krishnagiri District	0.64	15,800
4	WSIS to Samathur Town Panchayat in Coimbatore District	0.49	6,196
5	Dedicated water supply Scheme to Suleeswaranpatti Town Panchayat in Coimbatore District	7.60	23,600
6	CWSS to Thekkampatty and 31 other Habitations in Karamadai Union in Coimbatore District	3.01	33,693
7	CWIS to Manmangalam and 71 other habitations in Karur Union in Karur District.	2.38	24,232
8	CWSS to 40 habitations in Pallapalayam, Andankoil East and Andankoil West panchayats in Thanthoni union in Karur District.	6.43	29,445

9	WSIS to Melachockanathapuram Town Panchayat in Theni District.	6.36	14,164
10	Providing WS to 6 habitations in Keelanatham Panchayat in Tirunelveli District.	0.97	9,078
11	WSIS to Pathamadai Town Panchayat in Tirunelveli District	0.95	18,000
<b>Total</b>		<b>33.71</b>	<b>2,05,409</b>

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

Sl. No.	Name of the scheme	Project Cost (₹ in Crore)	Population benefited
1	WSIS to Kallakudi Town Panchayat in Trichy District.	0.49	13,100
2	WSIS to Pullambadi Town Panchayat in Trichy District.	0.95	13,000
3	WSIS to Thirunageswaram Town Panchayat in Thanjavur District.	8.60	15,000
4	WSIS to Ayyampettai Town Panchayat in Thanjavur	5.58	15,700

Sl. No.	Name of the scheme	Project Cost (₹ in Crore)	Population benefited
	District		
5	WSIS to Darasuram Town Panchayat in Thanjavur District.	9.28	16,000
6	WSIS to Kottur Town Panchayat in Coimbatore District.	1.41	26,250
7	WSIS to Odayakulam Town Panchayat in Coimbatore District.	0.79	13,700
8	WSIS to Vettaikaranpudur Town Panchayat in Coimbatore District	0.48	19,600
9	WSIS to Karamadai Town Panchayat in Coimbatore District	9.97	27,817
10	WSIS to Jagathala Town Panchayat in The Nilgiris District	1.65	15,700
11	CWSS to 327 Habitations in Idapadi, Magudanchavadi and Konganapuram unions in Salem District.	40.36	96,926
12	WSIS to Avalpoondurai Town Panchayat in Erode District.	0.45	3,175
13	WSIS to Kunnathur Town Panchayat in Tiruppur District	0.30	9,000

Sl. No.	Name of the scheme	Project Cost (₹ in Crore)	Population benefited
14	WSIS to Nambiyur Town Panchayat in Erode District.	1.94	6,800
15	WSIS to Anthiyur Town Panchayat in Erode District.	3.04	22,100
16	WSIS to Ammapet Town Panchayat in Erode District.	1.38	9,800
17	WSIS to Pandamangalam Town Panchayat in Namakkal District.	0.99	6,700
18	WSIS to Mohanur Town Panchayat in Namakkal District.	0.94	17,540
19	WSIS to Velur Town Panchayat in Namakkal District	0.96	21,400
20	WSIS to Alanganallur Town Panchayat in Madurai District.	0.68	7,625
21	WSIS to Palamedu Town Panchayat in Madurai District.	0.84	9,564
22	Augmentation of Water Supply to 147 Rural Habitations of Sankarankovil-Alangulam CWSS in Tirunelveli District.	31.32	1,31,438

Sl. No.	Name of the scheme	Project Cost (₹ in Crore)	Population benefited
23	CWSS to 170 Habitations in Manur Union (Part) and Palayamkottai Union (Part) in Tirunelveli District	46.54	1,28,346
24	CWSS to 34 Habitations in Manur Union (Part) and Palayamkottai Union (Part) in Tirunelveli District	8.78	22,082
25	CWSS to Azhagiyapandipuram and 8 other Town Panchayats and 246 rural habitations in Kanyakumari District.	98.30	2,33,859
	<b>Total</b>	<b>276.02</b>	<b>9, 02,222</b>

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

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

Sl. No.	Name of the Scheme	Estimate Cost (₹ in Crore)	Population benefited (in lakh)
1	Water Supply Improvement Scheme to Theni-Allinagaram Municipality in Theni District	60.60	1.00
2	CWSS to Cuddalore, Virudhachalam Municipalities, 9 Town Panchayats and 1,647 Rural Habitations in 11 Panchayat Unions in Cuddalore District and Villupuram, Tindivanam Municipalities, 4 Town Panchayats and 1,946 Rural Habitations in 15 Panchayat Unions in Villupuram District	650.00	25.37
3	Combined Water Supply Scheme to 3,517 Rural Habitations in Pudukottai, Viralimalai, Annavasal, Ponnamaravathi, Kunnandarkoil, Tirumayam, Arimalam, Gandarvakottai, Aranthangi, Karambakudi, Thiruvarankulam Unions in Pudukottai District and 125 Habitations in S.Pudur, Kallal and Sakkottai Unions of Sivagangai District and Vallam Town Panchayat in Thanjavur District	575.00	11.93

Sl. No.	Name of the Scheme	Estimate Cost (₹ in Crore)	Population benefited (in lakh)
4	Combined Water Supply Scheme to Zamin Uthukuli Town Panchayat and 63 Rural Habitations in Pollachi North, South Unions in Coimbatore District	12.84	0.41
5	Combined Water Supply Scheme to 158 Rural Habitations in Gudimangalam and Udumalpet Unions in Tiruppur District	48.40	1.02
6	Combined Water Supply Scheme to 147 Rural Habitations in Pappakudi (Part), Keelapavur, Alangulam, Manur, Melaneelethanallur, Sankarankovil Unions in Tirunelveli District	31.32	1.31
7	Combined Water Supply Scheme to Keelapavur Town Panchayat and 163 Rural Habitations in Pappakudi (part), Kadayam and Keelapavur Unions in Tirunelveli District	46.00	1.45
8	Combined Water Supply Scheme to Udangudi Town Panchayat and 368 Rural Habitations in 12 Panchayat Unions in Thoothukudi District	103.47	1.87
	<b>TOTAL</b>	<b>1,527.63</b>	<b>44.36</b>

## **6.9 Under Ground Sewerage Schemes**

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

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

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



- **7 Underground Sewerage Schemes** namely UGSS to Ramanathapuram, Cuddalore, Namakkal, Thiruvannamalai, Dharmapuri, Villupuram and Pudukottai benefitting a population of **6.73 lakh** at an estimate cost of **₹ 263.01 Crore** are under progress and expected to be completed in **2012-2013**.
- **The remaining 14 Underground Sewerage Schemes** benefitting a population of **8.54 lakh** at an estimate cost of **₹ 542.46 Crore** are in progress.
- Under Ground Sewerage scheme to **Orathanadu Town Panchayat** in Thanjavur District is being taken up under the **Integrated Urban Development Mission (IUDM)** at a cost of **₹ 15.21 Crore**, to benefit a population of **10,172**.

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

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

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

### **6.10 Hydrogeological Activities**

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

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

### **6.11 Management Information System**

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

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

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