



**MUNICIPAL ADMINISTRATION AND
WATER SUPPLY DEPARTMENT**

**POLICY NOTE
2024-2025**

DEMAND NO.34

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Minister for Municipal Administration

©

GOVERNMENT OF TAMIL NADU

2024

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Policy Note – 2024-2025

VISION STATEMENT

Provide a decent quality of life, clean, green and sustainable environment, quality basic amenities, vibrant public spaces, induce economic growth, generate employment and mitigate poverty through responsive city governance leading to a decent quality of life for all by following a comprehensive, inclusive, integrated, transparent and participatory approach of urban development.

1. PREAMBLE

Tamil Nadu which has rich legacy of electoral Governance since 10th century AD as documented in epigraphical inscription of Uthiramerur Chaturvedi Mangalam, now, in modern times witness undergoing a notable surge in urbanization, culminating as highest, among the larger States. Tamil Nadu boasts the highest rate of urbanization, positioning itself as one of India's most urbanized regions, with 48.45% of its populace residing in urban locales as per the Census of 2011. Over the span from 1991 to 2011, the urban population of Tamil Nadu burgeoned from 1.9 crore (constituting 34% of the total population) to 3.5 crore (representing 48.45% of the total population), reflecting an impressive 83% increase within this interval. By contrast, India's urban populace escalated from 25.71% in 1991 to 31.16% in 2011. Despite commencing from a more elevated urbanization base, Tamil Nadu's urban

population exhibited a substantially swifter growth rate compared to that of the entirety of India during this corresponding period.

Challenges and opportunities arising from this rapid urbanization trend are evident. Tamil Nadu's elevated level of urbanization not only mirrors but also contributes to its vibrant and diversified economic foundation, positioning it as the second-largest State in terms of Gross State Domestic Product amongst Indian States. Nevertheless, the relentless pace of urbanization compounds the strain on urban infrastructure and service provision within cities and towns, raising concerns regarding the quality of urban life. While the state has historically maintained a commendable urban infrastructure coverage, the rapid urbanization trajectory could exacerbate existing service gaps, potentially yielding adverse consequences for the urban living standard. Moreover, as economic capacity and per capita

incomes ascend, citizens' aspirations and expectations regarding urban services necessitate fulfillment. In light of these circumstances, the Government of Tamil Nadu acknowledges the imperative to substantially augment investments in urban infrastructure from current levels.

Furthermore, there exists a pressing need for a paradigm shift in the conceptualization of cities. Rather than regarding cities merely as conglomerations of physical structures such as buildings and roads, they ought to be perceived as clusters of human capital. In alignment with this recognition, the Government pledges to prioritize the pursuit of inclusive urban growth.

Treading in the path as evinced in the Vision Statement 2021-2031, thrust areas such as Water Supply and Sanitation / Solid Waste Management, Knowledge Centers, Urban Greening are given focus in delivering Urban Amenities and Services

The beneficial impacts of urbanization are ascribed to technological and infrastructural advancements, enhanced transportation and communication networks, and the provision of quality educational and medical facilities. However, the challenge lies in keeping pace with the escalating demand for urban services, such as reliable and equitable water supply, efficient drainage and solid waste management, commensurate with the expansion of the housing and transportation sectors.

A pragmatic approach involving gap analysis, followed by meticulous city planning, has been instrumental in accessing budgetary allocations from both Government of India-sponsored and State schemes. Projects are initiated with effective fund allocation, utilizing co-financing strategies and soliciting public participation.

In addressing the priority areas of water supply and sanitation, significant emphasis is placed on climate-resilient measures, leveraging technology and fostering awareness. Strategies such as the preservation and restoration of water bodies, the utilization of reclaimed water, and the promotion of urban greening with indigenous flora are adopted to mitigate the environmental impact of climate change. Additionally, funds specifically allocated for parks, playgrounds, urban space enhancement, heritage building restoration, and street lighting contribute to the enhancement of urban livability. These measures are pivotal in enabling Tamil Nadu to effectively tackle the challenges posed by urbanization and emerge as a beacon of responsive governance.

Water – Fundamental to Life

Ensuring clean, ample, and affordable water supply to all remains a paramount objective of the department. City water action plans have been

devised for all urban local bodies to identify crucial water supply requirements. Under the AMRUT 2.0 initiative, essential water supply projects, coupled with source augmentation and targeted household connections, are being taken up.

Efforts to rejuvenate severely polluted and silted water bodies are underway through initiatives such as the Kalaignar Nagarpura MEMPATTU Thittam (KNMT), Singara Chennai 2.0, and AMRUT 2.0. Additionally, impetus is given to water conservation by utilizing reclaimed water for industrial purposes. The revenue generated from such endeavors not only strengthens the financial position of Urban Local Bodies but also enhances water availability. Tertiary treatment reverse osmosis (TTRO) plants, located at Koyambedu and Kodungaiyur, cater to the industrial water requirements of Chennai, thus alleviating the strain on freshwater resources.

Waste Management – A Reflection of Public Health

Sanitation and solid waste management play a pivotal role in safeguarding public health and well-being. An integrated framework has been initiated to address both liquid and solid waste management challenges. City sanitation plans have been prepared for all Urban Local Bodies under the Swachh Bharat Mission 2.0.

The State aims to implement underground sewerage systems under AMRUT 2.0, co-financed with assistance from external funding agencies, and septage management under SBM 2.0. Concrete steps are also being taken to address legacy waste through bio-mining and to manage wet waste through bio-remediation and bio-CNG plants.

Greater Chennai Corporation, encompassing an area of 426 sq.km. and a population of 71 lakh as per the 2011 census, stands as the largest Urban Local Body in Tamil Nadu. Efforts are underway to enhance the operation and maintenance of public toilets in urban areas. As part of a pilot project, the construction of new public and community toilets, refurbishment of existing facilities, and operation and maintenance of 372 toilets have been undertaken through the public-private partnership (PPP) mode in Greater Chennai Corporation. Based on the success of this endeavor, similar initiatives will be expanded to other corporations in the State.

Roads – Vital for Connectivity and Communication

The burgeoning urban landscape necessitates quality road infrastructure to connect suburbs and hinterlands. The road network serves

as a prime indicator of development. Steps have been taken to establish all-weather roads and to repair roads damaged due to the implementation of water supply and underground sewerage schemes and adverse weather conditions. A dedicated scheme, Nagarpura Salai Mempattu Thittam (NSMT), has been launched, aligning with the Tamil Nadu Urban Road Infrastructure Fund (TURIF), Singara Chennai 2.0, and Kalaingar Nagarpura Mempattu Thittam (KNMT). These schemes aims to improve approximately 21,000 km of roads at an estimated cost of about Rs.9,600 crore over a four-year period.

Education and Employment Opportunities

Urban local bodies are actively working to enhance school infrastructure, with Greater Chennai Corporation leading efforts to develop model schools. Knowledge centers comprising modern libraries (Digital Libraries), reading rooms,

e-learning facilities, and training rooms are being established, providing invaluable support to youth preparing for competitive exams.

Bus Stands and Markets

Modern bus stands equipped with state-of-the-art facilities are essential for facilitating comfortable inter and intra-city commuting. Under initiatives such as KNMT and Capital Grant Fund, efforts are underway to establish modern bus stands and vibrant markets in urban areas.

Chennai – The Capital and Metropolis

Singara Chennai 2.0 serves as a catalyst for Chennai's growth, endeavouring to transform the city into a modern, functional, and livable urban center. Efforts are underway to restore the iconic Indo-Saracenic architecture of Victoria Public Hall, thereby preserving a symbol of the city's rich heritage. Celebratory events such as Chennai

Sangamam – Namma Ooru Thiruvizha bring communities together to commemorate the city's cultural legacy. Additionally, the Chennai Book Fair, a highly anticipated event spanning 45 years, has been extended to other urban local bodies, further fostering a culture of literary engagement and enrichment.

Greening Cities

Urban afforestation serves as a viable solution to strike a balance between ecological preservation and infrastructure development. The government has prioritized increasing green cover through initiatives such as KNMT, Singara Chennai 2.0, Namakku Name Thittam, and AMRUT 2.0. Planting native species and rejuvenating water bodies effectively to mitigate carbon emissions, contributing to the creation of sustainable and resilient urban environment.

Other Infrastructure

Efforts are taken to provide modern crematoria in Urban Local Bodies under KNMT and Singara Chennai 2.0. Night shelters are also being established to provide refuge for the urban homeless under the National Urban Livelihood Mission.

The Chief Minister's Breakfast scheme, a flagship initiative, was inaugurated on 15th September 2022 by the Honorable Chief Minister of Tamil Nadu in Madurai Corporation and was implemented in 15 Corporations and 23 Municipalities. It was later expanded on 25th August 2023 to encompass the remaining 5 Corporations, 115 Municipalities, and 62 nearby Town Panchayats. This scheme aims to provide morning breakfast to students from 1st to 5th standard.

Currently, 220 Local Bodies including Municipalities, Corporations, and Town Panchayats are executing the Chief Minister's breakfast scheme across 2,256 schools, benefiting 2,48,041 students. The financial allocation for this endeavor amounts to Rs.65.26 crore, and its progress is closely monitored through a dedicated mobile application.

The implementation of this scheme has notably bolstered student attendance across all Government / Municipal schools, consequently contributing to an upsurge in the literacy percentage among underprivileged students. The resounding success of the Honorable Tamil Nadu Chief Minister's breakfast scheme has piqued the interest of other States also, with Telangana recently adopting a similar initiative.

The operational timeline of the scheme is structured as follows: Food preparation

commences at 5:00 am in the Common kitchens, culminating by 6:30 am. Subsequently, the cooked food is securely packed in covered hot boxes and dispatched to schools. Food vehicles depart from the kitchen by 7:00 am, and the hot boxes are delivered to the school in-charge by 8:30 am. Distribution of food to students takes place before 9:00 am each day.

In conclusion, urbanization brings both opportunities and challenges, and efforts are underway to ensure that cities provide a high quality of life for their residents.

1.1 Departments

In Tamil Nadu, the following departments are functioning under Municipal Administration and Water Supply department to implement various schemes in effective manner in the Urban Local Bodies.

1. Directorate of Municipal Administration (DMA)
2. Greater Chennai Corporation (GCC)
3. Directorate of Town Panchayats (DTP)
4. Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB)
5. Tamil Nadu Water Supply and Drainage Board (TWAD)
6. Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL)
7. Chennai Rivers Restoration Trust (CRRT)
8. Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited (TUFIDCO)
9. New Tiruppur Area Development Corporation Limited (NTADCL)
10. Tamil Nadu Water Investment Company Limited (TWIC)

1.2 Urban Local Bodies

21 Municipal Corporations, 138 Municipalities and 490 Town Panchayats are functioning under the administrative control of the Department of

Municipal Administration and Water Supply Department in Tamil Nadu.

During the Demand for grant of Municipal Administration and Water Supply Department for the year 2023-24, the Hon'ble Minister for Municipal Administration announced that the Karaikudi, Tiruvannamalai, Pudukottai and Namakkal Municipalities will be upgraded as Corporations.

Accordingly, orders have been issued announcing the intention of the Government to constitute the said Karaikudi, Tiruvannamalai, Pudukottai and Namakkal Municipalities as Corporations, vide G.O.(Ms) No.55, 56, 57 and 58, dated 15.03.2024.

The objections/views expressed by individuals and public welfare associations on the above proposal is under the consideration of the Government.

District wise details of Urban Local Bodies are given in table 1.1.

Table 1.1

Sl.No.	Districts	Corporations	Municipalities	Town Panchayats	Total
1.	Ariyalur	-	2	2	4
2.	Chennai	1	-	-	1
3.	Coimbatore	1	7	33	41
4.	Cuddalore	1	6	14	21
5.	Dharmapuri	-	1	10	11
6.	Dindigul	1	3	23	27
7.	Erode	1	4	42	47
8.	Kancheepuram	1	2	3	6
9.	Chengalpattu	1	4	6	11
10.	Kanniyakumari	1	4	51	56
11.	Karur	1	3	8	12
12.	Krishnagiri	1	1	6	8
13.	Madurai	1	3	9	13
14.	Nagapattinam	-	2	4	6
15.	Mayiladuthurai	-	2	4	6
16.	Namakkal	-	5	19	24
17.	Nilgiris	-	4	11	15
18.	Perambalur	-	1	4	5
19.	Pudukkottai	-	2	8	10
20.	Ramanathapuram	-	4	7	11
21.	Salem	1	6	31	38
22.	Sivagangai	-	4	11	15
23.	Thanjavur	2	2	20	24
24.	Theni	-	6	22	28
25.	Tiruvallur	1	6	8	15

26	Tiruvannamalai	-	4	10	14
27.	Tiruvarur	-	4	7	11
28.	Thoothukudi	1	3	18	22
29.	Tiruchirappalli	1	5	14	20
30.	Tirunelveli	1	3	17	21
31.	Tenkasi	-	6	17	23
32.	Tiruppur	1	6	15	22
33.	Vellore	1	2	4	7
34.	Tiruppathur	-	4	3	7
35.	Ranipet	-	6	8	14
36.	Villupuram	-	3	7	10
37.	Kallakurichi	-	3	5	8
38.	Virudhunagar	1	5	9	15
	Total	21	138	490	649

2. Directorate of Municipal Administration

2.1 Administration

20 Municipal Corporations and 138 Municipalities are functioning under the administrative purview of the Directorate of Municipal Administration in the State.

Municipal Corporations are classified on the basis of population as follows.

Table 2.1

Sl. No.	Category	Population (in lakhs)	No. of Corporations
1	Special Grade(A)	Above 15	3
	Special Grade(B)	10 -15	3
2	Selection Grade	5 - 10	5
3	First Grade	3 - 5	3
4	Second Grade	Below 3	6
Total			20

The Municipalities are classified based on the annual income as follows.

Table 2.2

Sl. No.	Classification	Annual Income (Rs. in crore)	No. of Municipalities
1	Special Grade	15 and Above	16
2	Selection Grade	9 - 15	29
3	First Grade	6 - 9	31
4	Second Grade	Below 6	62
Total			138

Creation of New Posts and Regularization of posts in Corporations and Municipalities.

Municipal Corporations are classified into 4 levels based on their population and new posts for each level of Municipal Corporations have been created and the existing posts have been regularized vide G.O (Ms) No.152, Municipal Administration and Water Supply Department, dated 20.10.2022.

Further, in the Municipalities, standard norms have been fixed for the staff based on the grade of the Municipalities. New posts have been

created and existing posts have been regularized, vide G.O.(Ms.) No.10, Municipal Administration and Water Supply Department, dated 23.01.2023.

This rationalisation and standardization of staffing pattern based on the above two Government Orders will help in improving service delivery to the public in a consistent and regular manner. Also, necessary steps have been taken to fill up 1,621 vacancies under Engineering wing, Town Planning wing and Public Health wing through direct recruitment.

Functions of Urban Local Bodies

The Urban Local Bodies in Tamil Nadu are discharging 16 functions (except census and fire service) out of 18 functions stipulated under Article 243W and 12th Schedule of the Constitution of India.

2.1.1 Implementation of Tamil Nadu Urban Local Bodies Act, 1998 and Tamil Nadu Urban Local Bodies Rules, 2023

Considering the necessity and benefits of a Common Act applicable to all urban local bodies, the Tamil Nadu Urban Local Government Bodies Act, 1998 which was under suspension since the year 2000, has been revived and amended suitably by the Tamil Nadu Urban Local Bodies (Amendment) Act, (Tamil Nadu Act 35 of 2022). Under the Tamil Nadu Urban Local Bodies Act, 1998, as amended by the Tamil Nadu Act 35 of 2022, the Tamil Nadu Urban Local Bodies Rules, 2023 have been framed. The said Tamil Nadu Urban Local Bodies Act, 1998 and the Tamil Nadu Urban Local Bodies Rules, 2023 made thereunder have been implemented with effect from 13.04.2023.

Upgradation of Municipalities

5 Municipalities viz, Tiruttani, Nandhivaram-Guduvancheri, Poonamallee, Tiruvallur, Thiruverkadu as per G.O.(Ms) No.49 Municipal Administration and Water Supply Department, Dated 15.04.2023 and 14 Municipalities viz, Villupuram, Kallakurichi, Dharapuram, Kangeyam, Thirumuruganpoondi, Mayiladuthurai, Vedaranyam, Tiruvarur, Jeyankondam, Perambalur, Rameswaram, Bodinayakanur, Theni-Allinagaram and Tenkasi as per G.O.(Ms) No.57 Municipal Administration and Water Supply Department, Dated 02.05.2023 have been upgraded. The details of the 19 upgraded municipalities are as follows:

Table - 2.3

Sl. No.	Municipalities	Erstwhile status	Upgraded status
1	Thiruverkadu	Selection Grade	Special Grade
2	Villupuram	Selection Grade	Special Grade

3	Mayiladuthurai	Selection Grade	Special Grade
4	Theni-Allinagaram	Selection Grade	Special Grade
5	Poonamallee	First Grade	Selection Grade
6	Tiruvallur	First Grade	Selection Grade
7	Kallakurichi	First Grade	Selection Grade
8	Dharapuram	First Grade	Selection Grade
9	Tiruvarur	First Grade	Selection Grade
10	Perambalur	Second Grade	Selection Grade
11	Bodinayakanur	First Grade	Selection Grade
12	Tenkasi	First Grade	Selection Grade
13	Tiruttani	Second Grade	First Grade
14	Nandhivaram-Guduvancheri	Second Grade	First Grade
15	Kangayam	Second Grade	First Grade
16	Thirumuruganpoondi	Second Grade	First Grade
17	Vedaranyam	Second Grade	First Grade
18	Jeyankondam	Second Grade	First Grade
19	Rameswaram	Second Grade	First Grade

2.1.2 Office building

As per Budget announcement 2022-23, a special fund of Rs.56.00 crore has been allocated to create basic infrastructure in the 28 newly created municipalities at Rs.2.00 crore each.

Based on the announcement, construction of new office building has been sanctioned for 15 municipalities, viz. Sholingur, Musiri, Tharamangalam, Thirumuruganpoondi, Thittakudi, Mangadu, Vadalur, Pallapatti, Tiruchendur, Thirukovilur, Karumathampatti, Nandivaram-Guduvanchery, Ulundurpet, Tirunindravur and Adhirampattinam at an estimated cost of Rs.3.50 crore each and Idanganasalai, Kottakuppam and Gudalur (Coimbatore) Municipalities at a total estimated cost of Rs.9.65 crore.

Construction works have been completed in Ulundurpet, Thirukovilur, Vadalur, Musiri,

Tharamangalam, Sholingur and Thirunindravur municipalities.

In Thirumuruganpoondi, Karumathampatti, Nandivaram-Guduvanchery, Thittakudi, Pallapatti and Tiruchendur Municipalities works are nearing completion.

In Mangadu and Idanganasalai municipalities, nearly 70% of works have been completed and in Gudalur (Coimbatore), Adhirampattinam Municipalities works have been started.

Additional office building

Additional office building work has been sanctioned for Surandai, Kalakadu and Kundrathur municipalities at an estimated cost of Rs.0.50 crore each. In Manamadurai, Ponneri, Karamadai and Pugalur Municipalities, works were taken up at a total estimated cost of Rs.5.14 crore and completed.

Other development works under special fund (2022-23)

Construction of commercial complex has been sanctioned for three newly upgraded municipalities at an estimated cost of Rs.4.58 crore and construction of a Community hall and Wedding hall for two newly upgraded municipalities at an estimated cost of Rs.2.88 crore. Works are in progress.

Construction of Over Head Tank has been sanctioned for two newly upgraded municipalities at an estimated cost of Rs.2.50 crore.

Infrastructure facilities for newly constituted Corporations and Municipalities

6th SFC Grant (2022-23)

Based on the recommendation of the Sixth State Finance Commission, a sum of Rs.60.00 crore has been sanctioned to provide effective service delivery to the newly upgraded urban local bodies, vide G.O.(D).No.130, Municipal

Administration and Water Supply Department,
dated 16.03.2023.

Market, commercial complex and bus stand works have been sanctioned for newly upgraded Municipal Corporations of Cuddalore, Karur, Kancheepuram and Kumbakonam with corporation contribution of Rs.3.00 crore each.

Construction of new office buildings have been sanctioned for 14 newly upgraded municipalities with municipality contribution of Rs.1.50 crore each.

Construction of a commercial complex, community hall has been sanctioned for 4 newly upgraded municipalities at an estimated cost of Rs.4.94 crore and construction of Over Head Tank for 2 newly upgraded municipalities has been sanctioned at an estimated cost of Rs.2.05 crore.

Administrative Sanction accorded for construction of additional office building to Madukkarai municipality at an estimated cost of

Rs.1.50 crore and storm water drains for Pugalur municipality at an estimated cost of Rs.1.50 crore.

6th SFC Grant 2023-24

Based on the recommendation of the Sixth State Finance Commission, a grant of Rs.60.00 crore was sanctioned in the financial year 2023-24 to provide effective service delivery to the newly upgraded municipalities and municipal corporations, vide G.O.(D).No.11, Municipal Administration and Water Supply Department, dated 10.01.2024.

Administrative sanction was accorded for construction of commercial complex in newly upgraded Karur and Kumbakonam Corporations at an estimated cost of Rs.3.31 crore and in 7 newly upgraded Municipalities at an estimated cost of Rs.9.62 crore.

Construction of community hall were sanctioned for 10 newly upgraded Municipalities at an estimated cost of Rs.7.04 crore and

construction of overhead tanks were sanctioned at an estimated cost of Rs.7.38 crore.

Construction of Storm Water Drain were sanctioned for Pallapatti Municipality at an estimated cost of Rs.1.46 crore and works are in progress.

2.2 Infrastructure development

2.2.1 Water supply

Due to the expansion of corporations and municipalities, the number of households and population are increasing and consequently, the demand for drinking water supplied to the public is increasing. The policy of the Government is to provide protected water supply to all in urban area including floating population, by increasing the duration of distribution of drinking water, by integrating drinking water projects which are completed at different timeline and to rejuvenate the existing water supply schemes, identifying new

water source and to complete new water supply schemes in time.

The details of drinking water supply in the Corporations and Municipalities are given in table 2.4 below:

Table 2.4

Urban Local Body	LPCD	No. of ULBs
Corporations	135 and above	5
	110-134	8
	70-109	6
	Below 70	1
Municipalities	135 and above	8
	110-134	22
	70-109	97
	Below 70	11
Total		158

In order to provide 135 LPCD of drinking water in Municipal Corporations and Municipalities where UGSS is operational and 90 LPCD in other

urban local bodies, the following steps have been taken to provide piped water supply connection to every household.

Under AMRUT 2.0, work orders have been awarded for 42 water supply works in 30 Municipalities and 12 Municipal Corporations at an estimated cost of Rs.3,087.87 crore. Work order have been issued for 40 works and are in progress. Tenders have been invited for the remaining 2 works.

Drinking water supply projects to 5 Municipalities have been sanctioned at an estimated cost of Rs.216.66 crore under Kalaingar Nagarpura Mempoattu Thittam and the works are in various stages of progress.

Under the Tamil Nadu Climate Resilient Urban Development Project (TNCRUDP), in 9 corporations and 3 municipalities, water supply projects were sanctioned at an estimated cost of Rs.319.91 crore, tenders were received and are in

scrutiny. Further, under this scheme, for implementation of water supply augmentation works in Avadi and Kancheepuram corporations, tenders received for Rs.374.54 crore and are in scrutiny.

Detailed project reports (DPR) are being prepared to carry out augmentation works for protected drinking water supply to Karur Corporation and Thiruverkadu Municipality at an estimated cost of Rs.223.20 crore under KfW funding.

Rejuvenation of Water Bodies

The details of water bodies located in the Corporations and Municipalities as per the State level survey are given in the following Table 2.5:

Table 2.5

Sl. No.	Urban Local Bodies	Number of Water Bodies
1	Corporations	603
2	Municipalities	1,874
	Total	2,477

Projects are implemented in such a way to improve water storage through works such as prevention of mixing of waste water in water bodies, reconstruction of channels, desilting of water bodies and recycling of used water.

During the years 2021-22, 2022-23 and 2023-24, under Kalaingar Nagarpura Mempattu Thittam, Namakku Naame Thittam Urban, Capital Grant Fund, 15th Finance Commission Grant and Atal Mission for Rejuvenation and Urban Transformation 2.0, 338 number of water body works at an estimated cost of Rs.283.35 crore have been taken up, in which 176 works have been completed and the remaining 162 works are in various stages of progress.

2.2.2 Streetlights

A total number of 8.62 lakh streetlights are maintained in 20 corporations (other than Greater Chennai Corporation) and 138 municipalities.

Further, additional streetlights are being provided wherever required, to meet the norms of one streetlight for every 30 metres. Optimum and efficient utilization of energy is the motto of Government. Considering the LUX value of lamp, the wattage category, safe transportation, minimum maintenance charges and environmental safety, action has been taken to install Energy efficient LED streetlights in ULBs to reduce 33% energy consumption charges.

As per the announcement made in the budget 2021-22, conversion of the existing 3,30,633 number of street lights into energy efficient LED lights at an estimated cost of Rs.374.09 crore and provision of 77,667 number of new street lights at an estimated cost of Rs.118.35 crore was taken up in 16 corporations and 119 municipalities under SUIDF, 15th FC grants.

Further, for providing 33,660 number of new LED lights at an estimated cost of Rs.64.81 crore in 6 Corporations and conversion of 17,704 number of existing street lights into energy efficient LED lights at an estimated cost of Rs.20.41 crore was sanctioned under SUIDF in 10 newly upgraded municipalities. So far 3,81,054 number of energy efficient LED street lights have been installed and the balance works are in progress.

2.2.3 Roads

In Corporations and Municipalities, a total of 31,483 km of roads are being maintained. Funds have been allocated for restoration of roads which had been laid 5 years before, on priority basis, under various schemes. The details of urban roads are given in the following table.

Table 2.6

Sl. No.	Classification of Roads	Total Length (Km)	Percentage (%)
1.	Cement Concrete Roads	6,768	21
2.	BT Roads	20,224	64

3.	WBM Roads	207	1
4.	Earthen roads	2,429	8
5.	Paver block roads, etc.	1,855	6
Total		31,483	100

During the financial years 2021-2022, 2022-2023 and 2023-2024 under various schemes/grants like Kalaignar Nagarpura Membattu Thittam, Capital Grant Fund, Tamil Nadu Sustainable Urban Development Project, State Finance Commission Grant etc., 50,144 road works with a length of 8,752.47 km have been taken up. In which 46,286 number of road works with a length of 8,051.18 km have been completed and remaining 3,858 number of road works for a length of 701.29 km are in progress.

Restoration of Roads

For Municipal Corporations (except GCC) and Municipalities, a sum of Rs.1,000.00 crore has been allocated as special fund for restoration of roads for a length of 11,872 km roads (Financial years 2022-2023 to 2025-2026) under the

Nagarpura Salaigal Membattu Thittam, vide G.O. (Ms) No.423, Municipal Administration and Water Supply Department, dated 19.11.2022. The works are under implementation.

To restore the roads damaged due to underground sewerage projects, water supply improvement works, excessive rainfall and roads laid before 5 years, works have been sanctioned for restoration during the years 2021-22, 2022-23 and 2023-24 and the works are in various stages of progress.

School Improvement Grant

As per the recommendation of the 6th State Finance Commission from the financial year 2022-23, funds have been allocated for the construction of new school buildings, new toilets, repairing dilapidated school buildings and toilets, so as to improve the basic infrastructure in Municipal and Corporation schools. Guidelines have been issued in this regard, vide G.O.(Ms) No.646,

Municipal Administration and Water Supply Department, dated 20.11.2023.

Capital Works

During the financial year 2022-23, construction of 63 new class rooms and toilets for corporation schools at an estimated cost of Rs.30.44 crore and construction of 88 new classrooms and toilets in Municipal schools at an estimated cost of Rs.35.99 crore have been approved and the works are in various stages of progress.

During the financial year 2023-24, construction of 71 new classrooms and toilets in corporation schools at an estimated cost of Rs.34.57 crore and construction of 89 new classrooms and toilets in Municipal schools at an estimated cost of Rs.40.00 crore have been sanctioned and 2 works have been completed, the remaining works are in progress.

Renovation Works

During the financial year 2022-23, renovation of 87 class rooms and toilets in corporation schools at an estimated cost of Rs.18.60 crore and renovation works of 155 classrooms and toilets in municipal schools at an estimated cost of Rs.21.60 crore have been sanctioned. 71 works are completed and other works are in progress.

During the financial year 2023-24, renovation of 139 class rooms and toilets in corporation schools at an estimated cost of Rs.20.46 crore and 155 class rooms and toilets in municipal schools at an estimated cost of Rs.25.40 crore have been sanctioned and the works are in progress.

Flood Mitigation Works

In order to prevent the risk of flooding in Greater Chennai Corporation and Chennai suburbs

and to find a permanent solution to the same, the Government constituted a Flood Management Advisory Committee headed by Dr.V.Thiruppugazh,I.A.S. (Retired), vide G.O. (D) No.362, Municipal Administration and Water Supply Department, dated 22.10.2021. Various levels of consultation meetings were held by the Hon'ble Chief Minister with this committee.

In order to prevent flood damage in suburban areas of Chennai viz., Tambaram Corporation, Avadi Corporation and Mangadu, Kundrathur and Tiruverkadu Municipalities, 21 storm water drains for a length of 30.31 km at an estimated cost of Rs.82.15 crore was taken up and completed, vide G.O.(Ms) No.214, Revenue and Disaster Management Department, dated 17.05.2022.

Further, for a stretch of 69.56 km in Tambaram, Avadi and Cuddalore Corporations, Mangadu, Kundrathur, Nandivaram-Guduvancheri,

Poonamallee, Ponneri and Tiruverkadu Municipalities, 53 stormwater drains have been taken up at an estimated cost of Rs.145.24 crore as per the G.O.(Ms)No.305, Revenue and Disaster Management Department, dated 21.06.2023 and 33 works have been completed, the remaining works are in progress.

In order to prevent floods in Thoothukudi Corporation areas, a detailed project report has been prepared for construction of storm water drainage and the works are taken up in four phases.

The first phase of work has been taken up for a length of 25.386 km at an estimated cost of Rs.230.90 crore under the Tamil Nadu Sustainable Urban Development Project (TNSUDP) and the second and third phase of works for a length of 56.359 km at an estimated cost of Rs.122.86 crore have been taken up under the Smart City mission and completed.

Under the Infrastructure and Amenities (I&A) Fund, 2022-2023, construction of 43.094 km of storm water drains at an estimated cost of Rs.42.55 crore has been sanctioned. Works are completed for 42.036 Km and the balance works nearing completion.

Apart from this, 36.38 km length of storm water drain work at an estimated cost of Rs.82.98 crore sanctioned in four packages under Asian Development Bank funding and 3.7 km length of stormwater drain at an estimated cost of Rs.12 crore sanctioned under State Disaster Mitigation Fund have been taken up during 2023-24 and all works are in progress. Efforts are being taken by this Government to carry out the above works quickly to avoid damages by flood during the next rainy season.

2.2.4. Town Planning

In order to address the needs of common public and to ease the process of building plan approval, the Government has introduced online services for submission of building application by simplifying the process. Submission of documents related to approval of building plans can be uploaded through online. As soon as the building application files are approved, the demand for payment of fees is generated and sent to applicant directly through SMS and e-mail. The applicant is also expected to remit such fee through online mode only. Since, the building plan approval is an end-to-end online service without human intervention, there is no need for the public to visit the offices of Municipality/ Corporation under any circumstances.

A Common Single Window Portal has been developed through TNeGA for issue of planning permission by Directorate of Town and Country

Planning and Chennai Metropolitan Development Authority for construction of buildings, exceeding the powers delegated to the local bodies and subsequently to issue building permits by local bodies through online has been implemented with effect from 21.08.2023.

Through continuous monitoring of this service, delays in issuing building permits are avoided and issue of final orders are ensured within stipulated time.

2.2.5 Other Infrastructure

(i) Modern Bus Stands

The details of 184 bus stands maintained in various Corporations and Municipalities are as follows:

Details of existing bus stands

Table 2.7

Grade	Corporations	Municipalities	Total
A	21	14	35
B	11	42	53
C	5	63	68
D	6	22	28
Total	43	141	184

The Government has taken measures to improve the infrastructure facilities in all the bus stands located in the urban areas, in order to provide all necessary facilities to the passengers.

As per the announcement for the year 2021-22, administrative sanction had been accorded to Tiruchirappalli Corporation for construction of an integrated bus terminal with a commercial hub at an estimated cost of Rs.140.00 crore under the Infrastructure and Amenities Fund, vide G.O.(D) No.497, Municipal Administration and Water Supply Department, dated 28.12.2021 and the work is nearing completion.

Further, administrative sanction has been accorded for construction of modern bus stands to Erode and Karur Municipal Corporations and Namakkal, Thiruthani, Thiruvannamalai, Tindivanam, Mayiladuthurai, Mannargudi, Ranipet, Sankarankovil and Tirumangalam Municipalities

during 2022-23 at a total estimated cost of Rs.266.76 crore, in which an amount of Rs.139.14 crore has been allocated under the Infrastructure and Amenities Fund, vide G.O.(Ms) No.20, Municipal Administration and Water Supply Department, dated 25.01.2022.

Administrative sanction has been accorded for construction of modern bus stands to Tiruppur and Hosur Municipal Corporations and Gudalur (T), Ariyalur, Vadalur, Vedaranyam, Melur, Pattukottai, Colachel and Pollachi municipalities at a total estimated cost of Rs.115.37 crore during the year 2022-23, vide G.O (Ms) No. 173, Municipal Administration and Water Supply Department, dated 18.12.2022 and the works are in progress. Out of the total estimate, an amount of Rs.57.05 crore has been allocated under the Infrastructure and Amenities fund.

Administrative sanction has been accorded for construction of new bus stands to Arcot, Idappadi,

Ramanathapuram, Tiruvallur, Mettur, Chidambaram and Usilampatti Municipalities at an estimated cost of Rs.93.40 crore, vide G.O (Ms) No. 28, Municipal Administration and Water Supply Department, dated 22.02.2023 and the works are in progress. Out of the total estimate, an amount of Rs.46.70 crore has been allocated under the Infrastructure and Amenities fund.

Further, under Kalaignar Nagarpura Mempoattu Thittam (KNMT), 10 works have been completed and remaining 7 works are in progress.

In 2023-24, construction of 8 new bus stands and development of 15 bus stand works are in progress under Kalaignar Nagarpura Mempoattu Thittam and Capital Grants Fund.

(ii) Parks

The Urban Local Bodies maintain parks and playgrounds. Municipal Corporations and Municipalities have a total number of 8,575 playgrounds and parks. The details are as follows:

Table 2.8

Urban Local Bodies	Number of Parks
Corporations	4,337
Municipalities	4,238
Total	8,575

During the years from 2021-22 to 2023-24, 416 number of park development works have been taken up under Kalaingar Nagarpura Mempattu Thittam, Namakku Naame Thittam, Capital Grants Fund, 15th Finance Commission grants and Atal Mission for Rejuvenation and Urban Transformation 2.0 (AMRUT 2.0) at a total estimated cost of Rs.162.96 crore. 296 number of works have been completed and 120 works are in progress.

(iii) Crematorium

To ensure that all the Corporations and Municipalities have modern crematorium facilities, it has been planned to set up at least one modern gas crematorium in each Corporation and Municipality. Accordingly, the details of works

sanctioned for construction of new LPG Gasifier crematorium and modernization of Gasifier crematorium from 2021 to 2024 are as follows:

Table 2.9

Urban Local Bodies	2021-22	2022-23		2023-24		Total	
	New	New	Modern-ization	New	Modern-ization	New	Modern-ization
Corporations	20	2	-	3	8	25	8
Municipalities	32	19	16	16	8	67	24
Total	52	21	16	19	16	92	32

The Government has decided to gradually convert all bio-mass gasifier crematorium into LPG gasifier crematorium /Electrical Crematorium. As per the budget announcement for the years 2021-22, 2022-23 and 2023-24, 92 New LPG gasifier crematorium works at an estimated cost of Rs.144.72 crore and 32 works for modernization of gasifier crematorium at an estimated cost of Rs.12.86 crore are being carried out in the corporations and municipalities under various schemes.

Steps are being taken to establish new crematorium in the Municipalities which do not have crematorium facilities.

(iv) Markets

The role of markets is very essential in selling the goods for the daily needs of the public. Markets are a major contributor to the revenue of Corporations and Municipalities.

Improvement and modernization of daily and weekly markets is essential. As per the Budget Announcements for the year 2021-22, 2022-23 and 2023-24, 67 new markets are being constructed at an estimated cost of Rs.390.43 crore in Municipal Corporations and Municipalities. Development of 32 existing markets at an estimated cost of Rs.135.79 crore has been sanctioned and the works are in various stage of progress.

2.3 Urban Health Infrastructure

15th FC Health Grant

The 15th Finance Commission, in order to strengthen the public health infrastructure and service delivery for rural and urban population, provide component specific grants.

With a focus on comprehensive primary health care, the 15th Finance Commission has sanctioned diagnostic infrastructure in sub centres and urban primary health centres and additional buildings for Government Hospitals in rural areas and for urban PHCs as well. Following works have been sanctioned for the financial years 2021-22, 2022-23 and 2023-24 and are at various stages of progress.

Table 2.10

Sl. No.	Components	No. of works sanctioned	Estimate amount (Rs. in crore)	No. of works Completed	No. of works in Progress
1.	Wellness Centers	507	126.75	476	31
2.	City public Health Lab	28	5.60	26	2

3.	Health Sub Centres and Block Public Health Units	178	54.45	8	170
4	Buildings for Urban Primary Health Centres and Government Hospitals	95	142.00	-	95
	Total	808	328.80	510	298

2.3.1 Sanitation Workers Welfare Scheme

The scheme aims to improve the Socio-Economic Development and livelihood of the sanitation workers as they are fully dedicated in maintaining our health infrastructure and sometimes face unforeseen risk. The Government during the demand of Municipal Administration and Water Supply Department for the year 2022-23 announced the "Sanitation Workers Development Scheme". The Sanitation Workers Development scheme was launched by the Hon'ble Chief Minister on 09.12.2022.

The scheme aims to provide skill development training to the workers and their dependents for their alternative livelihood of all the formal and informal workers working in touch with faecal matters in Urban Local Bodies and also in the private sector and institutions.

The scheme is being implemented with the technical support of Urban Management Centre, Ahmedabad in all the Urban Local Bodies.

As on 31.05.2024, 91,620 sanitation workers have been enumerated and validated.

After the final list is published, the identified sanitary workers will be given appropriate training and all the eligible scheme available in other Government departments will be converged to them.

National Urban Health Mission

The National Urban Health Mission was approved on May 1, 2013 as a sub-mission of the National Health Mission (NHM). It focuses on the

urban poor to meet the health needs of the urban people by providing essential primary health care services at low cost. The NUHM is in operation in state capitals, district headquarters and other cities with a population of 50,000 and above.

Under this mission, during the financial year 2022-23, construction of new buildings for 43 existing urban primary health centres in Municipalities and Corporations has been sanctioned at an estimated cost of Rs. 51.60 crore. For the upgradation of 4 health centers in 2 corporations Rs.2.40 crore has been allocated. 6 works have been completed and other works are in progress.

2.3.2 Underground Sewerage Scheme (UGSS) and Septage management

Out of 20 corporations (except GCC), underground sewerage scheme has been taken up for implementation in 18 corporations. The scheme has been completed in 16 Corporations and put into use. In respect of the Hosur Corporation,

administrative sanction has been accorded at an estimated cost of Rs.582.54 crore. With respect to Sivakasi, FSTP caters to the need and efforts are taken for providing UGSS also.

The Government is committed to provide UGSS in the left out areas of the cities in which UGSS has been already executed. To ensure 100% coverage, projects have been taken up in the added and uncovered areas of 10 Corporations, under AMRUT, Smart Cities Mission with Asian Development Bank assistance. The works are under various stages of implementation.

Status of UGSS in Municipalities

Out of the 138 Municipalities, in 52 Municipalities underground sewerage system has been implemented in certain areas and put into public use. In Rameswaram, Ambur, Tindivanam and Ponneri Municipalities underground sewerage system has been taken up and are in progress. The details are as follows

Table 2.11

Sl. No.	Name of the ULBs	Estimate Amount (Rs. in crore)
1	Rameswaram	52.60
2	Ambur	139.83
3	Tindivanam	268.00
4	Ponneri	54.78

In Mettur Municipality, underground sewerage projects is being carried out at an estimated cost of Rs.10.78 crore for the left out areas and Rs.263.00 crore for the added areas in Villupuram Municipality. At present, tenders are being invited for the implementation of underground sewerage projects under the AMRUT 2.0 and EAP project in the following municipalities.

Table 2.12

Sl. No.	Urban Local Bodies	Estimate Amount (Rs. in crore)
1	Chengalpattu	188.25
2	Trichy - Phase IV	230.61
3	Madurai	471.89
4	Tirunelveli (STP)	93.44

Further, integrated underground sewerage project is to be implemented in Poonamalle, Thiruverkadu, Mangadu Municipalities and in Karur Corporation action is being taken to implement the scheme under SBM 2.0 and EAP.

Table 2.13

Sl. No.	Urban Local Bodies	Estimate Amount (Rs. in crore)
1	Poonamalle, Tiruverkadu, Mangadu Package	972.73
2	Karur	476.12

Apart from this, detailed project report for the implementation of underground sewerage project to the leftout areas in Hosur, Tiruchirappalli and Tirupur Corporations. Further, underground sewerage project has been approved for Mannarkudi, Aruppukkottai, Mayiladuthurai, Maraimalainagar and Palani Municipalities.

In added areas of Coimbatore City Municipal Corporation, the underground sewerage scheme

project is in progress under AMRUT 2.0 and SBM 2.0.

Table 2.14

Sl. No.	Name of the Corporation	Estimate Amount (Rs. in crore)
1	Coimbatore (Newly added areas)	318.90
2	Coimbatore (Ondipudhur left out areas)	185.00

2.4 Modern Libraries (Library cum Knowledge Centres)

In order to improve the skills of students and job aspirants and to enable the public to obtain intellectual information, 100 numbers of Library cum Knowledge centres have been sanctioned in three type designs in urban local bodies at an estimated cost of Rs.198.35 crore under Kalaingar Nagarpura Mempattu Thittam, Capital Grant Fund and Smart City Mission in Corporations (Except GCC), Municipalities and Town Panchayats.

The Knowledge centres develop the knowledge of the public and students by acting as a gateway to access local, national and international information.

In first phase, 71 numbers of Library cum Knowledge Centres were inaugurated by the Hon'ble Chief Minister on 05.01.2024 through video conference. In second phase, 6 numbers of Library cum Knowledge Centres were inaugurated on 24.02.2024. At present, 77 numbers of Library cum Knowledge Centres are functioning effectively and works for balance 23 centres are in progress.

All Library cum Knowledge Centres are equipped with computers with internet access and have training rooms with facilities for efficient training of the students.

In order to fulfil the dream of aspiring students, 2,754 numbers of books from

244 Publishers, which are essential for competitive exams have been provided in the Library cum Knowledge centres as per the recommendation of Department of Public Libraries.

In each centre, to handle the books as in the library department, a retired staff has been employed by way of outsourcing to act as mentor cum librarian.

The books provided in these centres benefit the students aspiring to clear the competitive exams such as Tamil Nadu Public Service Commission (TNPSC), Tamil Nadu Uniformed Service Recruitment Board (TNUSRB) and Union Public Service Commission (UPSC). Further, a committee headed by the District Collector has been formed to monitor the functioning of these centres.

2.5 Flagship Schemes

2.5.1 Kalaingar Nagarpura Mempattu Thittam

The Kalaingar Nagarpura Mempattu Thittam is being implemented to improve the infrastructure of Municipalities and Town Panchayats at an estimated cost of Rs.1,000 crore allocated for each year during 2021-22, 2022-23 and 2023-24. Under this scheme, works such as water supply, street lights, laying of roads/streets and lanes, construction of community halls, markets, modern library cum knowledge centres and other essential infrastructure works like construction of bus stand, improvement to existing bus stands, rejuvenation of water bodies, solid waste management activities, construction and improvement of crematoriums, shandy, community hall, parks and playfields are taken up in municipalities and town panchayats.

The details of works taken up in various Municipalities are as detailed below:

Table 2.15

(Rs. in crore)

Sl. No	Sector	2021-22		2022-23		2023-24	
		No. of Works	Estimate	No. of Works	Estimate	No. of Works	Estimate
1	Library cum Knowledge Centres	25	45.21	34	64.99	10	19.14
2	Markets - New/Improvements	23	103.55	33	183.75	31	142.33
3	New Bus Stand	-	-	-	-	6	53.55
4	Improvement of existing bus stand	-	-	16	31.43	15	80.31
5	Parks	81	45.59	106	36.78	46	19.28
6	Water Bodies	87	98.08	76	37.29	27	18.21
7	Crematorium - New	35	51.83	18	26.27	16	26.98
8	Crematorium - Renovation	-	-	16	5.64	-	-
9	Roads	331	211.35	134	121.37	122	128.23
10	Water Supply	-	-	18	64.12	6	120.91
11	others (Commercial Complex and Vehicle Parking)	-	-	-	-	2	24.79
	Total	582	555.61	451	571.64	281	633.73

In 2021-22, out of 582 sanctioned works, 544 works have been completed and the remaining 38 works are nearing completion. In 2022-23, out of 451 works sanctioned, 315 works have been completed and the remaining 136 works are nearing completion. In 2023-24, out of 281 sanctioned works, 112 works have been completed and the remaining works are in various stages of progress.

2.5.2 Namakku Naame Thittam (Urban)

In order to improve the self-support mechanism of public and to enhance increased public participation in creating and maintaining community infrastructure, the Government has implemented Namakku Naame Thittam (Urban). One third of the estimate amount has been fixed as public contribution and the remaining amount is sanctioned by the Government to implement the works under this scheme.

Under this scheme, for the benefit of the public and to create asset to urban local body, works such as renovation of water bodies, formation and improvement of parks and play grounds, installation of traffic islands, fountains, streetlights and CCTV cameras, planting of trees and installation of tree-guards, construction and renovation of buildings for schools, colleges, hospitals, urban primary health centres, shopping complex and any other building of public benefit, construction of modern libraries / knowledge centres, bridges, culverts, new crematorium and storm water drain, upgradation of earthen /gravel / WBM roads to all Weather Roads and construction / upgradation of community toilets / public toilets and markets are taken up.

Further, the public contribution amount for the SC/ST has been fixed as one fifth of the estimate amount so that the SC/ST people could be more benefitted under this scheme.

An amount of Rs. 150.00 crore for the year 2021-22, Rs. 200.00 crore for the year 2022-23 and Rs. 100.00 crore for the year 2023-24 has been allocated for implementing the scheme.

The details of works sanctioned in Municipalities and Corporations in 2021-22, 2022-23, 2023-24 are as follows:

Table 2.16

(Rs. in crore)

Sl. No	ULB	2021-22		2022-23		2023-24	
		No. of Works	Estimate	No. of Works	Estimate	No. of Works	Estimate
1.	Corporations	240	67.06	323	129.78	239	50.00
2.	Municipalities	686	81.07	577	79.01	222	35.32
	Total	926	148.13	900	286.01	461	85.32

In 2021-22, all the 926 sanctioned works have been completed. In 2022-23, out of 900 sanctioned works, 853 works have been completed and the remaining works are in various stages of progress. In 2023-24, out of 461 sanctioned works,

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

2.5.3 Tamil Nadu Urban Employment Scheme

The Government, in order to provide employment to urban poor by engaging them in the creation and maintenance of public assets like parks, play fields, storm water drains, tree plantation and rejuvenation of water bodies, have launched the Tamil Nadu Urban Employment Scheme (TNUES), on a pilot basis, with an initial budgetary allocation of Rs.75.00 crore for the year 2021-22. An amount of Rs.25.00 crore was earmarked for the year 2022-23. At present, the scheme is being implemented on a pilot basis in 2 zones in Greater Chennai Corporation, 1 zone each in 14 corporations, 7 municipalities and 1 town panchayat each in 37 districts.

The following wage rate is adopted under the scheme.

Table 2.17

ULB	Wage rate (Rs. per day)
GCC, Coimbatore and Avadi Corporations	382
Other Corporations	363
Municipalities	342
Town panchayats	300

Out of 208 works taken up, 76 works have been completed and 2.53 lakh man-days have been generated so far.

2.6 Schemes Under Implementation

2.6.1 Government of India Schemes

(I) Smart Cities Mission

The Smart Cities Mission was launched by Government of India in 2015 with the objective of upgraded sustainable infrastructure, clean and sustainable environment and giving solution for continuous growth and quality life of all citizen in cities. This scheme provides smart solutions for service delivery on sustainable and inclusive growth of cities. An Area of city is selected and the

works implemented in that area will be a replicable model and act as a light house project to other cities.

The 11 cities viz., Chennai, Coimbatore, Madurai, Salem, Thanjavur, Vellore, Thoothukudi, Tirunelveli, Tiruppur, Tiruchirappalli and Erode selected for implementation of smart city projects. Water supply improvement works, under ground sewerage system works, improvised bus stands, rejuvenation of water bodies, solar street lights, improvement of parks are taken up for implementation with an allocation of Rs.1,000 crore for each city in the ratio of 50:50 by Central Government and State Government. Under this mission 682 works have been taken up in 10 Corporations (except Chennai Corporation) at a cost of Rs.9,658.48 crore out of which, 647 works have been completed with an estimated cost of Rs.8,067.29 crore. Other works are in progress at various stages. The project period is extended upto June 2024.

(II) Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

Atal Mission for Rejuvenation and Urban Transformation (AMRUT) is being implemented since 25.06.2015. This mission is being implemented with the financial assistance of Central Government and State Government. In Tamil Nadu, 28 cities viz., Chennai, Coimbatore, Madurai, Tiruchirappalli, Salem, Tirunelveli, Tiruppur, Thoothukudi, Thanjavur, Erode, Dindigul, Vellore, Nagercoil, Avadi and Hosur Corporations and Pallavaram, Tambaram, Cuddalore, Kancheepuram, Tiruvannamalai, Kumbakonam, Rajapalayam, Pudukkottai, Ambur, Karaikudi, Nagapattinam, Rameswaram Municipalities and Velankanni Town Panchayat had been selected for implementation of AMRUT.

Under AMRUT 14 water supply projects, 13 underground sewerage scheme and 358 parks

have been implemented at an estimated cost of Rs.9,977.37 crore.

Out of 385 projects 373 have been completed at an estimated cost of Rs.4,363.93 crore and 12 projects are in progress at various stages.

Tamil Nadu is the pioneer State in implementing all schemes and AMRUT as well.

(III) Atal Mission for Rejuvenation and Urban Transformation (AMRUT 2.0)

With the consideration of need of the AMRUT mission, AMRUT 2.0 has been launched on 01.10.2021. In Tamil Nadu, 21 Corporations (including GCC), 138 Municipalities and 490 Town panchayats are benefitted through AMRUT 2.0. The mission period is 5 years from October 2021. The important components of AMRUT 2.0 are water supply to all house holds, under ground sewerage scheme, septage management, reuse of the used

water through tertiary treatment, rejuvenation of water bodies and green parks development.

The Government of India allocation under AMRUT 2.0 for Tamil Nadu is Rs.2,257.06 crore. The Tamil Nadu Government share for AMRUT 2.0 is Rs.1,545.96 crore and the urban local bodies contribution is Rs.2,852.78 crore.

Totally, 446 projects have been taken up at an estimated cost of Rs.6,655.80 crore. Of these, 42 water supply projects and combined water supply projects at an estimated cost of Rs.3,087.87 crore, 14 underground sewerage projects at an estimated cost of Rs.3,360.65 crore and 186 water bodies improvement at an estimated cost of Rs.131.67 crore and 204 green parks at an estimated cost of Rs.75.59 crore are taken up for implementation.

Out of 446 projects, 228 projects at an estimated cost of Rs.114.43 crore have been completed. Balance projects are in progress at various stages.

iv) Swachh Bharath Mission (U)

The main objectives of the Swachh Bharat Mission (U) are to make all the cities garbage free and open defecation free. Under Swachh Bharat Mission (U), 158 Urban local bodies (20 corporations, 138 municipalities) have been declared as Open Defecation Free (ODF).

Under the Mission, 5,07,143 Individual House Hold Latrines (IHHL) and 22,337 seats of Community toilets and Public Toilets have been constructed so far. For scientific processing of solid waste, purchase of primary collection vehicles such as battery operated vehicles, light commercial vehicles and tipper lorries, construction of micro composting centres, resource recovery centres and other infrastructure works have been taken up and completed facilities are put into use.

Swachh Bharat Mission 2.0

Swachh Bharat Mission 2.0 has been launched on 1st October 2021. The Mission period is 5 years, i.e. upto October 2026.

Objectives of SBM (U) 2.0

- i. To sustain Open Defecation Free status in all statutory towns by ensuring coverage of individual household latrines in all ULBs and to ensure availability of solid waste management facilities for achieving garbage free city status in all ULBs.
- ii. To ensure no untreated faecal sludge or used water is discharged into the environment and all used water (including sewage and septage, grey water and black water) is safely contained, transported and treated, along with maximum reuse of treated used

water, in all cities with less than 1 lakh population.

- iii. To make all cities clean and garbage free, with 100% scientific processing of municipal solid waste through source segregation, effective management of construction and demolition waste, plastic waste management and remediating all legacy wastes in dumpsites.

The Fund Sharing Pattern under the Swachh Bharat Mission (U) 2.0 is as follows:

Table 2.18

City / Town Population	GOI contribution	State contribution	ULB Contribution
More than 10 lakh	25%	16%	59%
10 lakh to 1 lakh	33%	22%	45%
Less than 1 lakh	50%	33%	17%

Sanitation

The ULB wise action plan has been prepared based on the existing and projected 2026 population requirements for sanitation and solid waste management as per the SBM 2.0 guidelines.

IHHL

To sustain the Open Defecation Free status in all statutory towns, 8,854 numbers of Individual House Hold Latrines (IHHL) have been sanctioned during 2021-22, 2022-23 and 2023-2024. Of which, construction of 7,778 numbers have been completed. Remaining 1,076 IHHLs are in various stages of construction.

Community Toilets

Community Toilets are constructed for providing sanitation facilities to the households without land for the construction of IHHL. Under SBM(U) 2.0 in the years 2021-22, 2022-23 and

2023-24, 422 numbers of Community toilets were sanctioned for Rs.74.79 crore, out of which 147 numbers of community toilets have been constructed and put into use. Remaining 275 numbers are in various stages of construction.

Public Toilets

To ensure the citizens' easy access for toilets in public places, public toilets are constructed in all urban local bodies under different schemes. Under SBM(U) 2.0 in the years 2021-22, 2022-23 and 2023-24, 296 public toilets were sanctioned at an estimated cost of Rs.87.09 crore, out of which 111 public toilets have been constructed and put into use. Remaining 185 are in various stages of construction. Urinals were also sanctioned at an estimated cost of Rs.10.88 crore for construction of 801 urinals out of which 360 have been constructed and remaining 441 are in various stages of construction.

Solid Waste Management

Around 7,500 MT of solid waste is being generated in 20 corporations and 138 municipalities. Out of this, nearly 54% is wet waste and 46% is dry waste. Scientific management of solid and liquid waste in an environment friendly manner is important duty of Urban Local Bodies.

100% processing of solid waste generated is ensured through practising source segregation (wet waste, Dry waste, Construction and Demolition waste, E-waste, and other waste) and creation of facilities for scientific processing of waste.

Action is being taken to scientifically process and dispose the legacy waste dumped at various locations in an environment friendly manner through bio-mining. The Government intends to convert the retrieved land as urban green spaces or parks depending on the nature and condition of the land.

Based on the SBM 2.0 guidelines, City Solid Waste Action Plan (CSWAP) has been prepared for all the 158 ULBs and gap has been arrived for the projected waste generation for the year 2026. The State High Powered Committee of SBM (U) 2.0 has approved the City Solid Waste Action Plan to establish 156 Micro Composting Centres, 6 Bio-methanation plants, 7 Bio-CNG plants, 230 manual Material Recovery facilities, 7 fully automatic MRFs, 7 Transfer stations etc for processing of both wet and dry waste.

During the year 2022-23 and 2023-24, 156 Micro Composting Centres were sanctioned at an estimated cost of Rs.81.76 crore, out of which 56 have been constructed, 24 are in various stages of construction and balance 76 are at tender stage.

During the year 2022-23 and 2023-24, 218 Material recovery facilities were sanctioned at an estimated cost of Rs.216.16 crore. 77 have been constructed, 40 are at various stages of construction and 101 are at tender stage.

During the year 2021-22, to process the construction and demolition waste, processing facilities were sanctioned in 6 Corporations viz. Coimbatore, Madurai, Tiruchirappalli, Salem, Thoothukudi and Tiruppur at an estimated cost of Rs.22.50 crore for a total process capacity of 375 TPD.

In order to prevent the dust and air pollution, road sweeping machines have been sanctioned and purchased for 5 corporations viz, Coimbatore, Madurai, Tiruchirappalli, Salem and Thoothukudi and put into use. In 2023-24, 3 road sweeping machines have been sanctioned for Avadi and Thoothukudi Corporations.

Biomining of Legacy Waste

Reclamation of dump yards filled with legacy waste through biomining is under progress in

various ULBs. The total quantity of legacy waste accumulated in 111 ULBs is 106 lakh cu.m.

Under SBM (U), biomining work has been taken up in 18 Corporations and 93 Municipalities to remove legacy waste at an estimated cost of Rs.600.48 crore.

Steps are being taken to complete the bio-mining process in these corporations and municipalities at the earliest. A part of the retrieved land in various cities is being used for setting up solid waste processing facilities, developing parks and Urban green spaces.

During the year 2021-22, 2022-23 and 2023-24, 84 works have been sanctioned at an estimated cost of Rs.257.96 crore under SBM 2.0, out of which 12 works has been completed and 72 works are at various stage.

Urban Forests

56,958 native tree saplings such as Nawal, Nellie, kodukapuli, Badam, Neem, Tamarind and Pungan have been planted at a cost of Rs.1.72 crore in 132.04 acres of retrieved land in 42 urban local bodies to improve the environment. The planted tree saplings are well maintained.

Used Water Management

Under SBM 2.0, 2 Sewage Treatment Plants (STP) with a capacity of 38.44 MLD at an estimated cost of Rs.94.28 crore, 12 Sewage Treatment Plant cum Faecal Sludge Treatment Plant (STP cum FSTP) with capacity of 31.66 MLD at a cost of Rs.114.42 crore and decanting facilities at 21 STPs at a cost of Rs.3.01 crore have been sanctioned and works are in various stages of implementation.

To desludge and transport the faecal matter to treatment plants, 115 cesspool tankers have been sanctioned to the Urban Local Bodies at an estimated cost of Rs.49.73 crore.

People's movement for Clean Cities:

As it is envisaged that the efforts of Government supplemented with large scale participation of citizens will make our cities clean, a campaign by name People's movement for clean cities has been launched by the Hon'ble Chief Minister on 03.06.2022.

The activities are designed under the following 7 major themes. On every second and fourth Saturdays, the activities are undertaken by all Urban Local Bodies.

- (a) Mass Cleaning of Public areas.
- (b) Sensitizing about source segregation
- (c) Cleaning of water bodies/ storm water drains and mass tree planting
- (d) Removal of unauthorized hoardings / boards
- (e) Felicitation of Champion Workers and Volunteers

- (f) Removal of unauthorizedly dumped Construction and Demolition Waste and complete removal of wall posters.
- (g) On every third Wednesday, awareness campaigns are conducted in schools and colleges about solid waste management and sanitation.

So far, 8,43,000 numbers of volunteers have been involved in this movement. 9,454 numbers of elected representatives participated. 3,500 garbage vulnerable points have been cleared and put to alternate use or beautified. 3,200 km length of storm water drain has been desilted during the campaign. 25,000 numbers of cleanliness workers/ volunteers were felicitated.

Branding of Manure – Sezhippu

All the wet waste generated are converted into organic manure in the micro composting centres and on-site composting centres. The manure is scientifically analysed for the Nitrogen,

Phosphorous and Potassium (NPK) contents and presence of heavy metals as per the specifications of Fertilizer Control Order, 1985, to ensure supply of quality manure. The analysed quality manure is sold under the common brand name Sezhippu, to create demand and value among kitchen gardeners and farmers, who are the major consumers.

(v) National Urban Livelihoods Mission (NULM)

Under the National Urban Livelihoods Mission, the components of support to urban street vendors and shelter for the urban homeless are being implemented through the Directorate of Municipal Administration.

Shelter for the Urban Homeless (SUH)

It is the policy of the Government to provide shelter with all basic facilities to the street dwellers in the Corporations and Municipalities. Under this scheme with Government of India contribution, 127 new shelters and 35 old shelters have been

renovated and a total of 162 shelters have been constructed at an estimated cost of Rs.88.42 crore in 20 Corporations and 66 Municipalities and all are functional for the benefit of street dwellers. During 2023-24, construction of 11 new shelters have been sanctioned and work orders have been issued.

Scheme for Urban Street Vendors (SUSV)

For the benefit of the street vendors in the urban local bodies, with Government of India contribution, uniformly designed vending carts have been provided free of cost for selling goods on the streets in Corporations and Municipalities. Sanction has been accorded for procurement of 4,577 vending carts at an estimated cost of Rs.35.28 crore and distributed to the identified street vendors. For the year 2023-24, Rs.1.45 crore has been sanctioned and work orders have been issued for development of vending markets in 10 municipalities.

PMSVANidhi

Eligible street vendors are provided loans with interest subsidy of 7% by banks through Urban Local Bodies. 3,80,095 street vendors have received Rs.377.67 crore as 1st term loan, maximum of Rs.10,000 each. 1,00,304 street vendors have received Rs.199.94 crore as 2nd term loan with a maximum of Rs.20,000 each and 14,644 street vendors have received Rs.71.93 crore as 3rd term loan with a maximum of Rs.50,000 each, since 01.06.2020.

2.6.2 State Schemes

(I) Capital Grant Fund

Based on the recommendation of the Sixth State Finance Commission, from the financial year 2022-23, a capital grant fund of Rs.500 crore has been allocated (31% to the Municipal Corporations, 36% to the Municipalities, and 33% to the Town panchayats) and an additional increase of

Rs.50 crore is being provided annually. This fund is used for the capital works of urban local bodies such as drinking water supply, underground sewerage, construction of bus stands, construction of storm water drains, construction of markets and parks and other basic infrastructure works and services.

Under this fund, Rs.335.00 crore has been allocated for the financial year 2022-2023 and 61 infrastructure works have been sanctioned in Municipalities and Corporations. 11 works have been completed and remaining works are in various stages of progress. For the financial year 2023-2024, a fund of Rs.368.50 crore has been allocated and 62 infrastructure works have been sanctioned. 5 works have been completed and the remaining works are in various stages of progress.

(II) Operation and Maintenance Deficit Grant Fund

Based on the recommendation of the Sixth State Finance Commission, from the financial year 2022-23, Operation and Maintenance Deficit Grant of Rs.200 crore is allocated to Municipal Corporations (31%), Municipalities (36%) and Town Panchayats (33%) and an additional increase of Rs.20 crore is being provided annually. This fund is distributed to urban local bodies for operation and maintenance of basic facilities such as drinking water supply, underground sewers, roads etc., and payment of outstanding water charges and electricity dues of ULBs.

Under this fund, Rs.134.00 crore has been allocated for the financial year 2022-23 and Rs.98.03 crore has been paid as outstanding electricity bill of Corporations and Municipalities and Rs.33.69 crore as outstanding water charges. For other works, Rs.2.28 crore has been

sanctioned. For the financial year 2023-24, a fund of Rs.147.20 crore has been allocated and Rs.25.15 crore has been paid to the Tamil Nadu Water Supply and Drainage Board (TWAD Board) towards dues of the Corporations and Municipalities. Rs.48.92 crore has been dovetailed as Government contribution for various drinking water and underground sewerage projects and Rs.1.96 crore allocated to remit electricity dues of Corporation and Municipalities and Rs.0.79 crore for other works. Also 3 bus stand development works worth Rs.3.76 crore, 1 bridge and road work worth Rs.1.54 crore, 4 underground sewerage project maintenance works worth Rs.19.29 crore, 23 drinking water project works worth Rs.28.70 crore have been sanctioned.

2.7 Externally Aided projects

Tamil Nadu Government is implementing many infrastructure projects through external funding.

2.7.1. Sustainable Municipal Infrastructure Financing – Projects – implemented through the assistance of German Development Bank (Kfw)

35 projects of Road improvement, storm water drains, water supply improvement projects and rejuvenation of water bodies, under ground sewerage schemes have been taken up with the financial assistance of German Development Bank (kfw) in 37 urban local bodies at an estimated cost of Rs.3,062.51 crore. Out of these 35 projects, 34 have been completed at an estimated cost of Rs.2,832.51 crore. Government is expediting implementation of projects and all projects will be completed and put into usage of public at the earliest.

Under the Sustainable Municipal Infrastructure Financing in Tamil Nadu phase III (SMIF – TN – III), funding for 19 sub-projects to the tune of Rs.2,760 crore has been approved.

Under the German Development Bank financial assistance, 16 underground sewerage scheme, 2 water supply improvement projects have been implemented in 15 urban local bodies (total of 18 works). All the above projects are in progress at various stages. Government is expediting the project implementation and all the projects will be completed at the earliest and put into public usage.

2.7.2 Tamil Nadu Sustainable Urban Development Project (TNSUDP)

The World Bank assisted Tamil Nadu Sustainable Urban Development Project (TNSUDP) is being implemented at a cost of Rs.3,831 crore.

The project consists of 3 components. Of the above three components, the urban governance (model city) component and urban sector technical assistance component are being implemented by the Directorate of Municipal Administration. The investment in urban service component is being

implemented through Tamil Nadu urban Infrastructure and Financial service Limited.

(i) Result based grants for Urban Governance Component

The main objective of this component is to demonstrate effective models of urban management.

Erode, Vellore and Hosur municipal corporations were selected as model cities under this component. These model cities are envisaged to become role models for ULBs across Tamil Nadu in terms of urban management and governance. A sum of Rs.383.10 crore was earmarked for the entire project period of 7 years to improve urban management practices in these cities. A sum of Rs.356.48 crore has been released to 3 corporations towards their achievements upto 2021-2022.

(ii) Urban sector technical assistance component

a) e-Governance in Urban Local Bodies

A centralized Web Based software “Urban Tree Information System (UTIS)” has been implemented at a cost of Rs.18.31 crore in 20 Municipal Corporations and 138 Municipalities for handling day-to-day activities of Municipal Administration.

b) Online Revenue Monitoring System (Revenue Dashboard)

Urban local bodies are providing various infrastructure and basic amenities to the citizens using various scheme fund and ULBs’ own fund. Tax revenue plays an important role in ULBs’ revenue generation. Revenue Dashboard (<http://tnurbanepay.tn.gov.in/revenue>) is designed and implemented in Urban Tree Information System (UTIS) software for monitoring the collection of tax revenue and other related activities of all Corporations and Municipalities in real time.

c) Integration of UTIS with CM Dashboard

The progress of scheme works taken up in all Corporations/Municipalities are monitored in real time through a dedicated 'Scheme Dashboard' in Urban Tree Information System (UTIS) software. The Progress of scheme works updated by Corporations and Municipalities in UTIS is now automatically updated in Hon'ble Chief Minister's Dashboard on daily basis.

d) Incentive for advance payment of Property Tax

To encourage the tax payers to pay the property tax in time, Government have announced an incentive of 5% of property tax or a maximum of Rs.5,000 which is to be offered by all Corporations and Municipalities for those who are paying property tax within 30 days from the commencement of the Half Year. Necessary provision is enabled in Urban Tree Information System Software from 24.04.2023 and incentive

provision is implemented in all Corporations and Municipalities.

e) Implementation of Common Seniority Module for Employees

A new module viz. "Employee Service Particulars" is enabled in Urban Tree Information System (UTIS) software. This module is used to prepare the common seniority for all the Urban Local Body employees based on Tamil Nadu Urban Local Bodies Rules, 2023. Using this module, employee service particulars of all Corporations, Municipalities and Greater Chennai Corporation have been captured in UTIS Software.

Tamil Nadu Climate Resilient Urban Development Project (TNCRUDP)

In Continuation to Tamil Nadu Sustainable Urban Development Project, with the financial assistance of World Bank, the Tamil Nadu Climate Resilient Urban Development Project has been sanctioned. The total outlay for TNCRUDP is

Rs.3,838.65 crore. This project is being implemented from 2024-25 to 2029-30.

Under TNCRUDP, underground sewerage scheme and water supply projects have been taken up in 12 corporations and 9 municipalities. The list of projects are tabulated below:

Table 2.19

Sl. No.	Name of the Corporation / Municipality	Project Details	Estimate Cost (Rs. in crore)
1.	Avadi	Water Supply improvement works	59.92
		Underground sewerage scheme extension works	98.59
2.	Tambaram	24/7 Water Supply project	20.29
3.	Kancheepuram	Water Supply improvement works	331.88
		Underground Sewerage Scheme	340.15
4.	Cuddalore	24/7 Water Supply project	28.67
		Underground sewerage scheme	173.39
5.	Erode	24/7 Water Supply project	21.93
6.	Salem	Underground sewerage scheme	557.65
7.	Tiruchirappalli	24/7 Water Supply project	38.49
8..	Vellore	24/7 Water Supply project	13.69
9.	Thoothukudi	24/7 Water Supply project	16.06
		Underground sewerage scheme	153.29
10.	Tirunelveli	24/7 Water Supply project	28.25
11.	Nagercoil	24/7 Water Supply project	64.68
12.	Dindigul	24/7 Water Supply project	09.67

		Underground sewerage scheme	171.23
13.	Namakkal	Underground sewerage scheme	211.83
14.	Krishnagiri	Underground sewerage scheme	49.86
15.	Pudukkottai	24/7 Water Supply project	25.31
		Underground sewerage scheme	101.34
16.	Karaikudi	24/7 Water Supply project	25.02
		Underground sewerage scheme	35.03
17.	Tiruvannamalai	Underground sewerage scheme	105.82
18.	Theni	Underground sewerage scheme	67.76
19.	Dharmapuri	Underground sewerage scheme	71.71
20	Rajapalayam	24/7 Water Supply project	27.85
21.	Tiruvarur	Underground sewerage scheme	29.46

2.8 Financial Management

2.8.1 Sixth State Finance Commission

Based on the 6th state finance commission recommendation, orders have been issued in G.O.(Ms)No.60, Finance Department, dated 28.2.2023, to devolve 10% of the state own tax revenue to the urban local bodies and sharing ratio between urban and rural local bodies is to be 49:51.

16% of the grants for urban local bodies should be devolved to Greater Chennai. (Greater Chennai Corporation and Chennai Metropolitan Water Supply and Sewerage Board)

84% of the state finance commission devolution grants for urban local bodies is allocated in the ratio of 31:36:33 among corporations (except Greater Chennai Corporation), municipalities and town panchayats.

As per the 6th state finance commission recommendations, the following criteria and weightages are adopted for sharing of state finance commission devolution to urban local bodies.

Table 2.20

CORPORATIONS (31%)			MUNICIPALITIES (36%)	
a)	Population as per 2011 Census	65%	Population as per 2011 Census	60%
b)	Area	15%	Area	20%
c)	Slum Population	20%	Slum Population	20%

6th State Finance Commission Special Grants for the year 2022-23 and 2023-24

Table 2.21

Sl. No.	Schemes	Amount 2022-23 (Rs. in crore)	Amount 2023-24 (Rs. in crore)
1.	Grants to Sanitary Workers Welfare Board	10.00	10.00
2.	Advance Library Cess	60.00	66.00
3.	Advance Cess to Public Library	90.00	99.00
4.	Grants for GIS Mapping	10.00	10.00
5.	Grants for Study and Documentation	5.00	5.00
6.	Grants to TNIUS for Training needs	5.00	5.00
7.	Tourism Grants		
	a. Fixed Grants	15.00	15.00
	b. Variable Grants	5.00	5.00
8.	School Improvement Grant		
	a. Infrastructure	100.00	110.00
	b. O&M	60.00	66.00
9.	Urban Road Development Fund	200.00	220.00
10.	Grants to newly upgraded Local Bodies	60.00	60.00

The details of allocation of the release of grants to the municipal corporations and municipalities, as per the recommendations of the 6th State Finance Commission are given below:

Table 2.22

(Rs. in crore)

Classification	2022-23		2023-24	
	Allocation	Released	Allocation	Released
Corporations				
SFC grant	1,432.80	1,432.80	1,586.37	1,586.37
CGF	155.00	155.00	170.50	170.50
O&M Gap Filling fund	62.00	62.00	68.20	68.20
Municipalities	Allocation	Released	Allocation	Released
SFC grant	1,663.89	1,663.89	1,842.23	1,842.23
CGF	180.00	180.00	198.00	198.00
O&M Gap Filling fund	72.00	72.00	79.20	79.20

2.8.2 15th Finance Commission

In order to make recommendations for devolution of central taxes to State Governments and local bodies, the 15th Finance Commission was constituted under Article 280 of the Constitution of

India. The 15th Finance Commission's recommendation period is from 2020-21 to 2025-26.

The 15th Finance Commission has divided ULBs into two categories viz., Million Plus Cities and Non-Million Plus Cities. The Greater Chennai Corporation, Coimbatore, Madurai and Tiruchirappalli Corporations are under the category of Million Plus Cities and other Corporations, all Municipalities, Town panchayats and Cantonment Boards, namely, Wellington and St.Thomas Mount are under the category of Non-Million Plus Cities.

On the basis of 15th Finance Commission recommendations, the Union Government is providing tied and untied grants to Non-Million Plus ULBs. For Million Plus Cities, solid waste management grant and Ambient air quality grant are provided. The 15th Finance Commission has recommended grants on the basis of population to Cantonment boards also.

Million Plus Cities

Under solid waste management grant in the financial year 2022-23, 46 works have been taken up at an estimated cost of Rs.124.00 crore (except GCC).

In the financial year 2022-23, under Ambient Air quality grant, 31 works have been taken up at an estimated cost of Rs.27.00 crore (except GCC).

In 2023-24, under the solid waste management component, the eligible works like water bodies rejuvenation, waste water treatment, water supply, procurement of vehicles, solid waste management works through outsourcing and other works have been taken up. Under Ambient Air Quality grant, laying of end to end roads and other works have been taken up at an estimated cost of Rs.24.75 crore.

Non-Million Plus Cities:

During the year 2022-23, under Tied grant, 662 works have been taken up at an estimated cost of Rs.386.31 crore, 584 works have been completed and the remaining works are nearing completion.

Under Untied Grant component, 755 works have been taken up at an estimated cost of Rs.260.07 crore, 692 works have been completed and the remaining works are nearing completion.

In 2023-24, under Tied Grant, 216 works have been taken up at an estimated cost of Rs.129.00 crore and all works are in progress.

Under untied grant component for the year 2023-24, 279 works have been taken up at an estimated cost of Rs.235.00 crore and the works are in progress.

2.9 Tamil Nadu Institute of Urban Studies, Coimbatore

The Tamil Nadu Institute of Urban Studies (TNIUS), Coimbatore was established in 1981, with a view to achieve greater efficiency in the functioning of the administration of urban local bodies. The following are the objectives of the Institute:

- i. To create awareness on latest management techniques in various branches of municipal administration.
- ii. To disseminate knowledge on urban issues 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.
- iv. To assist in the development of urban infrastructure.

- v. The annual contributions collected from the municipal corporations, municipalities and town panchayats constitute a major source of revenue for the operations of TNIUS.

2.10. Chief Minister's Breakfast scheme

The morning breakfast scheme, a flagship program was launched on 15.09.2022 by the Hon'ble Chief Minister in Madurai Corporation and it was implemented in 15 Corporations and 23 Municipalities. It was expanded to the remaining 5 Corporations, 115 Municipalities and 62 Town Panchayats on 25.08.2023. This scheme has been launched to provide morning breakfast to students from 1st to 5th Standard.

At present, 220 Local Bodies (Municipalities, Corporations and Town Panchayats) are implementing the Chief Minister's breakfast scheme in 2,256 schools for 2,48,041 students. The financial allocation is Rs.65.26 crore and the

activities of the scheme are monitored through an mobile application.

Table 2.23

Scheme Activity

Total No of ULBs	Total No of Common kitchens	G.O.(Ms)No.33, Dated: 07.06.2023					
		No of Schools in Corporations & Municipalities	No of Students in Corporations & Municipalities	No of Schools in Town panchayats	No of Students in Town Panchayats	Total No of Schools	Total No of Students
220	163	2039	2,30,604	217	17,437	2256	2,48,041

Due to the implementation of the scheme, the attendance of students in all schools has increased which in turn resulted in increase in literacy percentage of poor students. The success of Hon'ble Chief Minister's breakfast scheme also resulted in showing interest to implement the scheme by other states. This scheme has been recently implemented in the State of Telangana.

By 5.00 am the food preparation begins in Common kitchens. The preparation of food is completed by 6.30 am. The cooked food is filled in covered hot box and then safely sent to schools.

Food vehicles will depart from kitchen by 7.00 a.m. and the hot boxes are handed over to school in-charge by 8.30 a.m. Food is distributed to students before 9.00 a.m. daily.

2.11 Financial Position of Corporations and Municipalities

The abstract of Income and Expenditure of Corporations and Municipalities is given in the tables 2.24 and 2.25

Table 2.24

		Revenue			(Rs. in Crore)		
Sl.No.	Description	Corporations			Municipalities		
		2021 - 22	2022- 23	2023- 24	2021 - 22	2022- 23	2023- 24
Income							
1	Tax Revenue	714.92	1,147.62	2,154.15	414.11	612.08	793.78
2	Non-Tax Revenue	458.71	534.00	673.80	229.73	315.00	248.61
3	Assigned Revenue	102.99	322.65	204.05	138.78	185.00	105.76
4	SFC/CFC Grants	1,122.20	2,237.80	2,031.23	1,140.81	1,932.14	1,493.03
Total Revenue Receipts (A)		2,398.91	4,242.07	5,063.59	1,923.43	3,044.22	2,575.23
Expenditure							
1	Establishment, Administrative Operation & Maintenance expenses	2,584.11	3,968.13	4,503.72	2,137.00	2,859.00	2,222.13
Total		2,584.11	3,968.13	4,503.72	2,137.00	2,859.00	2,222.13
Surplus / Deficit		-185.20	273.94	559.87	-213.57	185.22	353.10

Table 2.25

		Capital			(Rs. in crore)		
Sl. No.	Description	Corporations			Municipalities		
		2021 -22	2022-23	2023-24	2021 -22	2022-23	2023-24
1.	Capital Income	2,275.75	2,440.31	3,817.72	714.93	1,123.00	2,178.33
2.	Capital Expenditure	2,235.94	3,248.24	4,853.48	1,050.57	1,848.48	2,084.16

2.12 Corporations under the Administrative purview of Directorate of Municipal Administration

I. Madurai Corporation

Madurai Corporation was constituted on 01.05.1971 and the extent of the Corporation is 147.99 sq.km. As per 2011 census, the population was 15,73,616 and current population is 20,31,266 approximately. The corporation has 100 wards. For administrative convenience, the corporation area is divided into 5 Zones. The average annual income of the Corporation including tax, non-tax revenue and Central / State Government grants is Rs.1,147.40 crore.

Water Supply

Main water source of Madurai Corporation is Vaigai-I, Vaigai-II, Cauvery River and total available source of water is 159.15 million litre. The total water requirement of the city is 317.00 million litre and the total water supply per day is 159.15 million litre. Out of 3.01 lakh houses, 1.66 lakh houses have been provided with drinking water connection. The drinking water supply of the city will be 317.00 million litre on completion of Mullai Periyar Lower Camp drinking water Project.

Underground Sewerage System

The City has 2 sewerage treatment plants with a total capacity of 170.70 million litre. Daily generation of sewage is 25 million litre which is treated and discharged into the land for grass cultivation. So far, 1.67 lakh underground sewerage connections have been provided out of 3.01 lakh houses. Out of 100 wards, 67 wards have underground sewerage facilities. Underground sewerage works is being carried out in the

remaining 33 wards. A detailed project report has been prepared for implementation of underground sewerage project in the left out areas of North Vaigai river and South Vaigai river at an estimated cost of Rs.471.89 crore. Also, a detailed project report is being prepared for the rehabilitation of the old sewerage scheme.

Solid Waste Management

The total solid waste generated in the city is 750 to 800 metric ton per day. Wet waste accounts for 60 percent and is processed in 38 Micro Composting Centres. The city has 1 Resource Recovery Centre for processing dry waste.

Roads

The city has a total of 1,686.20 km roads. Road improvement works are carried out in the damaged roads. Road works to a length of 346.62 km were carried out during 2021-22 and 2022-23. For the year 2023-24, 273.80 km of road development / rehabilitation works have been taken up and are in progress.

Street Lights

The total number of street lights in the city is 57,877. Proposed new street lights are 2,882 and conversion of 7,447 existing street lights into LED lights have been taken up for implementation in the year 2023-24.

The main sources of finance of the Corporation

The total own Revenue of the Corporation is Rs.577.40 crore and the collectable taxes such as property tax – Rs.307.01 crore, vacant land tax - Rs.67.43 crore, profession tax – Rs.46.50 crore, water charges - Rs.36.05 crore and non-tax income of Rs.120.41 crore are the primary sources of income.

Table 2.26

Ongoing Projects

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
1	SBM 2.0 & 15 th FC	Implementation of biominning phase II process for disposal of existing legacy waste at vellaikkal	34.95

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
2	I&A 2022-23	ECO – Restoration/ Rejuvenation and beautification of Vandiyur Tank	50.00
3	I&A 2022-23	Construction of Onion Market at Mattuthavani Vegetable Market in Ward No.33	10.30
4	CGF 2022-23	Improvement Works to Thayir market at East marret Street in Ward No.49	1.53
		Reconstruction Of vegetable shops market at Subramaniyapuram in Ward No.77	1.99
		Special Improvement Works at Arapalayam Bus Stand in Ward No.58	1.07
		Rehabilitation of the Dr.M.G.R Bus stand Building and Omni bus stand at Mattuthavani, Ward No. 33.	1.81
		Proposed New Construction of Gasifier Crematorium Building, Modern Toilet Building with Compound Wall at Melamadai Burial Ground in Ward No.36.	2.00
5	CGF 2023-24	Development Works of Race Course Road in Ward No.31	6.30
		Providing New HT & LT Electrical Panel with all Cable Work for Periyar Shopping Complex at zone 3	9.12
		Revamping of existing underground drainage line at karumbalai area, ward No. 31, K.K.Nagar pumping lines in ward No.33, SMP colony area in ward No.34, Zone 2.	5.80

Table 2.27

New Projects	
Sl. No.	Name of the Work
1	Rehabilitation of underground sewers in the old 72 ward areas. A survey is being carried out by M/s. Tata Consultancy for these works
2	Construction of new storm water drain in all the 5 zones of Madurai Corporation. Survey works being carried out by the M/s. Aarvee Associates.
3	Construction, Financing, Commissioning and Development of 250 TPD Building waste removal for 20 years under PPP mode.

New Projects to be implemented			
Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
1	AMRUT 2.0	Construction and Operation and maintenance for 5 years of underground sewerage system to leftout areas and added areas in Madurai Corporation, North of river Vaigai	179.09
2	AMRUT 2.0	Construction and operation & maintenance for 5 years of underground sewerage system to leftout areas and added areas in Madurai Corporation, South of River Vaigai.	292.80

II. Coimbatore Corporation

Coimbatore Corporation was constituted on 01.05.1981. The present area of the Corporation is 257.04 sq. km. The population as per 2011 census was 16,04,925 and the present population is

22,88,052. There are 100 wards in the Corporation. For administrative convenience, the Corporation area is divided into 5 zones. The average annual income of the Corporation including tax, non-tax revenue and Central / State Government grants is Rs.2,523.84 crore.

Water Supply

Drinking water schemes have been designed to draw 447.75 million litres of water daily from the Siruvani, Pillur- 1, Pillur 2, Aliyar and Bhavani rivers, which are the city's main water sources. The total drinking water requirement of the city is 308.88 million litres per day and the average water intake per day is 248.03 million litres. A total of 3,09,685 houses have been provided with drinking water connections. After the completion of the Pillur-III drinking water project which is currently being implemented, the daily supply of drinking water to the corporation will be increased

to 447.75 million litres and the drinking water requirements will be achieved.

Underground Sewerage Scheme

The city operates 4 waste water treatment plants with a combined capacity of 200.53 million litre. So far, the Corporation has 1,06,457 sewerage connections. Out of the 100 wards, 38 wards have sewerage facilities. Underground sewer infrastructure construction is underway in 47 wards.

Solid Waste Management

The city generates 950 to 1100 metric ton of solid waste every day. Wet waste accounts for 605 metric ton, while dry waste accounts for the remaining quantity. Wet waste is processed at 22 Micro Processing Centers. There are 19 Resource Recovery Centers which are handling dry waste.

Roads

The Corporation maintains a total of 3,212 km of roads. 278.12 km. 1,636 number of road works at a cost of Rs.142.76 crore have been taken up under TURIP, NSMT and SFC grants and completed between 2021-22 and 2022-23. In addition, 2,108 number of road works for a length of 334.46 km at a cost of Rs.138.54 crore were taken up under TURIP, NSMT and SFC grants and completed during 2023-24.

Street Lights

The Corporation maintains 95,423 street lights in the city. In addition to that in the year 2023-24, provision of 8,759 new LED street lights [7,701 No. of LED lights under State Urban Infrastructure Development Fund and 1,058 No. of LED lights under general Funds] has been taken up and completed.

The main sources of finance of the Corporation

The total own revenue of the corporation is Rs.1,324.79 crore and the collectable taxes such as property tax - Rs 403.31 crore, vacant land tax- Rs.43.32 crore, profession tax-Rs.45.38 crore, water charges-Rs.126.82 crore, non-tax income - Rs.705.96 crore are the primary sources of income.

Table 2.28

Ongoing Projects

Sl. No	Name of the Scheme	Name of works	Estimate Cost (Rs. in crore)
1.	15 th FC Grant 2023 -2024	11 Nos of Urban Sub-Health Centers	3.30
2.	15 th FC Grant 2023 -24	4 Nos of Urban Sub-Health Centers	4.80
3.	Urban Homeless Shelter (2023- 24)	3 Nos of Urban Homeless Shelter	5.00
4.	AMRUT 2.0 2023- 24	Providing a sewerage system to the left-out areas in Ondipudur region	1.85
5.	AMRUT 2.0 2023- 24	Underground sewerage project in Chinnavedampatti, Saravanampatti and Vellakinar sectors	3.18

6.	AMRUT 2.0 2023- 24	Reconstruction of Chinnavedampatti pond in Ward No.12 Reconstruction work of Urumandampalayam. Water body in Ward No.14 Reconstruction of Narasimpathi Lake in S.F. No. 322 in Ward No.74 for strengthening the lake's bund as well as the construction of footpath and Lighting facilities.	2.66
7.	Semmozhi Poonga	Construction of a park on an area of 45.00 acres in the first phase to benefit the students for education, research, environmental management and for the benefit of public, children for better entertainment in order to drum up the Universal Tamil Classical Conference.	167.25

Table 2.29

New projects to be implemented

Sl. No.	Name of the Scheme	Name of works	Estimate Cost (Rs. in crore)
1.	SBM 2.0	Land reclamation work by biomining process:7,43,287 metric tons of legacy waste Land reclamation work (biomining process) at the Vellalore compost facility will be safely treated	58.54
2.	SBM 2.0	Construction of a 250 TPD Bio Gas Plant (Bio CNG)	68.79
3.	SBM 2.0	Garbage Transfer Stations at Kavundampalayam, Peelamedu and Ukkadam	27.00

Table 2.30**New projects**

Sl. No.	Name of the works
1.	The Hon'ble Chief Minister announced on 14.03.2024 that the bus stand, which was dismantled during the flyover construction near Ukkadam Bus Stand, will be rebuilt with a modernized bus stand at a cost of Rs.20.00 crore.
2.	The Hon'ble Chief Minister announced on 14.03.2024 that construction of a hockey Sports Ground will be taken up at an estimated cost of Rs.10.00 crore in R.S.Puram Municipal Corporation High School Campus.

III. Tiruchirappalli City Corporation

Tiruchirappalli City Corporation was constituted on 01.06.1994 and the extent of the Corporation as on date is 167.23 sq.km. The population as per 2011 census was 9,15,569 and present population is around 10,81,234. There are 65 wards in the Corporation and divided into 5 Zones for administrative purposes. The average annual income of the corporation including tax, non-tax revenue and Central/State Government grants is Rs.1,023.15 crore.

Water Supply

156 million litre of water is being drawn through 8 Corporation owned water sources and 3 sources of TWAD Board. Total water requirement of the City is 146 million litre and 146 million litre is being distributed to 1,20,541 households out of the total 2,73,538 households in the city.

Underground Sewerage Scheme

The corporation has a sewage treatment plant with the capacity to treat 58.64 million litre of sewage. 55 million litre is being treated daily and the treated sewage is being let into the nearby Korayar channel. Underground drainage house service connections have been provided to 67,033 households, out of the total 2,73,538 households in the city. 15 out of 65 wards have been fully covered with UGSS. UGSS is being implemented in 49 wards under AMRUT 2.0. Moreover, UGSS will be implemented in 8 wards fully under AMRUT 2.0 and tenders have been called for the same.

Solid Waste Management

The Corporation generates 470 to 500 metric tons of garbage, daily. Out of which, 280 metric ton is wet waste and the remaining is dry waste. There are 40 Micro Compost Centers to handle the wet waste and 5 Resource Recovery Centers to handle the dry waste in the Corporation.

Roads

The Corporation maintains a total of 1,352.811 km of roads running across the city. Out of this, 447.91 km of roads were laid between 2021-22 and 2022-23, 350.67 km were laid during 2023-24 and 152.78 km of roads will be laid during 2024-25.

Street Lights

There are 44,170 street lights giving luminance to the city. Provision for 6,264 LED street lights has been taken up during the year 2023-24.

The main sources of finance of the Corporation

The total own revenue of the Corporation is Rs.396.28 crore. The collectable taxes such as, property tax - Rs.116.00 crore, vacant land tax - Rs.7.00 crore, profession tax - Rs.18.00 crore, water supply charges - Rs.32.00 crore and non-tax revenue - Rs.223.28 crore are the primary sources of income.

Table 2.31

Ongoing Projects

Sl. No.	Name of the Scheme	Name of Work	Estimate Cost (Rs.in crore)
1	AMRUT Phase II 2016-17	Providing UGSS to added areas - Phase II (284.464 km)	377.29
2	AMRUT Phase III 2017-2018	Providing UGSS to added areas - Phase III (292.90 km)	335.07
3		Revamping of existing Sewerage network in the ABD area in Block 1, 2 & 2A - Package 1A	70.76
4		Revamping of existing Sewerage network in the ABD area in Block 3 & 4 - Package 1B	62.03

Sl. No.	Name of the Scheme	Name of Work	Estimate Cost (Rs.in crore)
5	Smart City 2016-2024	Revamping of existing Sewerage network in the ABD area in Block 5 & 6 - Package 1C	77.51
6		Water Supply Source Augmentation - Providing Radial Arms, Motor pump set and diesel generators at collector well, main pumping station in ABD area - Package 1	9.33
7		Water Supply Source Augmentation - Laying of pumping main from pumping station to ABD area reservoirs 17.50 km in TCC- Package 3	22.49
8	I&A Fund 2022-2023	Package - 1- Construction of Integrated Bus Terminal and Multi Utility Facilities Centre at Panjappur.	243.78
9		Package - 2- Construction of Truck Terminal and Roads and other Infrastructure at Panjappur.	106.20
10		Construction of Railway Over Bridge near Marris Theatre.	34.10
11	Capital Grant Fund 2022-23	Construction of Bus Stand at Srirangam.	11.10
12	AMRUT 2.0 2023-24	Construction of Sewage Treatment Plant with the capacity to treat 100 MLD in Panjappur.	226.35

Table 2.32**New projects to be implemented**

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
1	AMRUT 2.0	Providing UGSS to the left out areas	230.61
2	AMRUT 2.0	Providing water supply on "24 x 7" model on pilot basis in Ward Nos.51, 52, 53, 54, 55 and 56 by laying water supply pipeline distribution works.	38.49
3	SBM 2.0 2023-24	Establishing a Bio-CNG plant to treat 100 MT Solid wastes through bio-digestion process.	30.78

Table 2.33**New projects**

Sl. No.	Name of the Work	Estimate Amount (Rs. in crore)
1	Providing ring road from Panjappur to Konakkarai Karur bypass road, by laying road in the eastern bank of Uyyakondan channel and Konakkarai	350.50
2	Construction of Integrated Market complex in Panjappur	161.70

IV. Tirunelveli Corporation

Tirunelveli Corporation was constituted on 01.06.1994. The population as per 2011 census was 4,74,838 and the present population is around

5,54,522. The Corporation consists of 55 wards with an extent of 108.65 sq.km and divided into 4 zones for administrative convenience. The average annual income of the Corporation including tax, non-tax revenue and Central/ State Government grants is Rs.247.58 crore.

Water Supply

48 million litre water is supplied from 15 head works and an additional 25 million litre water is drawn from Ariyanayagipuram water supply scheme. Total requirement of water for the city is 72.90 million litre and daily supply of water is 73.00 million litre. 85,609 House Service connections are provided out of 1,69,453 households.

Underground Sewerage Scheme

In Tirunelveli Corporation, a sewerage treatment plant with a capacity of 24.2 million litre is available in which 12.00 million litre sewage water is treated. 27,212 House Service

Connections have been provided out of 1,69,453 households. Out of 55 Wards, underground drainage facility is fully provided in 10 Wards. Further, underground drainage construction work is in progress in wards 1 to 37, 39 to 55 and 38, partly.

Solid Waste Management

200 to 230 metric ton of solid waste is generated in the Corporation limits, out of which 133 metric ton is wet waste and the remaining is dry waste. 133 metric ton wet waste is processed through 47 micro compost centres and 4 resource recovery centres are there for handling dry waste.

Roads

The Corporation has a total of 935.66 km of roads, out of which 807.53 km length are corporation roads and 112.65 km length are State Highways roads.

In the year 2022-23, roads were laid for a length of 93.99 km. In the year 2023-24, roads were laid for a length of 87.57 km. In the year 2024-25, roads are proposed to be laid for a length of 72.71 km.

Street Lights

31,214 street lights are maintained by Tirunelveli City Municipal Corporation. In the year 2023-24, provision of 1,968 new LED Street lights has been taken up.

The main sources of finance of the Corporation

The total own revenue of the Corporation is Rs.192.22 crore. The collectable taxes such as property tax - Rs.89.95 crore, vacant land tax- Rs.18.69 crore, profession tax – Rs.14.92 crore, water tax – Rs.28.92 crore, non-tax income – Rs.20.70 crore and solid waste management charges – Rs.19.04 crore are the primary sources of income.

Table 2.34**Ongoing projects**

Sl. No	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	15 th FC grant (2021-22)	26 No. of water supply works, 3 Nos. of LPG crematorium, 2 Nos. of Drainage works, 1 No. of compound wall, 9 Nos. of Solid Waste Management and 4 Nos. of BT roads	42.70
2	AMRUT 2016 - 17	Underground Drainage, Phase II and Phase III	960.03
3	National Urban Health Mission 2023 - 24	2 Nos. of Urban Primary Health Centre and 5 Nos. of Urban Health Sub Centre	3.90

Table 2.35**New project to be implemented**

Sl. No	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	15 th FC Untied Grant 2023 -24	Providing 84 Nos. of Road Works	7.92

Table 2.36**New projects**

Sl. No	Name of the Work
1	An amount of Rs.28.25 crore has been sanctioned for the project of Providing 24 x7 Water supply.
2	An amount of Rs.91.91 crore has been sanctioned for the project on construction of sewage treatment plant of 58.00 million litre capacity in Ramayanpatti manure centre, under KfW financial assistance

V. Salem Corporation

Salem Corporation was constituted on 01.06.1994 and the extent of the Corporation is 91.34 sq km. The population as per 2011 census was 8,29,267 and the present population is around 10,83,506. There are 60 wards in the corporation and for administrative convenience, the Corporation area is divided into 4 Zones. The average annual income of the Corporation including tax, non-tax revenue and Central / State Government grant is Rs.436.02 crore.

Water Supply

Cauvery river is the source of drinking water for Salem City. 148.00 million litre of water is drawn from Cauvery river, daily and distributed to the public. The total water requirement of Salem City is 146.28 million litre and the total water supply per day is 144.50 million litre. Out of total 2,09,953

houses, 1,16,437 houses have been provided with drinking water connection.

Underground Sewerage Scheme

The city has 4 sewage treatment plants with a capacity of 98 million litre. 46 million litre of sewage generated daily is treated and discharged into the Thirumanimuthar. A total of 13,365 sewerage connections have been provided so far out of a total of 84,222 houses. Out of 60 wards, 18 wards have underground sewerage facilities. Underground sewerage scheme is in progress in 9 wards.

Solid Waste Management

The total solid waste generated in the city is 500 to 550 metric ton, of which 319 metric ton is wet waste and the remaining is dry waste. 29 micro composting centers for processing of wet waste and 5 resource recovery centers for handling dry waste, are functioning.

Roads

Salem city has a total of 1,040 km of roads. 163.269 km of road works have been done during 2021-22 and 2022-23. 145.280 km length of road works have been taken up in 2023-24.

Street Lights

There are 42,349 street lights in the city and provision of another 800 new LED lights taken up during 2023-24.

The main sources of finance of the Corporation

Out of the total own revenue of Corporation Rs.130.32 crore and the collectable taxes such as property tax – Rs.71.45 crore, vacant land tax – Rs.2.20 crore, profession tax – Rs.12.51 crore, water charges – Rs.23.65 crore and non-tax income – Rs.20.51 crore are the primary sources of income.

Table 2.37
Ongoing projects

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	National Urban Health Mission (NUHM) - 2023 - 24	Construction of 17 Urban Health and Welfare Centers	7.20
2	School Improvement Grant	School Improvement Works	12.03
3	Operation and Maintenance fund	Purchase and installation of motor for the treatment plant of Dedicated Water Supply scheme	2.40
4	Health and Hygiene Food streets Grant	Construction of Food Street	3.00
5	Infrastructure and Amenities Fund (I&A)	The Beautification of 3 lakes, viz. Mookaneri Lake, Bodinayakanpatti Lake and Allikuttai Lake	52.00
6	Ungal Thoguthiyil Muthalvar (2023-24)	8 number of works taken up to resolve the long pending problems in Salem North, Salem West and Salem South assembly constituencies.	22.97
7	15 th FC Grant 2023-24	Construction of a Drain to carry excess water from Allikuttai Lake	1.77
8	AMRUT 2.0	Construction of 1 MLD waste water treatment plant in Kumaragiri lake	4.63
9	Capital Fund 2023-24	Construction of a Drain to divert surplus water from Mookaneri to Thirumanimuthar river	11.07
10	Solid Waste Management	Construction and maintenance of Bio CNG (PPP method) plant for solid waste management work	57.00

Table 2.38**New project to be implemented**

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	AMRUT 2.0	Implementation of the underground sewerage project in the areas left out in the Corporation	548.00

Table 2.39**New project**

Sl. No.	Name of the Work	Estimate cost (Rs.in crore)
1	24 X 7 drinking water supply work under AMRUT 2.0 Administrative approval accorded.	758.13

VI. Erode Corporation

Erode Corporation was constituted on 01.01.2008 and the extent of the Corporation is 109.52 Sq.km. The Population was 4,98,121 as per 2011 Census and Present Population is 5,86,602. There are 60 wards in the corporation and for administrative convenience, the Corporation area is divided into 4 Zones. The average Annual income of the corporation, including tax and non tax sources, Central and State Government Grants is Rs.650.37 crore.

Water supply

The main water source of Erode is River Cauvery. For drinking purpose 105 million litre water is being taken from the river. Daily water supply demand of the town is 79.19 million litre and 79.19 million litre of water is supplied daily. Out of the total 1,69,912 households, 1,05,000 house service connections have been given.

Underground Sewerage Scheme

A sewage treatment plant with a capacity of 50.55 million litre is functioning in the city. 25 million litre sewage generated daily is being treated in the STP and treated water is let out into Perumpallam Odai. Out of 1,69,912 households, 79,398 house service connections have been given. Out of 60 Wards, UGSS is available in 53 Wards. Consultant has been appointed to prepare DPR for providing UGSS to remaining 7 Wards and left out areas of the Corporation.

Solid waste management

Total solid waste generated in Erode Corporation is 196 to 236 metric ton per day, out of which, 90 metric ton are wet waste and remaining are dry waste. As of now, 24 Micro Compost Centres are available for processing wet waste and 2 Resource Recovery Centres are available to handle dry waste.

Roads

The city has a total of 841.01 km of roads. 90.16 km of roads have been restored in the year 2021-22 and 2022-23. Further, 240.14 km of roads restored in the year 2023-24.

Street lights

The total number of Street Lights in the city is 23,881. Works to provide 5,431 new LED street lights are in progress during the year 2023-2024.

The main sources of finance of the Corporation

The total own revenue is Rs.290.90 crore and the collectable taxes such as property tax - Rs.70.18 crore, vacant Land tax - Rs.16.10 crore,

profession tax - Rs.6.75 crore, water charges - Rs.75.52 crore and non-tax revenue - Rs.122.35 crore are the primary sources of income.

Table 2.40
Ongoing project

Sl. No.	Name of the Scheme	Name of the Work	Estimate Cost (Rs.in crore)
1.	Infrastructure and Amenities Fund	Construction of New Bus Stand at Solar Pudur	63.50

Table 2.41
New projects to be implemented

Sl No	Name of the Scheme	Name of the Work	Estimate Cost (Rs.in crore)
1.	AMRUT 2.0	Implementation of 24x7 water supply Scheme in 6 Wards on Pilot basis	21.93
2.	Infrastructure and Amenities Fund	Construction of New Bus stand at Kaniravuthan kulam area in Sathy Road	144.38

Table 2.42
New projects

Sl. No.	Name of the Work
1.	Construction of Integrated Market Complex for whole sale vegetables and fruits, at Solar Pudur at an estimated Cost of Rs.20.00 crore
2.	Providing world standard environmental friendly park in VOC Park campus at an estimated cost of Rs.15.00 crore
3.	Development of Cauvery River Front and Providing Sewage Treatment plant at an estimated cost of Rs.30.00 crore in Erode Corporation Area.

VII. Tiruppur Corporation

Tiruppur Corporation was constituted on 01.01.2008 and the extent of the Corporation is 159.35 sq.km. As per the 2011 census the population was 8,77,778 and the current population is 13,99,700. There are 60 wards in the corporation. For administrative convenience, the Corporation is divided into 4 Zones. The average annual income of the corporation including tax, non-tax revenue and Central / State Government grants is Rs.1,301.06 crore.

Water supply

The daily requirement of drinking water for Tiruppur Corporation area is 189 million litre. At present, the average daily water supply is 20.00 million litre through second water supply scheme, 90 million litre through third water supply scheme and 40 million litre through 4th water supply scheme, totaling to 150 million litre per day. An

average of 107 million litre of water is supplied daily. Out of 2,68,904 houses, 2,04,784 houses have been provided with water supply connections.

Underground Sewerage Scheme

135 km long underground sewer network and 15 million litre capacity treatment plant are in operation in Tiruppur Corporation area since 2008. 14,638 house service connections have been provided. At present, under AMRUT, construction of underground sewers for a length of about 542 km has been carried out at an estimated cost of Rs.636.40 crore and the work is nearing completion. Provision of 57,835 house service connections are in progress under this scheme. Out of three STPs, two STPs of capacity 20 million litre and 36 million litre respectively, have been completed and put into use and 15 million litre capacity STP is nearing completion. As of now, out of 60 wards, 48 wards have underground sewerage facilities. Under AMRUT 2.0, to cover the left out

areas of the Corporation, new project is to be implemented at an estimated cost of Rs.179.74 crore with a total of 16,708 house service connections in the remaining wards. So far, 30,916 underground sewerage house service connections have been provided out of 2,68,904 households in Tiruppur Corporation area.

Solid waste management

The total solid waste generated in the city is 480 metric ton to 770 metric ton, out of which 315 metric ton is wet waste and remaining 455 metric ton is dry waste. There are 26 Micro composting centres and a bio gas plant of 10 metric ton capacity for processing wet waste and 6 resource recovery centres for processing dry waste in the city.

Road

The city has a total of 1,523.69 km of roads. In the financial years 2021-22 and 2022-23 a total length of 336.31 km of roads have been completed

across various schemes. In addition, 401.88 km length of roads are taken up in 2023-24 across various schemes.

Street lights

A total of 35,950 street lights have been installed in the city area and maintained by the Corporation. Currently, under 15th Central Finance Commission (CFC) grant for 2022-23, 13,436 new LED street lights installation work is being carried out at an estimated cost of Rs.17.51 crore.

There are 43,631 new street lights, out of which 4,755 are sodium vapour lamps, in which 1,956 will be converted into energy saving LED lights. So far, under this new project 1,155 new LED lights have been installed out of 8,681 new LED lamps.

The main sources of finance of the Corporation

The total own revenue of the Corporation is Rs.146.31 crore and the collectable taxes such as property tax - Rs. 103.96 crore, vacant land tax - Rs.4.31 crore, profession tax - Rs.4.25 crore, water charges - Rs.20.69 crore and non-taxable income - Rs.13.10 crore are the primary sources of income.

Table 2.43 Ongoing projects

Sl. No.	Name of the Scheme	Name of the work	Estimate Amount (Rs. in crore)
1.	Infrastructure and Amenities fund 2022-23	Construction of New Bus Stand at Kovilvazhi	26.00
2.	Infrastructure and Amenities fund 2023-24	Construction of High-Level Bridge	36.36
3.	School Improvement Grant 2022-23	Construction of class room building	13.36
4.	National Urban Health Mission 2023-24	Construction of Urban Health Sub Center and Construction of New Urban Primary Health Centre Building	9.28

Table 2.44**New projects to be implemented**

Sl. No.	Name of the Scheme	Name of the work	Estimate Amount (Rs. in crore)
1.	Swatch Bharath Mission 2.0 2023-24	Under Solid Waste Management Scheme establishment of Automated MRF Centre	29.75
2.	Swatch Bharath Mission 2.0 2023-24	Under Solid Waste Management Scheme establishment of Bio - CNG Centre	58.04
3.	AMRUT 2.0 2023-24	Providing Comprehensive UGSS to leftout areas (zone -11, 11.1 & 11.3) in Tiruppur City Municipal Corporation including 60 months of Operation and Maintenance	192.95
		Construction of a new Municipal Corporation Office building comprising G+3 floors with an area of 1,25,000 sq.ft in front of Muthamil Aringnar Dr.M. Karunanidhi Bus Stand	40.00
		Hon'ble Chief Minister's announced (13.03.2024) construction of new bridges on PN Road Nallaar Pommanayakan palayam to Boyampalayam Road	7.00
		Hon'ble Chief Minister announced (13.03.2024) construction of flyover on Nallaar connecting Pichampalayam Main Road to Raja Nagar for Tiruppur District	4.50

VIII. Thoothukudi Corporation

Thoothukudi Municipal Corporation was constituted on 05.08.2008 and the extent of the corporation is 90.66 sq.km. The population of the corporation as per 2011 census is 3,72,408 and present population is around 4,90,362. The corporation is functioning with a total of 60 wards. For administrative convenience, the corporation has been divided into 4 zones. The average annual revenue, including taxes, non-tax revenues, and Central/State Government grants, amounts to Rs.212.16 crore.

Water Supply

The city's main water source is Tamirabarani river, with a capacity of 68.00 million litre. The total water requirement for the city is 66.20 million litre, with a daily distribution of 63.10 million litre. Water connections have been provided to 91,079, out of 1,55,455 households.

Underground Sewerage Scheme

The city has a 28 million litre capacity sewage treatment plant. 7 million litre of sewage is treated daily and the treated sewage water is discharged into the Kausika Mahanadi River and Miawakki forests. Underground drainage connections have been provided to 16,122 houses out of 1,55,455 houses. Out of 60 wards, 24 wards have Underground sewage system facilities and implementation of the UGSS in 13 wards is in progress.

Solid Waste Management

The total solid waste generated ranges from 170 to 180 metric ton, including 97 metric ton of wet waste and remaining is dry waste. There are 17 micro composting centres for processing wet waste and 1 resource recovery centre for processing dry waste in the city.

Roads

The city has a total of 691.98 km of roads. Development works on 144.85 km of roads have been completed in the years 2021-22 and 2022-23. An additional 146.14 km of roads are taken up in the year 2023-24.

Street Lights

The total number of street lights in the city is 18,266. Installation of 2,887 new LED street lights is in progress.

The main sources of finance of the Corporation

The total own tax revenue of the Corporation is Rs.117.33 crore and the collectable taxes such as property tax Rs.54.26 crore, vacant land tax – Rs.11.07 crore, profession tax – Rs.10.80 crore, water charges – Rs.35.63 crore and non-tax income – Rs.5.57 crore are the primary sources of income.

Table 2.45
Ongoing projects

Sl. No	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	Smart City	Providing UGSS, drinking water works, Ground mounted solar system and UGSS Internal plumbing	199.27
2	AMRUT 2.0	Providing UGSS (in left out areas)	152.14
3	Asian Development Bank Fund	Construction of storm water drains for a length of 36.36 Km	82.98
4	State Disaster Mitigation Fund	Construction of Storm water drains in the area of Sankaraperi.	12.00
5	I&A Fund 2022-2023	Construction of Stormwater Drains for a length of 43.57 km have been takenup of which 40.58 km has been completed. Remaining work is under progress.	45.19
6	School Improvement Grant	Maintenance work of corporation school building	2.48
7	NUHM 2023-2024 (15 th FC grant Fund)	Construction of Primary Health Centre and Urban Health Sub Centre in Corporation area	3.38
8	Capital Grant Fund 2023-2024	Construction of Foot Bridge at Vallanadu Head Works	8.60

Table 2.46**New projects to be implemented**

Sl. No	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	AMRUT 2.0	Water Work (24x7 Water Supply System)	16.06
2	SBM 2.0	Construction of Material Recovery Center and Micro Compost Center	6.00

Table 2.47**New project**

Sl. No	Name of the Work	Estimate cost (Rs.in crore)
1	Construction of fly over at fourth phase of the Railway Gate LC No 432, under UTM	95.00

IX. Vellore Corporation

Vellore Corporation was constituted on 01.08.2008 and the extent of the corporation is 87.915 sq.km. The population as per 2011 census was 5,04,079 and the present population is 6,57,842. The Vellore Corporation has 60 Wards and for administrative convenience, the corporation is divided into 4 Zones. The average annual income of the corporation including tax, non-tax revenue and Central / State Government grant is Rs. 223.08 crore.

Water Supply

62.00 million litre of water is drawn from 11 water sources to supply drinking water to the city. The total daily drinking water requirement of the city is 61.50 million litre which is supplied. Out of 1,49,261 households, 63,401 households have been provided drinking water connection.

Underground Sewerage Scheme

Out of the total 60 wards, 14 wards have underground sewerage facility and in 34 wards underground sewerage work is in progress. The corporation has a sewage treatment plant with a capacity of 10.28 million litre. 7.50 million litre of sewage is treated and the treated water is discharged into the Velavadi Lake at Rangapuram. A total of 4,990 UGSS connections have been provided out of 1,49,261 households.

Solid Waste Management

The solid waste generated in the city is 241 metric tons, daily. The corporation has 50 recycling centers for treatment of 128 metric ton of wet waste and 113 metric ton of dry waste generated in the city. Also, 1 resource recovery center is available for processing dry waste.

Roads

The city has a total of 565 km roads. As of 2021-22 and 2022-23, 120 km of road work has been completed. Road works for a length of 87 km has been taken up during 2023-24 and the works are in progress.

Street lights

The total number of street lights in the city is 28,600. In 2023-24, 653 new LED street lights are proposed and installation of lights is underway.

The main sources of finance of the Corporation

The total own revenue of the Corporation is Rs.147.62 crore and the collectable taxes such as

property tax - Rs. 64.41 crore, vacant land tax - Rs.8.91 crore, business tax Rs.10.94 crore, water charges Rs.39.13 crore and non-tax income of Rs.24.23 crores are the primary sources of income.

Table 2.48
Ongoing projects

Sl. No.	Name of the scheme	Name of the work	Estimate Amount (Rs. in crore)
1.	SBM 2.0	10 works are taken up for community toilets, and public toilets/ latrines, solid waste management	3.65
2.	State Finance Commission 2023 - 24	32 works have been taken up to build new classrooms and carry out maintenance in Schools. works are in progress	6.26
3.	15 th Finance Commission	87 storm water drain works and 8 drinking water works are under progress.	47.95

Table 2.49
New projects

Sl. No.	Name of the scheme	Name of the work	Estimate amount (Rs.in crore)
1.	Swacch Bharat Mission(U) 2.0	For 24 works to set up community toilets and public toilets/latrines and to set up solid waste management sheds, action is being taken up.	9.76
2.	AMRUT 2.0	24X7 drinking water scheme	13.69

X. Thanjavur Corporation

Thanjavur corporation was constituted on 19.02.2014 and the extent of the corporation is 36.31 sq.km. The population as per 2011 census was 2,22,943 and the present population is approximately 2,69,450. There are 51 wards. For administrative convenience the Corporation is divided into 4 Zones. The average annual income of the Corporation, including tax, non-tax and Central/State Government grant is Rs.345.00 crore.

Water supply

The city's main source of water is river Kollidam, from where 27.50 million litre of water is drawn. Total water requirement of the city is 30.05 million litre and the total quantity supplied per day is 27.50 million litre. Out of 56,836 households, 30,213 households were provided with house service connection.

Underground Sewerage Scheme

The city has a sewage treatment plant with a capacity of 28.05 million litre. 18 million litre of sewerage is generated, treated and discharged into samuthiram lake. Totally 28,016 underground drainage connections have been given so far, out of the 56,836 households. UGSS is available in 51 wards. For the leftout areas UGSS completed under smart cities mission.

Solid waste management

The total solid waste generated in the city is 97 metric ton to 107 metric ton. Out of this, 64.2 metric ton is wet waste and the remaining is dry waste. Micro-compost is being produced in all the 12 Micro Processing Centers to dispose the wet waste.

Roads

The city has a total of 365.266 km of roads and 47.94 km roads have been laid during the year 2021-22 and 2022-23. 96.30 km of roads have

been laid in the year 2023-24 and for the year 2024-25 work is in progress for a length of 10.122 km of roads.

Street Lights

The total number of street lights in the city is 13,998. Installation of 13,421 number of new LED street lights have been taken up in 2023-24 and is in progress.

The main sources of finance of the Corporation

The total own revenue of the Corporation is Rs.38.35 crore. The collectable taxes such as property tax – Rs.16.91 crore, vacant land tax – Rs.1.13 crore, profession tax – Rs.3.80 crore, water charges – Rs.2.66 crore and non-tax income of Rs.13.85 crore are the primary sources of income.

Table 2.50
Ongoing projects

Sl. No	Name of the Scheme	Name Of the work	Estimate Amount (Rs. in crore)
1.	Namakku Name Thittam 2022-23	32 numbers of Various works	10.03

2.	Namakku Name Thittam 2023-24	3 numbers of Various works	1.86
3.	SBM 2.0 2022-23	Construction of MRF shed at 5 locations	4.25
4.	SBM 2.0 2023-24	14 numbers of Toilet works	3.06
5.	National Health Mission 2022-23	7 numbers of New health sub Centre building	2.70
6.	School Improvement Grant fund - Infrastructure works -2022-23	4 numbers of School building works	4.33

XI. Dindigul Corporation

Dindigul City Municipal Corporation was constituted on 19.02.2014 and the extent of the Corporation is 14.01 sq.km. The population as per 2011 census is 2,07,225 and present approximate population is 2,49,944. The corporation has 48 wards and for administrative purpose, the Corporation is divided into 4 Zones. The average annual income of the corporation including tax, Non-tax revenue and Central / State Government grants is Rs. 148.00 crore.

Water Supply

The Corporation's main water source is Athur Kamaraj water works. 15.00 million litres of water is being supplied daily and 5.00 million litre daily from the Cauvery combined water supply scheme (CWSS) (from Tamil Nadu Water Supply and Drainage Board) making a total of 20.00 million litres. Distribution of water is in 48 wards. Out of the total 52,550 households, 32,359 households have been provided with water supply house service connection.

Underground Sewerage Scheme

A sewage treatment plant having a designed capacity of 13.65 million litre is functioning. In this STP 4.00 million litre of generated sewage is treated daily and discharged into River Kudaganar. Out of 19,420 houses, so far 12,989 houses have been provided with sewage connection. Out of the 48 wards, 13 wards are fully covered with UGSS and 13 wards are partly

covered with UGSS. In 22 wards action is being taken to provide UGSS under the Tamil Nadu Climate Resilient Urban Development Project (TNCRUDP).

Solid Waste Management

The total solid waste generated in the city is 92 metric ton. Out of which 46 metric ton are wet wastes. At present 9 Micro Compost Centres are functioning for processing of wet wastes. In addition to this, another 10 Micro Compost Centres are functioning. For processing of dry wastes 3 resource recovery centres are functioning.

Roads

The city has a total of 266.92 km roads. In 2021-22 and 2022-23 laying of 46.47 km road was completed and in 2023-24, road works for 13.60 km are in progress.

Street Lights

There are a total of 6577 street lights in the city. Another 869 new LED street lights (2023-24) are being installed.

The main sources of finance of the Corporation

The total own tax revenue of the Corporation is Rs.72.32 crore and the collectable such as property tax – Rs.19.82 crore, vacant land tax – Rs.0.16 crore, profession tax – Rs.1.51 crore, water charges – Rs.7.03 crore and non-tax revenue – Rs.43.80 crore are the primary sources of income.

Table 2.51

Ongoing projects

Sl. No	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	Swachh Bharat Mission 2022-23	Removal of additional Legacy waste through Bio Mining process in Murugabhavanam Compost yard	7.45

2	Capital Grant Fund 2021-22	Construction of weekly market shops (Rs. 5.00 Crore + Rs.5.00 Crore) and construction of Bharathipuram iron shops (Rs.5.00 crore) which are nearing completion.	15.00
3	Capital Grant Fund 2022-23.	Construction of drain and culverts for 37.914 km	19.68
4	State Finance Commission grant 2022-23 -	Schools Development Scheme, renovation work in 9 Corporation Schools and construction of additional classrooms in 10 Corporation Schools are in progress.	5.11

Table 2.52

New projects to be implemented

Sl. No	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	TNCRUDP	(i) Providing UGSS to the Left-out areas at an estimated cost of Rs.13,063.60 lakh (ii) Construction of 14.60 MLD capacity STP at a cost of Rs.3,755.00 lakh	168.18
2	AMRUT 2.0	Providing 24 x 7 water supply pilot scheme in zone 2 & zone 10	9.67

Table 2.53

New project

Sl. No	Name of the Work
1	Detailed project Report is under preparation for the Construction of a New bus stand on the outskirts of Dindigul City.

XII. Hosur Corporation

The Hosur City Municipal Corporation was constituted on 28.02.2019 and the extent of the corporation is 72.41 sq.km. According to the 2011 census, the population is 2,45,354 and it is estimated that the current population is about 3,79,720. For administrative purpose, 45 wards of the Corporation is divided into 4 Zones. The average annual income of the Corporation including tax, non-tax revenue and Central / State Government grants is Rs.113.28 crore.

Water Supply

The water requirement of the residents of the corporation is estimated to be 35.00 million litre. For this, 13.00 million litre of water is drawn from Hogenakkal combined water supply scheme through TWAD Board. The total supply of water to the drinking water connections is 27.00 million litre. Out of the total 1,08,491 houses in the city,

39,671 houses have been provided with drinking water connection.

Underground Sewerage Scheme

As per G.O.(Ms) No.143, Municipal Administration and Water Supply Department, dated 08.11.2023, Rs.582.54 crore has been sanctioned for construction of underground sewerage system through the Tamil Nadu Water Supply and Drainage Board. Accordingly, the TWAD Board is in the process of implementing the project. The tender received and technical scrutiny is in progress.

Solid Waste Management

The total solid waste generated in Hosur city is about 113 metric ton to 118 metric ton per day, out of which 47 metric ton is wet waste and the remaining is dry waste. There are 11 Micro Composting Centers to process wet waste and 6 Resource recovery centers to process dry waste.

Roads

The city has a total of 539.60 km of roads. 42.17 km of road works completed in 2021 – 2022 and 2022 – 2023. Also 31.97 km of road work has been taken up in 2023 – 2024 and is in progress.

Street lights

The city has a total of 13,234 street lights and another 3,000 new LED street lights will be installed in 2023–24. Under the State Urban Infrastructure Development Fund 2022-2023, the conversion of existing street lights to energy efficient LED lights is underway at an estimated cost of Rs.10.44 crore.

The main sources of finance of the Corporation

The total own revenue of the Corporation is Rs.55.37 crore and the collectable taxes such as property tax – Rs.38.34 crore, vacant land tax - Rs.3.60 crore, profession tax – Rs 6.87 crore,

water charges - Rs.5.94 crore and non-tax income Rs.0.62 crore are the primary sources of income.

Table 2.54

Ongoing project

Sl. No	Name of the Scheme	Name of Work	Estimate Amount (Rs. in crore)
1	I & A 2022-23	Construction of New Bus Stand at Moranappalli	33.00
2	Model City 2020-21	Restoration of Kalkeri Lake, Karnoor Lake, Anthiwadi Lake and Ramanayakan Lake	33.98
3	Capital Grant Fund 2021-2022	Construction of New Commercial Complex	29.36
4	NUHM 2022-23	Construction of New Urban Primary Health Centre at SBM Colony	1.20
5	NNT - 2021-22	Improvement and Rejuvenation Works in SIPCOT Lake	4.50
6	NNT 2023-24	Various Infra structure works	1.35
7	15 th FC 2023-24	Relaying of B.T Road, Construction of Storm Water Drain	4.32
8	School Improvement Grant fund, Operation and Maintenance 2023-24	Construction of Dining Hall and New Class Room at Corporation Primary Schools	7.25

Table 2.55**New project to be implemented**

Sl. No.	Name of the Scheme	Name of Work	Estimate Amount (Rs. in crore)
1	AMRUT 2022-23	2.0 Under Ground Sewerage System	582.54

Table 2.56**New projects**

Sl. No.	Name of work
1	Under the SBM 2.0, Bio Mining of legacy waste is proposed to be carried out at Dasepalli Compost Yard, at an estimated cost of Rs.3.19 crore
2	Detailed Project Report is under preparation for the Integrated Storm Water Drain system, with particular emphasis on Climate resilience through development of sponge parks and rejuvenation of lakes.

XIII. Nagercoil Corporation

Nagercoil corporation was constituted on 01.03.2019 and the extent of the Corporation is 63.15 Sq.km. The population as per 2011 census was 2,89,916 and the present population is

approximately 4,22,759. There are 52 wards in Nagercoil Corporation. The Corporation area is divided into 4 zones for administrative convenience. The average annual income of the corporation including tax, non-tax revenue and Central / State Government grants is Rs.87.47 crore.

Water Supply

Mukkadal dam is the main water supply source of the city from where 21.00 million litre of water is drawn. Total water requirement of the city is 24.00 million litre and the total supplied quantity per day is 24.00 million litre. Out of 1,02,630 households, 47,170 households are provided with the house service connection.

Underground Sewerage Scheme

The city has a sewerage treatment plant under construction with a capacity of 17.77 million litre. Out of 1,02,630 households, 15,575 UGD house service connections have been provided.

Out of the total 52 wards, 18 wards fully and 17 wards are partially covered under UGSS.

Roads

The city has a total of 905.491 km roads. 108.51 km of roads have been laid during the years 2021-22 and 2022-23. 180.15 km of roads have been laid during the year 2023-2024.

Street Lights

The city has 19,891 street lights. 1,046 new LED street lights have been sanctioned under the 15th FC grants in the year 2023-2024 and installation work is under progress.

The main sources of finance of the Corporation

The total own revenue is Rs.77.73 crore and the collectable taxes such as property tax – Rs.50.68 crore, vacant land tax – Rs.3.70 crore, profession tax – Rs.7.90 crore, water charges – Rs.6.73 crore and non- tax income of Rs.8.72 crore are the primary sources of income.

Table 2.57**Ongoing projects**

Sl. No.	Name of the Scheme	Name of Work	Estimate cost (Rs.in crore)
1	SBM 18-19	Removal of Legacy Waste through Bio-Mining process at Valampurivilai compostyard	10.07
2	National Urban Health Mission	Construction of Primary Health Centres at Ward 28-Vadiveeswaram and Ward 3 - Peruvilai (Christopher Colony)	2.40
3	AMRUT 2.0	Development of ponds	1.50
4	Pradhan Mantri Jan Vikas Kariyakram	Construction of Multipurpose Building at Vattavilai in ward 41	1.40
5	SBM 2.0	Construction of 4 Toilets	1.23

Table 2.58**New projects to be implemented**

Sl. No.	Name of the Scheme	Name of Work	Estimate cost (Rs. in crore)
1	AMRUT 2.0 2023-24	24x7 water supply system at Alur and Thengampudur	64.68

2	SBM (U) 2.0	BIO-CNG through DBFOT model, Construction of Material Recovery Facility Centre (MRF), Construction of Public Toilet	21.77
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Table 2.59

New projects

Sl. No.	Name of the work	Estimate cost (Rs.in crore)
1	Detailed project report was prepared for the construction of modern integrated bus terminal by integrating Vadasery Bus Stand with Vadasery Kanakamoolam Vegetable market.	35.54
2	Detailed project report is being prepared for implementation of UGSS scheme for the newly added and left out areas.	542.40

XIV. Avadi Corporation

Avadi City Municipal Corporation was constituted on 17.06.2019 and the extent of the Corporation is 65.00 Sq.km. Total Population as per 2011 census was 3,45,996 and the present population is 5,63,343. The Corporation is divided into 48 wards for administrative convenience, which are further organized into 4 zones. Average

annual income of the corporation from tax, non-tax and Central / State government grants is Rs.106.04 crore.

Water supply

The total water requirement of the city is 76.05 million litre and the total supply per day is 21 million litre. A total of 21 million litre of water is drawn from the local drinking source, and supply of 4 million litre from Puzhal Lake in the city from CMWSSB. Out of total 82,557 households, 4,777 households have been provided with house service water connection.

Underground Sewerage Scheme

The city has 2 number of sewage treatment plants of 36 million litre and 4 million litre capacity, respectively. 8 million litre of sewage generated daily is treated and discharged into Cooum River. Out of the 82,557 total households, 7,855 underground sewerage scheme House service connections have been provided. Out of

total 48 wards, 44 wards have (partial) sewerage facility. Additionally, underground sewer project works are proposed to be carried out in the left out wards.

Solid Waste Management

The total solid waste generated in the city is upto 180.74 metric ton, out of which 90.37 metric ton is wet waste and remaining is dry waste. There are 15 micro composting centre for wet waste processing and 1 resource recovery center for dry waste processing. Construction of 2 Material Recovery Facility (MRF) is nearing completion.

Roads

The city has a total of 718.68 km of roads. 70.48 km of roads have been laid during the year 2021-22 and 2022-23 and it is proposed to improve 10.11 km of roads during the year 2023-2024.

Street lights

There are a total of 21,538 street lights in the city. Installation of another 4,445 new LED street lights has been taken up in 2023-24.

The main sources of finance of the Corporation

The own tax revenue demand of the Corporation is Rs 36.73 crore and the collectable taxes such as property tax - Rs.25.30 crore, vacant land tax - Rs.5.21 crore, profession tax – Rs.4.41 crore, water charges of Rs 1.08 crore and non-tax income of Rs 0.73 crore are the primary sources of income.

Table 2.60

Ongoing projects

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
1	SDRF 2023-24	Construction of 10 Storm water drains	30.61
2	NUHM 2021-22 and 2022-23	Construction of 3 new Urban Health Center	3.60
3	15th FC 2023-24	Construction of new urban health center and Providing BT and CC Road	9.09

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
4	NUHM 2023-24	Construction of 9 New sub and additional urban health center	3.20
5	SUIDF 2022-23	Conversion of existing Street Lights into energy Efficient LED light (18292) and Providing New LED Street Lights (4445)	22.10

Table 2.61

New project to be implemented

Sl. No	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
1	AMRUT 2.0	Tenders have been called for provision of Water supply and Underground drainage house connections to the left out areas.	151.03

XV. Tambaram Corporation

Tambaram Corporation was constituted on 03.11.2021 and the extent of the Corporation is 87.64 sq.km Population as per 2011 census is 7,23,017 and the current population is 9,60,887. The Corporation is divided into 70 wards for administrative convenience, which are further organized into 5 zones. The average annual income of the Corporation including Tax, Non tax, Charges

and Central / State Government grants is about Rs.702.23 crore.

Water Supply

The main sources of Drinking Water supply to the Tambaram Corporation are 10 million litre from Palar River, 23.90 million litre from CMWSSB, 7.35 million litre from TWAD and 33.76 million litre from local sources. The Total supply of drinking water is 75.00 million litre out of the total requirement of 123.09 million litre. Out of total 2,78,388 houses, 88,473 houses have been provided drinking water supply connections.

Underground Sewerage Scheme

Out of total 70 wards in Tambaram Corporation, 38 wards have underground sewerage facility. Underground Sewerage scheme is in progress in 11 wards. Preparation of detailed project report for providing underground sewerage facility in

21 wards is in progress. Sewage Treatment Plant of 30 million litre capacity is located in West Tambaram area where the above project is operational and currently 16 million litre of sewage generated daily is treated and released into the Adyar river. 12 million litre of sewage generated daily in Pallavapuram area is treated at Perungudi Sewage Treatment Plant by Chennai Metropolitan Water Supply and Sewage Board. Out of the 2,78,388 total households, 61,432 underground drainage connections have been provided so far in the Corporation.

Solid Waste Management

The total Solid Waste generated in the city is 400 metric ton. Out of which 160 metric ton is wet waste and rest is dry/mixed waste. There are 27 Micro Compost Centers available for wet waste processing and 5 Resource Recovery Centers for dry waste processing.

Roads

The City has a total of 991.64 km of roads. 196.75 km of road laying work has been completed during 2022-23 and 2023-24. In 2024-25 an additional 40.74 km roads are to be taken up.

Street Lights

There are 42,902 street lights in the city. During 2023-24, 3,634 new LED street lights are to be installed.

The main sources of finance of the Corporation

The total own tax revenue of the Corporation is Rs.139.48 crore, and the collectable taxes such as property tax Rs.68.73 crore, vacant land tax Rs.15.54 crore, profession tax Rs.22.54 crore, water charges Rs.15.46 crore and non-tax income Rs.17.21 crore are the primary sources of income.

Table 2.62
Ongoing projects

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
1	CRRT and SBM	Providing UGSS	212.15
2	SBM 2.0	Removal of legacy waste through biomining work at Madambakkam , Kundumedu, Pallavapuram Periya Eri, Venkadamangalam and Appur	42.94
3	AMRUT (2.0)	Rejuvenation of 9 Water Bodies and Developemnt of 8 parks	11.31
4	15 th FC grant	Procurement of vehicles for Solid Waste Management, UGSS	10.48

Table 2.63
New projects to be implemented

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs.in crore)
1	15 th FC grant and SFC special fund	Construction of New Office building	43.40
2	SBM 2.0	Establishment of 150TPD Municipal Solid Waste based Bio-CNG Plant at Tambaram on Design, Build, Finance, Operate and Transfer Basis	44.43
3	AMRUT (2.0)	Providing 24x7 Water Supply to Pallavapuram area	20.29

Table 2.64**New projects**

Sl. No.	Name of the Work	Estimate cost (Rs.in crore)
1	Providing Integrated Water Supply Improvement scheme including 15 Village panchayats	1,575.00
2	Providing Integrated Under Ground Drainage scheme including 15 Village panchayats	2,010.00
3	Revamping of UGSS at Pallavapuram area in zone II	86.76

XVI. Kancheepuram Corporation

Kancheepuram Corporation was constituted on 21.10.2021 and the extent of the Corporation is 36.14 Sq.Km. Population is 2,32,816 as per 2011 census and current population is 2,46,070. There are 51 wards in the corporation. For administrative convenience the Corporation is divided into 4 Zones. The average annual income of the Corporation including tax, Non-tax revenue and Central / State Government grants is Rs.81.76 crore.

Water Supply

The main water source of the city is drawn from Palar River and local water sources is 23 million litre. The total water requirement of the city is 37.31 million litre and total supply per day is 23 million litre. Out of 51,890 houses, 32,702 houses have been provided drinking water connection.

Underground Sewerage Scheme

The City has 1 Sewage Treatment Plant with a capacity of 14.71 million litre. Sewage generated daily is 14.71 million litre which is treated and discharged into the Koraiyar river. So far 21,633 underground sewerage scheme connections have been provided out of 51,890 houses. Out of 51 wards, 40 wards have underground sewerage facility. Further, Underground sewer project work is being carried out in remaining 11 wards.

Solid Waste Management

The total solid waste generated in the city is 115 metric ton. Wet wastes account for 56 metric ton and remaining are dry waste. There are 9 Micro Processing Centres for processing wet waste and 4 Resource Recovery Centres for processing dry waste.

Roads

The City has a total of 361.76 Km of roads. Road improvement works are carried out in the damaged roads. Road works of length 31.590 km has been carried out during 2021-22 and 2022-23. Also 10.937 km of road development / rehabilitation work is proposed for 2023-24.

Street Lights

The total number of street lights in the city are 12,276. New LED street lights proposed are 709 during the year 2023-24.

The main sources of finance of the Corporation

The total tax own Revenue of the Corporation is Rs. 55.37 crore and the collectable taxes such as property tax – Rs.22.89 crore, vacant land tax - Rs.6.08 crore, profession tax – Rs.3.77 crore, Water charges - Rs.7.64 crore Non-tax income - Rs.14.99 crore are the primary sources of income.

Table 2.65

Ongoing projects

Sl. No	Fund Head	Name of Work	Estimate Amount (Rs. in Crore)
1	I & A fund 2022 – 23	Providing BT surface and revetment wall at Kavalan gate to Uthiramerur Kancheepuram Highway Road	5.00
2	I & A fund 2022 – 23	Strom Water Drain with cover slab in Manjalneer kalvai	40.00
3	CGF 2023-24	Construction of New Marriage Hall at Railway Road Annai Anjugam Stadium	8.77
4	CGF 2022-23	New Construction of Bridge across the Vegavathy river at Murugan kudiyiruppu Thattithoppu	2.30

Table 2.66**New projects to be implemented**

Sl. No.	Fund Head	Name of the Work	Estimate Amount (Rs. in crore)
1	TNCRUDP 2023-24	Construction of operation and maintenance for 5 years of Underground Sewerage System to uncovered areas (Phase-I)	254.00
2	TNCRUDP 2023-24	Construction of 36 MLD STP using SBR Technology based on DBOT (Phase-II)	68.25
3	TNCRUDP 2023-24	Construction of Collector Wells, Infiltration Wells, Pump House, Foot Bridge, Control Room, Generator Room, Stand Post, Connecting Main, Providing Pumpsets and Replacement of Gravity Main including Construction of Pipe Carrying Bridge and Providing Feeder Mains including Complete SCADA system for water supply system within 36 months and Operation & Maintenance for 5 years (Package I)	169.28
4	TNCRUDP 2023-24	Providing Distribution System with HDPE Pipes including Construction of OHTs and House Service Connections within 36 months And Operation & Maintenance for 5 years in Kancheepuram City Municipal Corporation – (Package II)	149.24

Table 2.67

New projects

Sl. No.	Name of the Work
1	Construction of New Bus Stand
2	Construction of Multilevel Parking Place

XVII. Cuddalore Corporation

Cuddalore corporation was constituted on 08.10.2021 and the extent of the corporation is 27.69 sq.km. The population as per 2011 census was 1,73,636 and the present population is approximately 1,98,987. It consists 45 wards. For administrative convenience, Corporation divided into 4 Zones. The average annual income of the Corporation including tax, Non-tax revenue and Central / State Government grants is Rs.86.52 crore.

Water Supply

There are 4 water supply head works in the city from which 20.70 million litre of water is drawn. Total water requirement of the city is 26.86

million litre and the total supplied quantity per day is 20.70 million litre. Out of 49,515 households, 11,967 provided with house service connection.

Underground Sewerage Scheme

The city has 1 sewage treatment plant with the capacity of 12.25 million litre. 6.5 million litre of sewage is daily generated and being treated and disposed scientifically. Totally 10,007 UGSS connections have been given so far out of 49,515 households. Out of 45 wards, UGSS is available in 27 wards. Action is being taken for the rest of the wards.

Solid Waste Management

Total solid waste generated in the city is 56 to 60 metric ton of which 24 metric ton is wet waste and remaining dry waste. Totally, 3 Micro composting centres are available for processing wet waste and 2 Resource recovery centre for dry waste.

Roads

The city has 313.75 km of roads. Steps are being taken to improve roads. In this direction, 50.32 km roads have been laid during the year 2021-22 and 2022-23 and it is proposed to improve / relay 16.275 km of roads during the year 2023-24.

Streetlights

There are 8,570 street lights in the City. Further, 1,287 new LED Lights are to be installed in the year 2023-24.

The main sources of finance of the Corporation

The total own Revenue of the Corporation is Rs. 86.52 crore and the collectable taxes such as Property tax Rs.40.22 crore, vacant land tax Rs.4.94 crore, profession tax Rs.5.03 crore, water charges Rs.5.04 crore and non tax revenue Rs.31.29 crore are the primary sources of income.

Table 2.68**Ongoing projects**

Sl. No.	Name of the Scheme	Name of Work	Estimate cost (Rs. in crore)
1	KNMT 2022-23	Construction of 3 daily Markets at Cuddalore Old town Bakthavatchalam Market, Manjakuppam Anna Market and Thirupathiripuliyur Panpari Market.	17.90
2	Special Grant 2022-23	Construction of Four Zonal Office Buildings	10.00
3	SDMF 2022-23	Construction of 14 Storm water drains	14.36
4	CGF 2023-24	Improvement of park site at Devanampattinam Silver Beach	4.98
5	School Improvement Grant 2023-24	Construction of additional class rooms	4.28

Table 2.69**New projects to be implemented**

Sl. No.	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
1	TNCRUDP fund 2023-24	Providing UGSS to uncovered areas	149.20
2		Construction of STP	26.56
3	I&A Fund 2023-24	Construction of New Bus Stand at Arisiperiyankuppam	36.00
4	AMRUT 2.0 2023-24	24x7 Water supply works	28.67
5	Swachh Bharat Mission (urban 2.0) 2023-24	Construction of Resource Recovery centre, Micro Composting centre and Public Toilet in Manjakuppam Maidanam	15.59

Table 2.70

New projects

Sl. No.	Name of the work	Estimate cost (Rs. in crore)
1	Under 6 th SFC grant 2023-24 construction of Shopping complex at Manjakuppam Maidanam	3.00
2	Revamping of WS Pumping main and Distribution pipe line (AC/CI pipe)	50.00
3	Providing 50 TPD capacity Bio-CNG Bottling plant	20.00

XVIII. Kumbakonam Corporation

Kumbakonam City Municipal Corporation was constituted on 24.12.2021 and the extent of the Corporation is 14.89 Sq.Km. The population as per 2011 census was 1,55,482 and the present population is 1,71,013. There are 48 wards in the corporation. For administrative convenience the Corporation is divided into 4 Zones. The average annual income of the Corporation including tax, Non-tax revenue and Central / State Government grants is Rs. 91.22 Crore.

Water Supply

The city main water source is river Cauvery where 20.47 million litre of water is drawn daily. Total water requirement of the city is 20.58 million litre and the total quantity supplied per day is 135 million litre. Out of 38,676 households, 18,364 households were provided with house service connection.

Underground Sewerage Scheme

The city has 1 sewerage treatment plant with the capacity of 17 million litre. 13 million litre of sewerage generated daily is treated and disposed into irrigation channel. Totally 21,119 underground drainage service connections have been given so far out of 38,676 households. Out of 48 wards, 43 wards have been covered with sewage network. Action is being taken to cover the balance 5 wards.

Solid waste management

Total solid waste generated in the city is 75 metric ton, of which 46 metric ton is wet waste and remaining dry waste. The city has 5 Micro Compost Centres available for processing wet waste and 4 Resource Recovery Centres for dry waste.

Roads

The city is facilitated with 185.97 km of roads and 55.53 Km roads have been laid during the year 2021-22 and 2022-23. In 2023-2024, it has been proposed to lay 15.14 Km of roads. 17.78 Km of roads have been proposed for the year 2024-25.

Street Lights

There are 6,428 street lights in the city and 200 new LED street lights are sanctioned for the year of 2023-24.

The main sources of finance of the Corporation

The total own revenue of the Corporation is Rs.48.13 crore and the collectable taxes such as property tax – Rs. 28.03 crore, vacant land tax – Rs.1.59 crore, profession tax – Rs.4.72 crore, Water charges – Rs.2.39 crore and Non tax income contributes Rs. 11.40 crore are the primary sources of income.

Table 2.71

Ongoing projects

(Rs. in crore)

Sl. No.	Name of the Scheme	Details of Works	Estimate Amount
1	Kalaignar Nagarpura Mempattu Thittam 2023-2024	Construction of Commercial Complex (Sambasivam Bus stand) near Old Bus stand	22.69
2	Capital Grant Fund 2023-2024	Redevelopment of Commercial Complex near Pidarikulam.	10.70

Table 2.72**New projects**

Sl. No.	Name of the Scheme	Details of Works
1	Water Supply	Development of Water Supply works in Dharasuram area
2	Under Ground Sewage System	Development of UGSS works in Dharasuram area
3	Under Ground Sewage System	Relaying and reconstruction of old 1960 UGSS in Banathurai
4	Buildings	Development of Dharasuram Market

XIX. Karur Corporation

Karur Corporation was constituted on 20.10.2021. The extent of corporation is 53.26 sq. Km. As per 2011 Census the population of the city was 2,14,412 and the approximate present population is 2,46,574. Corporation has 48 wards and for administrative convenience it has been divided into 4 zones. The average Annual Income of corporation from Tax, Non-Tax and State/ Central Government grant is Rs.11.41 crore.

Water supply

The main water supply source of the city is River Cauvery and 31.50 million litre water is drawn. The total water requirement of the city is 32.60 million litre and the total quantity supplied per day is 30.06 million litre. Out of 81,118 houses 55,137 houses have piped water supply.

Underground Sewerage Scheme

The city has 1 Sewage Treatment Plant with the capacity of 15 million litre. 6 million litre of sewage is generated daily and being treated and disposed into Panchamadevi channel for irrigation. Totally 27,225 UGSS connections have been given so far out of 81,118 households. Out of 48 wards, 32 has been covered by the scheme, for the remaining 16 wards to implement UGSS principle clearance has been accorded vide G.O (Ms) No. 93, Municipal Administration and Water Supply department, dated 12.07.2023.

Solid Waste Management

The total solid waste generated in the city is 100 to 110 metric ton of which 62 metric ton is wet waste and remaining dry waste. Totally 11 micro composting centers area available for processing wet waste and 2 resource recovery center for dry waste.

Roads

The City has 441.199 Km of Roads 81.35 Km roads have been laid during the year 2021-22, 2022-23 and 2023-24. Improvement / relay of 7.24 Km of roads has to be taken up for the year 2024-25.

Street lights

There are 11,875 Streetlights in the City. Further, it is planned to provide 1,507 new LED street light during the year 2023-24.

The main sources of finance of the Corporation

The total own revenue of corporation is Rs.69.38 crore and the Collectable taxes such as

Property tax Rs.33.89 crore, Vacant land tax Rs.4.71 crore, Profession tax Rs.4.80 crore, Water charges Rs.11.77 crore and Non tax Revenue Rs.14.21 crore are the primary sources of income.

Table 2.73

Ongoing projects

Sl. No	Name of the scheme	Details of works	Estimate (Rs. in crore)
1	Infrastructure and basic amenities Fund 2021-2022	Construction of New bus stand	40.00
2	Kalaignar nagarpura mepattu thittam 2022-2023	Construction of fish market	1.55

Table 2.74

Projects to be implemented

Name of the scheme	Details of work	Estimate (Rs. in crore)
Light house project	To provide UGSS for Sanapiratti, Thanthoni and left out areas of Karur and InamKarur, at an estimated cost of Rs.476.12 crore and also for improvement of water supply to Sanapiratti and Thanthoni at an estimated cost of Rs.113.20 crore, sanction accorded vide G.O (Ms) No. 93, MA&WS department, dated 12.07.2023.	589.32

XX. Sivakasi Corporation

Sivakasi Municipal Corporation was constituted on 21.10.2021 and the extent of the Corporation is 19.89 sq.km. Population as per 2011 census is 1,26,402 and current population is 2,70,006. There are 48 wards in this corporation which are divided into 4 zones. The average annual income of the Corporation including tax, non-tax and Central / State Government subsidy is Rs.40.00 crore.

Water Supply

10.10 million litre of water is drawn from Vembakottai, Manoor combined drinking water scheme which is the main drinking water sources to the city. The total water requirement of the city is 12.66 million litre. Total water supply of the city per day is 12.75 million litre. Out of total 53,778 houses, 19,691 houses have been provided drinking water connection.

Underground Sewerage Scheme

Detailed project report is under preparation for implementation of UGSS in the City.

Solid Waste Management

The total solid waste generated in the city is 52.70 metric ton to 55.00 metric ton. Out of which 29.50 metric ton is wet waste and remaining is dry waste. There are 8 Micro Processing Centres for wet waste processing and 4 Resource Recovery Centres for dry waste processing.

Roads

The city has a total of 174.91 km of roads and during the year 2021-2022 and 2022-23, 34.52 km of road work has been done. Further in the year 2023-2024, 19.35 km of road works has to be taken up for improvement.

Street lights

There are a total of 4,876 street lights in the city and 638 new LED street lights in the year 2023-24 are proposed to be installed.

The main sources of finance of the Corporation

The total own tax revenue of the Corporation is Rs.26.35 crore and the collectable taxes such as Property tax – Rs.17.38 crore, Vacant Land tax Rs.1.79 crore, profession tax – Rs.2.32 crore, Water Charges - Rs.2.11 crore, tax and Non – tax revenue - Rs.2.75 crore are the primary sources of income.

Table 2.75

Ongoing projects

S.No	Name of the Scheme	Name of the Work	Estimate cost (Rs. in crore)
1	KNMT 2023-24	Improvement and Rehabilitation of Periakulam Kanmai	1.87
2	CGF grant 2021-22	Construction of New Shopping Complex	5.00
3	Special fund 2022-23	Construction of new office building	10.00
4	SUIDF 2022-23	Conversion of 4423 Street Lights into energy efficient LED lights	5.36

3. Greater Chennai Corporation

The Corporation of Chennai was established as a local body on 29th September, 1688. It is the oldest municipal institution in the country and the second oldest in the world. The Greater Chennai Corporation has an area of 426 sq.km and has an estimated population of of 89.34 lakh in the year 2023 (66.72 lakh as per 2011 census). For administrative convenience, Greater Chennai Corporation is divided into 15 zones having 200 divisions. These 15 zones are organized into three regions. The salient features of the Greater Chennai Corporation are given in Table 3.1.

Table 3.1

Area	Population	Households	Zones	Wards/ Divisions	Sanctioned staff
426 sq.km	66.72 lakh (as per 2011 Census) 89.34 lakh* (2023)	13,45,804	15	200	18,435
Roads	Bridges	Storm water Drains	Street lights	Schools	Parks
5,688 km	289	2,624 km	3.01 lakh	417	863
Play- fields & Children Play ground	UPHC/HWC	UCHC/ Maternity centres	ICDS/ Balwadis/ Anganwadis	Community toilets	Crematorium / Burial grounds
490	140/140	16/3	1,806	1,379	192
*Estimated figure					

3.1. Infrastructure

3.1.1. Roads

(i) Bus Route Roads and Interior Roads

The Greater Chennai Corporation (GCC) maintains 488 bus route roads to a length of 418.57 km, and 34,640 interior roads to a length of 5,270 km.

The maintenance of bus route roads and interior roads is done with the Greater Chennai Corporation capital funds and grants provided under Tamil Nadu Urban Road Infrastructure Programme (TURIP), Singara Chennai 2.0, Nagarpura Salaigal Mempattu Thittam (NSMT) and State Finance Commission (SFC) grants.

During the year 2023-24, 6179 number of Bus Route Roads and interior roads to a length of 1,038.5 km have been taken up at an estimated cost of Rs.674.62 crore under Singara Chennai 2.0, Tamil Nadu Urban Road Infrastructure Programme, Nagarpura Salaigal Mempattu Thittam and State Finance Commission grants. Out of which, 5,304 numbers of the road have been completed and remaining works are under progress.

In 2023-2024, Greater Chennai Corporation has taken over 19 Bus Route Roads for a length of 35.77 Km from Highways Department and added to its road network.

During the year 2024-25, 1,188 number of Bus Route Roads and interior roads to a length of 220.38 Km have been taken up at an estimated cost of Rs.150 crore under the State Finance Commission grants. Out of which, 392 roads have been completed and remaining works are under progress. Further, 2,007 roads are to be taken up at an estimated cost of Rs.254 crore.

(ii) Bus Shelters and Bus Terminus

Greater Chennai Corporation maintains 1,416 bus shelters, built under various schemes, including 637 bus shelters set up under a Build Operate Transfer (BOT) model. In the year 2024-25, 765 numbers of bus shelters will be improved through Public Private Partnership (PPP) mode, on a Rehabilitate Operate Transfer (ROT) basis for 8 years. Further, Guindy, Velachery, Manali and Anna Square bus terminus will be renovated at an estimated cost of Rs.1.12 crore under Greater Chennai Corporation capital funds.

(iii) Multi-modal integrated bus stand in Broadway, Chennai

A Multi-Modal Facility Complex (MMFC) has been proposed at the Broadway bus stand by integrating multiple transit nodes, enhancing the facilities and amenities of the existing bus stand, multi-level car parking facility, commercial complex and supportive infrastructure including last mile connectivity at a tentative cost of Rs.822 crore.

3.1.2. Bridges

Greater Chennai Corporation maintains 14 flyovers, 13 Railway Over Bridges, 17 vehicular subways, 5 pedestrian subways, 5 foot over bridges, 1 Skywalk and 234 minor bridges.

The following bridge works were completed in the year 2023-2024 by the Greater Chennai Corporation put in use for the general public are given in Table 3.2.

Table 3.2

Sl. No.	Name of the work	Source of fund	Estimated cost (Rs. in crore)
1	Construction of ROB in lieu of existing Level Crossing at Kolathur – Villivakkam LC-1 (Mayor Chittibabu Bridge)	CGF	61.98
2	Construction of Skywalk with Escalators from Mambalam Railway station to T. Nagar Bus Terminus.	Smart City	28.45
3	Demolition and Reconstruction of Bridge at Stephenson Road across Otteri Nullah (Chengai Sivam Bridge)	CGF	52.90
4	Demolition and reconstruction of bridge across Otteri nullah connecting Aspiran Garden II street and Kilpauk Garden road	I & A	6.20
5	Reconstruction of a ROB at Elephant Gate road (South side)	CGF and GCC Capital fund	30.78
	Total		180.31

The major bridge/flyover/Railway Over Bridge (ROB) /LUS projects, currently under execution are given in Table 3.3.

Table 3.3

Sl. No	Name of the work	Source of fund	Estimated cost (Rs. in crore)
1	Construction of flyover over the existing subway at Ganesapuram	I & A Fund and GCC Capital fund	226.55
2	Construction of flyover along South Usman road and CIT Nagar 1st main road	I & A Fund	164.92
3	Construction of ROB in lieu of existing LC No. 2B at Manali road	I & A Fund	96.04
4	Construction of high level bridge across Cooum river connecting Poonamallee high road and Union road at ChinnaNolumbur	I & A Fund	42.71
5	Construction of high level bridge across Cooum river connecting Poonamallee High road and Union road at Sannathinagar 1st cross street	I & A Fund	31.65
6	Reconstruction of a ROB at Elephant Gate road (Northern side of ROB)	CGF and GCC Capital fund	30.78
7	Bridge across Puzhal surplus water canal at Vadaperumbakkam	CMCDM	22.41
8	Construction of limited use subway at the level crossing (LC No.11A) at Bojaraja Nagar	CGF and GCC Capital fund	30.13

Sl. No	Name of the work	Source of fund	Estimated cost (Rs. in crore)
9	Construction of bridge across Adambakkam lake at Jeevan Nagar 2nd street	I & A Fund	5.00
Total			650.19

To facilitate the free flow of traffic and to provide sustainable traffic management for the future, GCC has proposed to construct a flyover/skywalk/ box culvert/ two-wheeler cum pedestrian subway/bridge in 4 locations at an estimated cost of Rs.27.42 crore under the Infrastructure & Amenities (I & A) fund, Chennai Rivers Restoration Trust deposit fund, Railway Deposit fund and Greater Chennai Corporation Capital fund. The details are given in Table 3.4.

Table 3.4

Sl. No.	Name of the work	Source of fund	Estimate cost (Rs. in Crore)
1	Construction of Cable stayed suspension skywalk connecting Phase I & II of Tholkappia Poonga under EPC mode	CRRT Deposit Fund	9.35

Sl. No.	Name of the work	Source of fund	Estimate cost (Rs. in Crore)
2	Construction of Precast Triple cell Box culvert in lieu of existing pipe culvert across Dr. D.G.S. Dinakaran Salai under EPC mode	CRRT Deposit Fund	5.07
3	Construction of Two-Wheeler cum Pedestrian Subway in lieu of existing Level Crossing No.6 at Ambattur	Railway Deposit Fund	11.40
4	Demolition and reconstruction of bridge across Virugambakkam Canal connecting Railway Colony 3rd Street and Madha Kovil Street, Choolaimedu	GCC Capital fund	1.60
Total			27.42

Disaster management

3.1.3 Stormwater Drains

Chennai city has been facing the challenge of urban flooding during northeast monsoons. To mitigate the floods, the Greater Chennai Corporation (GCC) has been constructing stormwater drains under various schemes viz., the State Disaster Response Fund (SDRF). Further, construction of integrated stormwater drains has been taken up under Externally Aided Projects

funded by the Asian Development Bank (ADB) and the German Development Bank (KfW).

The Greater Chennai Corporation maintains 11,516 numbers of stormwater drains for a length of 2,624 km. (Table 3.5).

Table 3.5

Sl. No.	Zone No.	Zone Name	No. of SWDs	Length of existing SWDs (km)
1	I	Thiruvotriyur	550	98.93
2	II	Manali	421	108.16
3	III	Madhavaram	531	168.57
4	IV	Tondiarpet	423	117.01
5	V	Royapuram	377	119.71
6	VI	Thiru Vi Ka Nagar	586	140.08
7	VII	Ambattur	1299	326.04
8	VIII	Anna Nagar	711	184.36
9	IX	Teynampet	754	177.65
10	X	Kodambakkam	763	214.23
11	XI	Valasaravakkam	1483	282.00
12	XII	Alandur	1267	211.06
13	XIII	Adyar	784	210.50
14	XIV	Perungudi	1255	204.83
15	XV	Sholinganallur	312	60.43
Total			11,156	2,623.56

Greater Chennai Corporation also maintains 33 canals/waterways, which collectively span over a length of 53.42 kilometers. (Table 3.6).

Table 3.6

Sl. No	Zone No.	Name of the canal	Length in meter.
1	I	Thamaraikulam canal	500
2	II	Old Napalayam canal	1299
3	II	Thulasinagar canal	2043
4	II	ManaliPudur TNHB canal	1121
5	II	PeriyaEachankuzhi canal	257
6	II	Kadapakkam lake surplus canal	952
7	II	Madhavaram - Manali lake canal	1266
8	IV	Captain Cotton canal	3040
9	IV	Kodungaiyur canal (North)	1150
	IV	Kodungaiyur canal (South)	1675
	IV	Kodungaiyur canal (Main)	2575
10	IV	Link canal	530
11	IV	Vyasarpadi canal	1350
12	IV	Jawahar canal	750
13	VI	Ekangipuram canal	1530
14	VII	North Avenue canal	2900
15	VII	Ambattur Sidco canal	1320
16	VII	Padikuppam canal	2120
17	VIII	TVS canal	910
18	VII&XI	Nolambur canal	2480
19	IX	Nungambakkam canal	900
20	IX	Nandanam canal	1060
21	IX	Trustpuram canal	1500
22	IX&XIII	Mambalam canal	5800
23	X	Reddykuppam canal	500
24	X	MGR canal	1800
25	X	Jafferkhanpet canal	600
26	XI&XII	Nandambakkam canal	3240
27	XII	Adambakkam canal	927

Sl. No	Zone No.	Name of the canal	Length in meter.
28	XIII	Chellammal College canal	700
29	XIII	Guindy Industrial Estate canal	1600
30	XIII	Rajbhavan canal	1100
31	XIV	Pallikaranai canal (MayilaiBalaji canal - 1 & 2)	342
32	XV	Secretariat colony canal	1084
33	XV	Semmencheri canal	2500
Total			53,421

Kosasthalaiyar Basin- Integrated Stormwater Drainage (ISWD) project

The Kosasthalaiyar Basin Integrated Stormwater Drainage (ISWD) project, which is funded by Asian Development Bank, has been taken up to address the long-standing need for stormwater drains in North Chennai. The primary objective of this project is to mitigate the hazard of flooding during monsoons. The project involves the construction of integrated stormwater drains in the Kosasthalaiyar basin, for a length of 769 km. at an estimated cost of Rs.3,220 crore. The project is

progressing at a good pace. So far, 72.08% of the works have been completed. The work will be completed by September 2024. Upon completion of the project, 30 lakh people living in Ambattur, Manali, Madhavaram, and Thiruvotriyur will be benefitted.

Kovalam Basin - Integrated Stormwater Drainage (ISWD) project

Construction of an Integrated stormwater drain in the Kovalam Basin has been taken up in three phases at an estimated cost of Rs.1,714 crore. In the first phase, for a length of 41.42 km. at an estimated cost of Rs.150.45 crore have been taken up. So far, 94.50% of the works have been completed. In Phase II, Integrated Storm Water Drain works have been taken up for a length of 120.09 km at an estimated cost of Rs.447.03 crore. So far, 70.60% of the works have been completed. In Phase III, for a length of 140.10 km will be taken up at an estimated cost of Rs.760.10 crore. On completion of this project,

20 lakh people residing in Perungudi, Sholinganallur and part of Alandur zones will be benefitted.

Greater Chennai Corporation has taken up the restoration and rejuvenation of 12 water bodies under the Singara Chennai 2.0 scheme at an estimated cost of Rs.9.62 crore. So far, restoration works in 7 water bodies have been completed, remaining 5 water bodies are in progress. Further, under AMRUT 2.0, restoration of 5 water bodies has been taken up at an estimated cost of Rs.14.84 crore and under Singara Chennai 2.0 scheme (2023-24) restoration of 24 water bodies have been taken up at an estimated cost of Rs.13.56 crore.

3.1.4. Special Projects

(i) Installation of Chennai Metropolitan Area Intelligent Transport System

The Chennai Metropolitan Area Intelligent Transport System project is being implemented at an estimated cost of Rs.904.88 crore with loan

assistance from the Japan International Co-operation Agency (JICA). The project is expected to create an efficient traffic management system to meet the increasing traffic demands in the Chennai Metropolitan Area. Major components are as follows;

1. Adaptive Traffic Signal Control System
2. Chennai Traffic Information and Management System
3. City Bus System

The Contract has been awarded for the execution of the project. The pilot phase of the project is launched and is under implementation. The duration of implementation of this is 31 months. Operation and Maintenance of the system will be carried out for 5 years after implementation. Currently, the implementation of the pilot project is under progress.

(ii) Chennai City Partnership Programme (CCPP)

Chennai City Partnership Programme focuses on enhancing the resilience of Chennai city and improving service delivery in the Chennai Metropolitan Area for key services. It is a USD 1 Billion (nearly Rs.7,500 crore) program to be executed in 3 phases. Greater Chennai Corporation is one of the major stakeholders in this program.

In phase I, the Government of Tamil Nadu will receive USD 300 million (nearly Rs.2,250 crore) from the World Bank over 5 years, starting from 2021. Greater Chennai Corporation will receive around USD 90 million (nearly Rs.675 crore) over 5 years on the successful completion of 4 DLIs (Disbursement Linked Indicators). Further, 4 DLIs, Greater Chennai Corporation will also have to achieve the Result Areas (RAs) as agreed to with the World Bank.

The 4 DLIs are - reduction in vacancy rates in professional cadres of Greater Chennai Corporation; enhanced efficiency and transparency of public procurement of Greater Chennai Corporation; strengthening Greater Chennai Corporation's health system; and increased annual own-source revenue of Greater Chennai Corporation. The RAs are - a reduction in women feeling unsafe in buses and public spaces; increased availability of pedestrian-friendly multi-utility streets; improved solid waste management efficiency; and citizen and customer feedback for improved accountability of service delivery institutions.

(iii) Complete Streets Programme

A key component of the City Partnership Program is Complete Streets. To further its efforts in creating high-quality and equitable streets for all, Greater Chennai Corporation has launched the Mega Streets Programme to re-imagine the city's

arterial roads as “complete streets,” taking into account the needs of all street users and uses. The new designs would include continuous footpaths, streamlined carriageways, organized on-street parking, and well-planned underground utilities. The design also integrates bus stops, street vending, and all other street furniture thoughtfully to enhance pedestrian experience. In the first phase 11.6 km of roads are targeted with works already underway at Khader Nawaz Khan (KNK) and Monegar Choultry (MC) roads have been commenced. Further, Race Course road, Thiruvottriyur high road and Arunachaleswar road will be taken up for execution. Balance roads (6.6 km) DPR under preparation.

(iv) Operation and Maintenance of Toilets under Public Private Partnership (PPP) mode

Greater Chennai Corporation has selected a private concessionaire through an open-bidding process who will “Design, Build, Finance, Operate

and Transfer” the toilets. It is a 9-year project, in which 1 year will be given for designing, building and commissioning and 8 years for operation and maintenance. The project is structured as a Hybrid Annuity Model – Public Private Partnership with annuity payments to the concessionaire based on Key Performance Indicators (KPI) monitored by independent engineers. The Concessionaire has been selected and appointed on 01.09.2023. The details of toilets to be taken up in Zones 5, 6 & 9 (Marina Beach) are as given in table 3.7.

Table 3.7

Description	Zone – 5		Zone – 6		Zone – 9 (Marina only)		Total	
	Locations	Seats	Locations	Seats	Locations	Seats	Locations	Seats
New Construction	51	365	36	281	3	16	90	662
Major refurbishment	71	396	17	46	-	-	88	442
Minor refurbishment	105	1,398	81	661	8	107	194	2166
Total	227	2,159	134	988	11	123	372	3,270

In subsequent phases, the public toilets in the remaining zones would be taken up for comprehensive operation and maintenance work, similar to Phase 1. The preliminary works have been completed and the preparation of the tender document is under process.

(v) Restoration of Victoria Public Hall

Victoria Public Hall is a heritage building built in 1890 and is a significant icon in Chennai city. Greater Chennai Corporation has taken up the work of conservation, revitalization and seismic retrofitting of Victoria Public Hall under Singara Chennai 2.0 at an estimated cost of Rs.32.62 crore. After the rehabilitation of Victoria Public Hall, it will have a prominent museum space and become an important cultural venue for Chennai city.

(vi) Smart Cities Mission

Under the Smart Cities Mission, 46 works have been completed at the cost of Rs.985.24 crore. It includes major initiatives like a

pedestrian plaza, multi-level car parking, smart water meter, restoration of waterbodies and integrated command and control center (ICCC). Two works namely Mambalam Canal Reach-1 and Reach-2 at an estimated cost of Rs.59.42 crore are in progress. Further, an additional pond of 8.5 acre with a water holding capacity of 50,000 cu.m is being developed adjacent to the existing lake at Villivakkam at an estimated cost of Rs.7.90 crore. Work is in progress.

3.1.5. Buildings

Greater Chennai Corporation maintains 3,910 buildings like schools (418 nos), Public convenience (1379 nos), Emergency Obstetric Care (3 nos), Burial grounds (192 nos), UPHC (140 nos), Health & Wellness Centers (140 nos) UCHC hospitals, Night Shelters, Zone/Division/Unit/Electricals Office Buildings, Community halls, Shopping Complex, Anganwadis, Dobikhana, Gym building, Auditorium, etc.

During the year 2021–2022, under the Singara Chennai 2.0 scheme, construction of 23 new school building at an estimated cost of Rs.50.66 crore and 10 LPG Crematoriums at an estimated cost of Rs.6.13 crore were taken up and completed.

During the year 2022-2023, under the Singara Chennai 2.0 scheme, 19 new school buildings at an estimated cost of Rs.69.27 crore and the new / upgradation of 28 LPG Crematoriums at an estimated cost of Rs.23.86 crore taken up, out of which 75% works have been completed and balance work is under progress.

During the year 2023 – 24 Hon'ble Minister Announcements under the Singara Chennai 2.0 scheme, 33 number of new school buildings have been taken up at an estimated cost of Rs.49.30 crore and 15 new crematoriums have been taken up at an estimated cost of Rs.22.56 crore and construction of 6 numbers of

new community halls have been taken up at an estimated cost of Rs.46.61 crore. All the works are in progress.

Construction of 2,020 Aspirational toilet seats and 600 Urinal bowls at an estimated cost of Rs.105.50 crore, utilising SBM funds to the tune of Rs.21.485 crore and Nirbhaya Contribution of Rs.32.98 crore. Under SBM fund, 449 locations with 844 WCs and 942 Urinal works were completed.

During the year 2024-25, under the CITIIS scheme, it is proposed to be taken up renovation and upgradation of 11 school buildings at an estimated cost of Rs.35 crore and also construction of 13 new school buildings at an estimated cost of Rs.18.28 crore under State Finance Commission grant and State fund Scheme.

Under the Singara Chennai 2.0 scheme, it is proposed to construct 10 numbers of Smoke-free

LPG System Crematorium at an estimated cost of Rs.15.00 crore.

3.1.6. Electrical

Streetlights

The Greater Chennai Corporation provides uniform street lighting in all the bus route roads and interior roads for the safety of citizens and commuters. The corporation maintains 3.01 lakh streetlights which are energy-efficient LED lights and 450 high mast lights have been erected at vital locations such as major road junctions, beaches, and parks. The details of the streetlights are as given in Table 3.8.

Table 3.8

Sl. No.	Zone	Name of the Zone	No. of streetlights	No. of high mast lights
1	I	Thiruvotriyur	13,910	23
2	II	Manali	12,619	15
3	III	Madhavaram	19,019	36
4	IV	Tondiarpet	19,515	30
5	V	Royapuram	15,692	38
6	VI	Thiru-Vi-Ka-Nagar	18,819	35
7	VII	Ambattur	27,723	48

Sl. No.	Zone	Name of the Zone	No. of streetlights	No. of high mast lights
8	VIII	Anna Nagar	21,371	28
9	IX	Teynampet	23,271	52
10	X	Kodambakkam	24,435	33
11	XI	Valasaravakkam	20,730	16
12	XII	Alandur	15,756	21
13	XIII	Adyar	24,548	48
14	XIV	Perungudi	23,964	18
15	XV	Sholinganallur	19,862	9
Total			3,01,234	450

Under the Nirbhaya Scheme, which is intended for the safety of women in public places, 13,579 numbers of Street Light posts and 12,213 LED Fittings have been installed, in dark spots identified in collaboration with Greater Chennai Police at an estimated cost of Rs.68.99 crore.

3.1.7. e-Governance

The Greater Chennai Corporation offers online services to citizens like payment of property

tax, birth, and death registration, town planning, public grievance redressal, Namma Chennai App, WhatsApp services, 1913 call center, etc.

An elaborate Enterprise Resource Planning System (ERP) is also used within Greater Chennai Corporation for works management, legal case management, personnel management, pension management, etc.

Enterprise Resource Planning system (ERP 2.0)

Greater Chennai Corporation is using a full-fledged Enterprise Resource Planning (ERP) Software system with more than twenty live functional modules since 2008. All modules available in the Enterprise Resource Planning system are integrated into the Finance module, emphasizing the importance of Municipal Finance. Facilities such as Mobile Application, and Call Center are interlinked to the Enterprise Resource Planning system, allowing for seamless use of data

resources available with Greater Chennai Corporation. Online payment channels such as BBPS and UPI are incorporated to enhance citizen service delivery. Services of more than 10 banks can be accessed for online payments as of the year 2023-24. The data available with Greater Chennai Corporation is used by different Government agencies including, the Guidance Tamil Nadu portal (Single Window Portal), Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB), and also for services such as Name Transfer of Land, etc.

The project Enterprise Resource Planning 2.0 is proposed, as the majority of the revenue-related activities of Greater Chennai Corporation such as Property tax, Profession tax, Trade License, Company tax, etc. are being undertaken on the existing Enterprise Resource Planning platform.

Greater Chennai Corporation shall enable increased revenue collection by simplifying the

processes of assessment and collection. Under Enterprise Resource Planning 2.0, major business process re-engineering is proposed for improved user experience and functionality. The following are the Salient features of ERP 2.0:

- Microservices-based architecture to be in line with the latest digital technology standards.
- Mobile first design to improve accessibility for users, including Greater Chennai Corporation staff undertaking fieldwork.
- User-friendly interface that aids in navigation and usage of Greater Chennai Corporation online services.
- GIS-enabled ERP application to identify and plug revenue leakages for improved revenue collection.
- Compliance with the latest industry standards for ensuring security, performance, accessibility, etc.

- Performance – to enhance during peak and normal times for delivery of Greater Chennai Corporation services.
- Integrations – to facilitate inter-departmental and external integrations for data sharing.
- Online transactions – to efficiently manage continuously increasing online transactions (online transactions have increased from 5% to 80% for revenue-related services over the last few years in Greater Chennai Corporation).
- Scalability to facilitate continuous growth of Greater Chennai Corporation services and functions.
- Increased user community – to cater to a large user community including citizens, businesses, Greater Chennai Corporation employees, pensioners, external government departments, etc.

- Real-time/Near real-time Dashboards – Availability of AI/ML-enabled data-driven analytical dashboards.
- Data sharing – to provide an exclusive data-sharing platform for G2G services.
- Disaster Recovery Facility – Establishment of Disaster Recovery Facility.

3.1.8. Parks and Playfields

Greater Chennai Corporation maintains 863 parks. Out of these 863 parks, 585 parks are maintained by private contractors, 189 parks are maintained by Greater Chennai Corporation through park labor, and 89 parks are maintained by way of adoption by citizen groups. Greater Chennai Corporation also maintains 490 playgrounds and children’s playgrounds, 3 Swimming Pools, 163 Gym, and other sports facilities. Apart from the park and playfield, Greater Chennai Corporation is maintained by 112 center medians and 113 traffic islands, as given in Table 3.9.

Table 3.9

Zone	Name of the Zone	No. of Parks	No. of Playfields and No. of Children Playground	No. of Gym Buildings	No. of Swimming Pools
I	Thiruvotriyur	9	5	2	1
II	Manali	32	35	5	-
III	Madhavaram	63	23	1	-
IV	Tondiarpet	56	66	13	-
V	Royapuram	27	12	15	1
VI	Thiru-Vi-Ka Nagar	47	38	11	-
VII	Ambattur	90	8	6	-
VIII	Anna Nagar	42	73	21	-
IX	Teynampet	42	22	24	1
X	Kodambakkam	58	70	6	-
XI	Valasaravakkam	83	17	7	-
XII	Alandur	70	10	11	-
XIII	Adyar	82	63	31	-
XIV	Perungudi	71	20	4	-
XV	Sholinganallur	91	28	6	-
TOTAL		863	490	163	3

Parks & Playfields - New Developments (OSR Lands)

In the financial year 2024-25, it is proposed to develop new parks in the vacant open space reservation (OSR) lands vested with Greater Chennai Corporation. All the newly developed parks are designed as differently-abled friendly. Further, the new parks will have minimal use of concrete and plentiful greenery so that they act as sponge parks in the rainy season.

Under Singara Chennai 2.0 scheme (2021-22 and 2022-23) a total of 170 parks and 67 playfields have been sanctioned at an estimated cost of Rs.60.59 crore and Rs.27.92 crore respectively. Out of which 153 park and 59 playfield works were completed. Balance work in progress.

Under Singara Chennai 2.0 scheme (2023-24) a total of 19 parks and 37 playfields have been sanctioned at an estimated cost of Rs.6.99 crore and Rs.14.30 crore respectively. Out of which

3 Parks and 1 Playfields work were completed.
14 Parks and 35 Playfield works are in progress.
2 Parks and 1 Playfield works are to be taken up.

In the year 2024-25, under Singara Chennai 2.0 plans to develop 35 new parks and playgrounds in OSR Lands and 50 sponge parks to be developed in the existing parks.

(i) Urban Greening

Greater Chennai Corporation has made sustained efforts to increase the green cover in Chennai city by planting native tree saplings in various parts of the city. Greater Chennai Corporation has planted over 3 lakh trees in the years 2022 to 2024. It is proposed to plant 1 lakh tree saplings with community participation and Residential Welfare Associations.

3.2 Health and Sanitation

3.2.1. Solid Waste Management

On average, 5,500 MT of solid waste is generated daily in Greater Chennai Corporation.

It is collected at the household level. The source-segregated wet and dry waste is channelized to the decentralized processing facilities, and the remaining waste is transferred to the processing sites at Perungudi and Kodungaiyur.

At present, solid waste management activities are being carried out in 5 out of 15 zones by Greater Chennai Corporation and in the remaining 10 zones through private concessionaires.

(i) Infrastructure

Solid Waste Management involves the collection of waste at the point of waste generation, transportation to the respective processing centers, and further processing.

For carrying out these activities, the Greater Chennai Corporation operates 2,457 battery-operated vehicles (BOVs), 101 battery-operated tricycles, 671 tricycles, 172 HMV/LMV compactors, 106 HMV/LMV tippers, 14 Mechanical sweepers etc.

Likewise, the private concessionaires operate 3,509 BOVs, 136 HMV/LMV compactors, 102 HMV/LMV tippers, and 45 mechanical sweepers.

In Greater Chennai Corporation 4,615 permanent employees, 448 temporary workers, and 4676 contract workers are engaged for solid waste management activities. Further, the private operators have engaged 12,249 workers for carrying out these conservancy operations.

(ii) Wet and Dry Waste Processing

In line with Solid Waste Management Rules 2016, the Greater Chennai Corporation initiated decentralized facilities to process the source-segregated wet and dry waste.

At present, 200 wet waste processing facilities such as micro composting centers, windrow composting centers, bio-CNG plants, and garden waste processing centers have a capacity of handling 1,020 metric tonnes per day (TPD) of wet waste. From the wet waste processing units,

presently, 720 MT of manure is produced every month and 562 MT Bio CNG gas has been produced so far.

Two Bio-CNG plants of 100 TPD capacity each, are in operation at Chetpet and Madhavaram. Additional five Bio-CNG plants, with a total capacity of 500 TPD are being set up to process the wet waste and are under various stages of construction. The details of the wet waste processing facilities are as given in Table 3.10.

Table: 3.10

Sl. No.	Description	Numbers	Capacity in TPD
1	Micro compost yards	194	560
2	Windrow method	2	100
3	Garden waste processing centres (Rs.660/MT)	2	160
4	Bio-CNG plants	2	200
	Total	200	1,020

Further, there are 143 Dry waste processing centers, such as material recovery facilities, resource recovery centers, incinerators, etc., having a capacity of 560 TPD.

In addition to this, 50 MT of non-recyclable combustible dry waste is sent to cement industries for co-processing every week from baling centers available at four locations (Madhavaram, Mint, Otteri, and Pallikaranai).

The dry waste processing facilities available with Greater Chennai Corporation are as given in Table 3.11.

Table: 3.11

Sl. No.	Method Of Processing	Total Number	Capacity in MT
1	RRC/MRF	136	415
2	Incinerator	3	65
3	Baling Centre	4	80
	Total	143	560

(iii) Disposal of legacy waste

a. Perungudi

The Perungudi site located in the southern part of the city is spread over an area of 225.16 acre and has been in use for more than 35 years as a disposal site. Solid waste from Zones 9 to 15 is sent to the Perungudi site.

The estimated volume of legacy waste above ground level is around 30.61 lakh cubic meters. The Greater Chennai Corporation has initiated reclamation of the Perungudi site through the bio-mining process under 6 packages, at a project cost of Rs.350.65 crore, under the Swachh Bharat Mission (SBM). Bio-mining work has commenced. So far, around 23.86 lakh cubic meters of legacy waste have been processed. Further, an additional quantity of 2.5 lakh cubic meters of waste will be taken up for biomining under the Swachh Bharat Mission 2.0 fund. After completion of the project, 200 acre of land will be reclaimed. A part of the

reclaimed land is proposed to be used for setting park.

b. Kodungaiyur

The Kodungaiyur site located in the northern part of the city, has an extent of 342.93 acre and has been in use for more than 40 years. Zones 1 to 8 use this facility. The estimated quantity of legacy waste, above ground level, is around 66.52 lakh MT. Bio-mining is started at Kodungaiyur Dumping Ground at a cost of Rs.648.38 crore under Swachh Bharat Mission & KfW funds and is under progress.

(iv) Construction and Demolition (C & D) Waste Management

Presently, the C & D waste collection in Chennai is around 800 TPD. To improve the service delivery, the collection and transportation of C & D waste has been outsourced, and operations have commenced.

Greater Chennai Corporation has installed two facilities for processing C & D waste on a PPP basis, one at Kodungaiyur and another at Perungudi, which have started the processing work. So far, 4,00,206 MT of C & D waste has been processed with an average of 250 MT in each location daily. Final products such as coarse and fine aggregates are used in construction.

(v) Mechanical Infrastructure

The Mechanical Engineering Department has a total fleet strength of 3,366 vehicles, which include vehicles for transportation of solid waste and C & D waste, such as battery-operated vehicles, Compactor, HMTV/LMTV tippers, frontend loaders, bulldozers and hydraulic excavators, etc.

Greater Chennai Corporation also has special equipment such as 2 numbers of amphibian vehicles, 4 numbers of robotic multipurpose excavators, 3 numbers of mini amphibians for clearing floating garbage and water hyacinth in

canals, and 7 numbers of vehicle-mounted high capacity suction cum jetting machines with water recycling facility for clearing storm water drains. 9 numbers of hydraulic-operated tree-pruning machines are also deployed to remove overhanging tree branches, on a need basis, and to clear fallen trees, poles etc., during disasters. To clear the sandy area in beaches, and make it litter-free, 8 numbers of tractor-driven beach cleaning machines are deployed at Marina Beach, Elliots Beach at Besant Nagar, Palavakkam Beach, and other beaches in the Greater Chennai Corporation area.

Further, 59 numbers of mechanical sweepers (including concessionaire vehicles) are used to clean the sand accumulated on the roads.

To increase the efficiency of door-to-door collection of garbage, a huge fleet containing 5,966 numbers of battery-operated vehicles

(including concessionaire vehicles) is being deployed in Zones I to XV.

Greater Chennai Corporation has recently procured 3,850 numbers of compactor bins and placed them in Zones 4,5,6,7 and 8 for the collection of garbage and all the bins are periodically washed.

(vi) Information, Education and Communication (IEC)

The Government is aware that to achieve the goal of a garbage-free and clean city, it is imperative to sensitize the citizens about solid waste management and sanitation.

Therefore, on 03.06.2022, the Hon'ble Chief Minister launched the People's Movement for Clean Cities - an awareness campaign – to elicit people's active participation in the efforts of urban local bodies to make the cities clean and garbage-free. As a part of this awareness movement, the Greater Chennai Corporation is organizing a special

campaign every 2nd and 4th Saturday of the month. During the campaign, various activities such as mass cleaning of public places; cleaning of water bodies; removal of damaged road furniture, vehicles, and other scrap from roadsides; arranging visits for RWAs and students to solid waste processing facilities; awareness about source segregation; etc. are organized. Swachh Bharat Mission animators and the staff of concessionaires also visit door to door to create awareness about solid waste management.

3.2.2. Public Health

Public Health Services

The Public Health Department provides comprehensive public health, preventive, and treatment services to the people of Chennai city including healthcare services, vector control and implementation of various National programs, and registration of births and deaths. The Public Health Department also maintains shelters for the urban

homeless. It has the regulatory function to implement the Urban Local Bodies Act and the Tamil Nadu Public Health Act for disease prevention and public health.

Primary Health Care services

The Greater Chennai Corporation has a well-established health infrastructure that provides comprehensive health care services, such as Antenatal and Postnatal care, Child health care, Basic diagnostics, and treatment for communicable and non-communicable diseases under one roof. The health care services are provided through a network of 140 Urban Primary Health Centres (UPHC), 16 Urban Community Health Centres (UCHC), and 3 Maternity hospitals.

Urban Health and Wellness Centres

The Health and Wellness Centers provide health care services at the nearest possible place to the people. The Fifteenth Finance Commission (FC-XV) has provided grants Rs.88.30 crore to

establish Health and Wellness Centers. In the 1st Phase, 140 Urban Health and Wellness Centers (UHWCs) have been established. The Health and Wellness Centers were inaugurated by the Hon'ble Chief Minister on 06.06.2023. These Centers function from 8.00 AM to 12.00 Noon and 4.00 PM to 8.00 PM. The total number of beneficiaries is 12,37,300 patients from June 2023 to till date.

National Quality Assurance Standards (NQAS)

To strengthen the quality of services provided by the Urban Primary Health Centers, it is proposed to get National Quality Accreditation Certification from the Government of India. So far, 12 Urban Primary Health Centers have been certified under National Quality Assurance Standards.

Dialysis Centers

The Greater Chennai Corporation has established 9 Dialysis Centers functioning under

the Chief Minister Health Insurance Scheme. Currently, 124 Dialysis machines are functioning and 47,980 dialysis cycles in rotation were done.

Polyclinics

Polyclinics are “Outpatient Speciality Clinics” established in Urban Primary Health Centers. The Greater Chennai Corporation has 40 polyclinics across Greater Chennai Corporation. They provide specialty services on fixed days. The services include Consultation and Lab Investigations. The services are provided from 4.30 PM to 8.30 PM. The beneficiaries are 1,35,032 patients from April 2023 to March 2024.

Communicable Diseases Hospital

The Communicable Disease Hospital is an exclusive hospital for Communicable diseases. This hospital has been functioning since 1914. Now, the hospital is functioning 24 hours with 360 bedded facilities.

IP and OP services at Communicable Diseases Hospital

Sl. No	Year	No. of In patients	No. of Out patients
1	2021	7043	68,797
2	2022	5829	84,719
3	2023	6935	99,302

Emergency Care and Recovery Centre (ECRC) with a 50 bed facility is functioning within the premises where mentally challenged persons are rescued and treated.

De-addiction center with a 50 bedded facility is functioning in the hospital. The beneficiaries are not only from Chennai but also from other States and Districts of Tamil Nadu.

The hospital is providing training for undergraduate and postgraduate medical as well as paramedical students. The following courses are being conducted in the institution

- Medical Laboratory Technician Course (DMLT -Two Years)
- Auxiliary midwife Training (for female students only) (ANM-Two years)

This institution has a well-furnished RTPCR lab facility for COVID-19 testing. From 2020 to 2022, 8160 patients with COVID-19 were hospitalized and handled effectively without any mortality.

District Blindness Control Society

GCC has been providing eye screening services in 42 UPHCs as well as in the community to identify cataracts, refractive errors, glaucoma, and diabetic retinopathy.

Performance of eye care services

Sl. no	Year	Cataract surgeries	Glaucoma surgeries	Diabetic retinopathy	Eye balls collected	Free spectacles issued
1	2021-22	10,961	371	333	1,594,	1,170
2	2022-23	15,963	303	1,358	2,090	7,461
3	2023-24	18,432	356	1,856	1,841	8,243

A Tele V Care center is functioning in Semmancherry Urban Primary Health Centre for eye care services. During the years 2021-2022 - 426, 2022-23 - 148, and 2023-24 - 43 cataract patients were identified and surgery was done in a Government hospital.

In the year 2022-2023, five optometrists were appointed under National Urban Health Mission to do screening activities in Urban Primary Health Centres and schools. These optometricians and NGOs have identified 4,526 and 4921 cataract patients in the years 2022-23 and 2023-24 respectively in Urban Primary Health Centres and referred them to Government hospitals for cataract surgery.

National Tuberculosis Elimination Programme

The Greater Chennai Corporation has 36 tuberculosis units, 163 Designated Microscopic Centers, 17 CBNAAT & 14 Trunat testing labs for

the diagnosis and management of Tuberculosis cases. Facilities are available to treat both Drug Sensitive TB (DS-TB) and Drug Resistant TB (DR-TB) in Greater Chennai Corporation.

Diagnosis and notification of TB cases

Sl. No	Year	No. of tests done	No. of patients notified
1	2021	60,898	10,093
2	2022	2,70,561	14,658
3	2023	3,25,240	14,805

TB Preventive Treatment

TB Preventive Treatment (TPT) was initiated for the Household Contacts (HHC) of positive Tuberculosis patients in January 2022. During the year 2022, out of the 4437 HHCs, 3239 (73%) were given TB Preventive Treatment (TPT).

Mobile X-ray vehicles

Greater Chennai Corporation owns 7 Mobile vans with an X-ray facility screening the vulnerable population for TB. In the year 2021 MDUs were used for screening for COVID. In the year

2022, 54,863 were screened, 19,133 X-rays were taken and 91 cases were identified. In the year 2023, 1,57,309 were screened, 33,185 x-rays taken and 165 were identified as TB.

AYUSH Clinics

Three integrated AYUSH Clinics (Ayurveda, Yoga & Naturopathy, Unani, Siddha, Homeopathy) are operational in Zone 4, 10, and 13. Further, Greater Chennai Corporation has nine standalone Ayush clinics across the city. The beneficiaries are 78,000 patients from April 2023 to March 2024.

Birth and Death Registration

The birth and death certificates have been made available online and free of cost since 07.09.2008. Birth / Death certificates are made available online on the official website of Greater Chennai Corporation (www.chennaicorporation.gov.in) and can be downloaded at free of cost. From 01.04.2023 to 31.03.2024 22,94,317 birth

certificates and 53,01,893 death certificates have been downloaded.

A total of 208 Burial Grounds are maintained by Greater Chennai Corporation, out of which Gasifier, LPG, and Electrical cremation facilities are available in 24, 14 and 4 burial grounds respectively. Burial/Cremation services are available in 166 burial grounds. Burial and cremation services done in this burial ground are provided free of cost.

Vector Control Activities:

In the Vector control section, there are 937 Permanent Health workers and 2,382 temporary Health workers, Totally, 3,319 workers are engaged to carry out the mosquito control activities. About 17 Lakh houses in Chennai city are divided into sectors which have about 500 houses per sector.

Anti-mosquito activities, such as fogging operations, are carried out using

65 vehicle-mounted fogging machines and 238 handheld fogging machines. Additionally, 362 handheld spraying machines, 202 battery sprayers, 2 mini fogging machines, and 69 power sprayers are used to spray larvicide in stormwater drains, open drains and canals to control larvicides. 6 Drones to spray larvicide in waterways.

Mega Amphibian, Mini Amphibian, and Robotic Excavator are used in Rivers and canals for desilting and removing hyacinth plants for mosquito larval control activities. Fiber boats are used for removing hyacinth plants and spraying Mosquito Larvicide Oil in the waterways.

Shelter For Urban Homeless

To provide special care to the homeless, Greater Chennai Corporation has 51 night shelters, which are run through NGOs. Out of these, 38 shelters are for the urban homeless and 13 are for

attenders of in-patients in Government Hospitals (special shelters).

Achievements of Shelters for Homeless Intervention

Table 3.12

Categories	2021-22	2022-23	2023-24
Total No. of homeless beneficiaries (rescued and accommodated in shelters)	3,720	3,679	3,297
Total no of special shelter beneficiaries (since 2021)	11,425	11,215	9,495
Old age Pension	81	63	30
Voter ID	9	21	15
Aadhar Card	127	60	47
Driving License	8	38	12
Disability Pension	16	11	4
Disability ID Cards	21	10	12
School Admission	174	194	100
No of residents reintegrated	341	346	262
No of residents rehabilitated	678	653	498
Bank Account	16	30	10

Veterinary Activities

The increasing population of stray Dogs in Greater Chennai Corporation areas is kept under control by following the Animal Birth Control rule, 2023 framed by the Animal Welfare Board of India. Complaints from the general public are attended to by catching Stray dogs and sending the dogs to Animal Birth Control centers which are located at Pulianthope, Lloyds colony, Kannammamet, Meenambakkam, and Sholinganallur. The Dogs undergo Animal birth control surgery and after post-operative care, Stray Dogs are released in the same area from where they were caught. In the year 2023, 19,640 numbers of Stray Dogs were caught and 14,855 numbers of Stray Dogs were sterilized and vaccinated against Rabies.

Greater Chennai Corporation maintained Pet clinics are functioning at TVK Nagar, Nungambakkam, Kannamapettai, and Meenambakkam to provide free treatment,

vaccination, and licensing of Pet Animals. In the year 2023, 37,341 numbers of Pet Animals have been treated and 1,497 numbers of Pet licenses have been issued to pet owners.

To control the Stray Cattle menace in Greater Chennai Corporation, each zone is allotted trained catchers and cattle vehicles for catching and transporting stray cattle caught to depots functioning at Pudupet and Perambur (D&G depot). The cattle caught are impounded at depots and are tagged and maintained until release. The impounded cattle are released to the owners once they submit an affidavit assuming not to let their cattle stray again. A minimum fine amount of Rs.5,000/- is collected from cattle owners for the first two days, after which the fine amount increases by Rs.1,000/- per day. During the year 2023, 4,237 stray cattle have been impounded and Rs.92,04,700/-has been collected from cattle owners as a fine amount and remitted in treasury.

Makkalai Thedi Maruthuvam

The "Makkalai Thedi Maruthuvam" (MTM) scheme was launched by the Government of Tamil Nadu on August 5, 2021, in Zone 6 and subsequently to all the remaining 14 zones of Greater Chennai Corporation. This program offers comprehensive "Home Based Health Care Services" to ensure continuity of care and meet the health needs of beneficiaries.

Field teams comprising Women Health Volunteers (WHVs), Palliative Staff Nurses, and Physiotherapists deliver services at the doorstep. WHVs provide screening and follow-up including Drug Box Delivery, referrals, and community health meetings. Physiotherapists and palliative care nurses offer home-based services to various beneficiaries including the elderly, cancer patients,

and those with chronic illnesses including End Stage Renal Disease.

The number of high-risk people screened for HT and DM has increased from 22,39,024 in March 2022 to 6,18,054 in March 2024. The number of patients identified and treated with Oral cancer, Breast cancer, and Cervical cancer, 68 cases (Oral CA), 193 cases (Breast CA) and 68 cases (Cervical CA) respectively in March 2024. Physiotherapy and Palliative care services, including continuous ambulatory peritoneal dialysis (CAPD), have been provided. By March 2024, 23,887 patients received physiotherapy care, 33,344 patients received palliative care and 43 cases received CAPD bags.

3.3. Revenue

It is essential to have adequate resources in order to implement schemes and programs that the livability of the city and enhance the quality of life for the citizens.

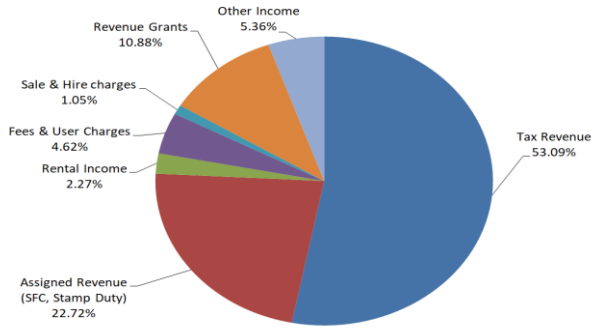
Greater Chennai Corporation has a budget of nearly Rs.7,800 crore. The actual figures as per audited accounts for the financial year 2022-23 are given in Table 3.13.

Table 3.13

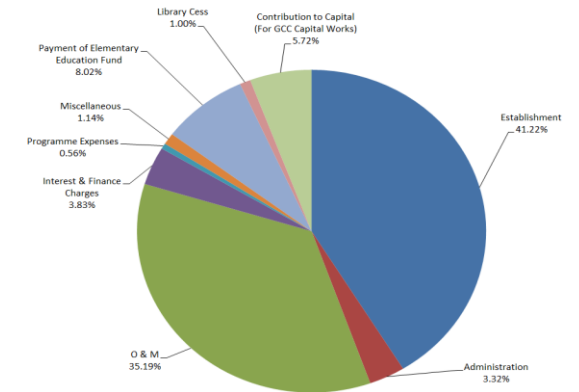
Sl. No.	Account head	Actuals 2022-23 (Rs. in crore)
1	Revenue Account	
	Receipts	3,779.02
	Expenditure	3,790.08
2	Capital Account	
	Receipts	3151.26
	Expenditure	2829.57

A breakup of the different sources of income/revenue receipts of GCC is given in Figure 1. A breakup of the revenue expenditure is given in Figure 2.

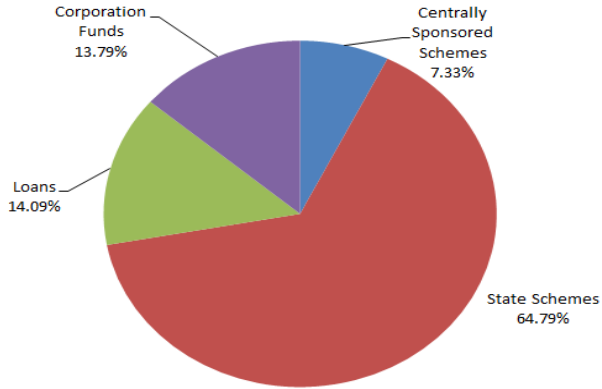
Revenue Receipts



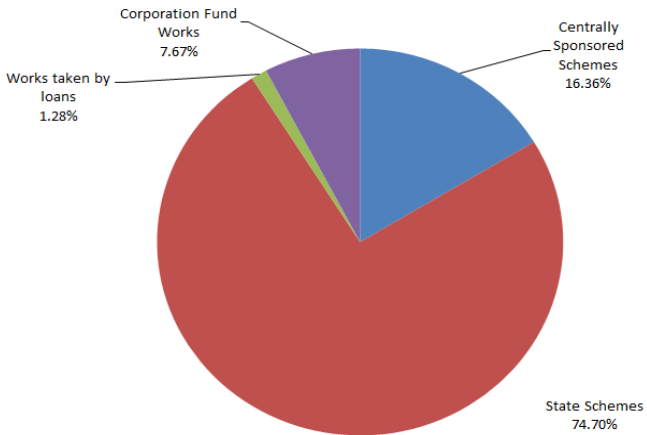
Revenue Expenditure



Capital Receipts



Capital Expenditure



3.3.1. Revenue Department

Revenue Department is responsible for the collection of Property Tax, Profession Tax, Company Tax, Entertainment Tax, Trade Licence Fee and Rent on Shopping complexes. Categorywise demand is given in Table 3.14. Over the years, GCC is taking various efforts to improve the collection of taxes through innovation & technological innovations.

Table 3.14

S.No.	Category	FY 2023-24 Revised Estimate (Rs. in crore)	FY 2024-25 Budget Estimate (Rs. in crore)
1	Property tax	1680.00	1750.00
2	Profession tax	500.00	550.00
3	Entertainment Tax	50.00	50.00
4	Trade License fee & Company tax	26.80	29.00
5	Rent on Shopping Complexes	25.00	25.00

3.3.2 Improving Collection Efficiency through Technology

Greater Chennai Corporation has undertaken several measures to augment tax collection by

leveraging state-of-the-art technology. Greater Chennai Corporation has implemented a holistic Geographical Information System (GIS) driven system, to map all the properties in the city to ensure a reduction in tax leakages. This has led to the creation of improved property and other tax databases. So far, this has resulted in generating an additional annual demand of Rs.100 crore for Greater Chennai Corporation.

Further, Greater Chennai Corporation is carrying out extensive data mapping exercises with databases from across Government departments such as TANGEDCO, Chennai Metropolitan Water Supply and Sewerage Board, Registrar of Companies, Co-Operative Societies, etc., which has resulted in the identification of escaped and miscategorized assessments.

To provide a convenient experience to citizens while payment of dues, field officials are now equipped with handheld POS devices.

Through these devices, payment can be made via several modes such as Cheques/DD/Cards, and the receipts are generated in real-time.

Similarly, citizens are provided with online payment facilities through the Greater Chennai Corporation website, the Namma Chennai app, BBPS, etc. wherein dues can be paid via various payment modes such as UPI, Net Banking, Credit/Debit cards, payment wallets, etc. Due to these technological interventions, almost 65% of property tax assesses currently pay their property taxes online.

3.4. Education

The Education Department of Greater Chennai Corporation strives to provide quality education, enriched with life skills to children through the Chennai schools.

Presently, Greater Chennai Corporation has 417 schools 3,690 teachers, and 142 permanent non-teaching staff under its administration,

catering to 1,20,175 students. Among these 210 schools have Kindergarten sections where about 11,000 students are studying.

Table 3.15

Type of school	Number of Schools 2022-2023	Number of Schools 2023-2024
Primary school	119	206
Middle school	92	130
High school	38	46
Higher secondary school	32	35
TOTAL	281	417

3.4.1 Students Enrolment and Attendance

2023-2024 Academic year, enrolment of the students in the Chennai schools is 1,20,175. Various projects are being taken to improve the attendance of students in schools like the Chief Minister’s Breakfast Scheme and Happy Classrooms initiative along with motivational initiatives like school level leader boards for students with good attendance owing to which Greater Chennai Corporation schools

3.4.2 Areas of Special Focus

Greater Chennai Corporation is taking all the necessary steps to implement the Ennum Ezhuthum program, which is the flagship program of the Government of Tamil Nadu, which has been envisioned to improve the quality of teaching and learning in primary classes in Tamil Nadu. The goal of the Ennum Ezhuthum mission is to ensure that all students of classes 1,2, and 3 in government schools in Tamil Nadu can read with comprehension and possess basic arithmetic skills by 2025. In the academic year of 2023-24, the students of classes 4 and 5 were also added to the purview of Ennum Ezhuthum.

In addition to this Greater Chennai Corporation has also proposed to launch bridging courses for Tamil, English, and Mathematics during the first two months of the next academic to help the students bridge the gap in learning that may occur due to the summer vacation.

To develop students' competency in spoken English, Greater Chennai Corporation is conducting training for students and teachers in various NGOs and CSR initiatives.

All schools are effectively using library books and students are allowed to take books home. Students are encouraged to draw, speak extempore, or write about the topics they read in the library books.

3.4.3 Model and Smart Chennai Schools under the CITIIS fund

Chennai Smart City Limited (CSCL) and Greater Chennai Corporation are implementing the "Model & SMART Corporation Schools in Chennai" under the CITIIS Challenge Initiative. The project envisages a complete transformation of selected Greater Chennai Corporation schools across various components such as Physical Infrastructure, Digital Infrastructure, Teaching Pedagogy, Teacher Training, Sports & Extra

Curricular etc. It is a multidimensional project with niche features under each component, which shall transform the schools holistically.

The original project outlay in Phase-1 of the CITIIS project was Rs. 95.25 crore, out of which Rs. 19.05 Cr (20%) was being borne by the SPV (CSCL). The remaining Rs. 76.2 crore (80%) is a loan funded by AFD received as a grant by Chennai Smart City Limited for this project purpose, with a commitment of repayment of 50% by the Government of Tamil Nadu and Government of India respectively. 28 Schools across 18 School Campuses were taken up for Physical Infrastructure Upgrade apart from several Pan-City interventions including Teacher Development, Smart School Management System, etc. Projects over Rs.80 crore have been completed in the first Phase including all Physical Infrastructure Upgrades.

Recognizing Chennai as a well-performing city in the CITIIS Project, Smart Cities Mission, MoHUA and AFD have sanctioned an allotted Chennai with an additional funding of Rs.35.68 crore for Phase – II of the Project. The proposal is to cover 11 Schools across 6 campuses for Physical Infrastructure Transformation apart from Pan City soft components.

Thus, the total project cost for both Phase – I and Phase – II works out to Rs.156.58 crore as detailed below:

Table 3.16

(Rs. in crore)

Phase	Project Cost and SPV Share		Loan	
			GoTN Share	GoI Share
Phase -I	95.25	19.05	38.10	38.10
Phase – II	61.33	25.65	17.84	17.84
Total	156.58	44.70	55.94	55.94

3.4.4 Women's Safety in Public Places under Nirbhaya fund

The "Women's Safety in Public Places", under the Nirbhaya fund, is being implemented at a project cost of Rs.425.06 crore, of which 60% of the cost (Rs.255.03 crore) is funded by Government of India and the remaining 40% (Rs.170.03 crore) is funded by Government of Tamil Nadu. The key stakeholders are the Greater Chennai Corporation, Greater Chennai Police, Social Welfare and Women Empowerment Department, and Metropolitan Transport Corporation. The projects that are taken up in Greater Chennai Corporation schools under Nirbhaya scheme are as shown below:

Table 3.17

SI No.	Project component	Project amount (Rs. in crore)	Status
1	Remote Monitoring of Street Lighting	14.07	Completed
2	Safety Monitoring in GCC Schools with Girls	5.47	Completed - (636 cameras fixed in 159 GCC schools). O&M of 5 years in progress.
3	Safe & Smart Self Defense to Empower Girls in GCC schools	6.91	Development of sports training grounds is progress for Rs 4.06cr / Self Defense tender in process (Rs.2.85 cr)
4	MenstrualHygiene Management in GCC Schools	4.79	Work completed. O&M is in progress.
5	Improve the Lighting Facilities in Public Places for the Safety of Women	68.99	Work is in progress.
6	Construction of Homeless Shelter for Women with Disability	3.08	Work completed.
7	PMC Extension and Design Consultant	8.50	Work completed.
8	Gender Lab	4.03	3 Consultants on boarded.

Sl No.	Project component	Project amount (Rs. in crore)	Status
9	Third- Party Independent Evaluation	0.50	To be undertaken after Completion of all projects.
10	Sanitation- 57.25 crore		
	A. Mobile Toilets	5.40	Work completed
	B. Renovation of Women Toilets	32.98	Work completed
	Safe Toilets in GCC Schools for girl children	18.87	Work completed
	Total - GCC Projects	173.59	

3.4.5 Community Colleges and ITI

The Greater Chennai Corporation runs an Industrial Training Institute (ITI) at Zone-9, affiliated with the National Council of Vocational Training (NCVT), and provides various courses for skilling students such as plumbers, fitters, mechanics, electricians, motor mechanics, and computer operators. After the completion of these courses, the trainees are provided with job opportunities in various industries by the institute. There are two Community Colleges run by Greater Chennai Corporation, especially for students who

are unable to continue their education after school. Various skill development courses like computer software, paramedical courses, baking and confectionery making, and jute bag-making are taught at these community colleges.

3.4.6 NGO Initiatives

NGO collaboration and coordination is a continuous process, where the needs of Chennai Schools were placed as demand to the NGOs /CSR thereby shifting the supply-based sponsors to demand-driven ones. Regular meetings were held with the NGOs and CSR partners to negotiate the requirements of Chennai Schools and appropriately mobilize the funds. There are around 45 NGOs currently engaged with Chennai Schools through a formal MoU or permission. The NGOs largely work in supporting Foundational Learning Skills, Sports initiatives, STEM coaching, Biodiversity literacy, Montessori training and environment setting, arts and crafts-based life skills, English communication

and soft skills, career guidance, psychological counseling, Robotics, etc.

Quarterly review meetings are conducted for the NGOs to know the progress made and areas of improvement and plan for the next academic year. The focus is more on the North region schools which are often left out for various reasons. This year the focus is more on the Middle and Primary Schools/Classes.

3.4.7 Physical infrastructure development projects

A total of 152 physical infrastructure development projects have been taken up by the Greater Chennai Corporation benefitting 143 schools and are under varying stages of completion. The details of the same are as below:

Table 3.18

Scheme	Completed	Proposed	Tender in progress	Work in Progress	Total
Namakku Naame Thittam	0	7	6	16	29
CITIIS	26	0	0	0	26
CITIIS 2.0	0	7	0	0	7
Singara chennai	0	65	0	0	65
Vadachennai Valarchi Thittam	0	14	0	0	14
SFC (TUFIDCO) funded	0	11	0	0	11
Total	26	104	6	16	152

Table 3.19

Category of School	No. of schools with projects
Higher Secondary	31
High	16
Middle	32
Primary	64
Total	143*
*9 schools have two projects each	

All the schools are also being provided with state-of-the-art dual desks in classrooms and this

is currently being implemented in a phased manner.

3.4.8 Capacity building initiatives for Teachers

3.4.8.1 School Leadership Development and Transformation (SLDT) Program

The School Leadership Development and Transformation Program covering five areas of leadership was provided to 600 school leaders comprising HMs/AHMs and a few aspiring leaders. The training had two phases – workshop and hand-holding support in the school to implement the learnings of the workshop. The five areas of leadership were personal development, Academic Leadership, Administrative Leadership, Relational leadership and Organizational Leadership. The training had KPIs and the progress of implementation was periodically recorded and documented.

All 279 schools have been equipped to prepare an SDP covering all the major requirements of the schools. SLDT phase 2 is planned for 278 teachers for the extended area schools.

3.4.8.2 Montessori Training

10 month long Montessori training was provided to 44 kinder garten teachers from 25 schools. The training and the assessment were completed and we will start Montessori teaching in these 25 schools in the academic year 2024-25.

3.4.8.3 Naan Mudhalvan

Naan Mudhalvan platform aims to provide dynamic information for students on courses and relevant information about industry-specific skill offerings. This will enable the students of Chennai schools to get training in their chosen field of interest that will help them in achieving their career goals.

The objective of this scheme is to identify potential training providers, to impart various skill training based on current industry gaps.

Through this flagship program, the students will be able to get trained and ensure they get jobs according to their skill sets. We will also offer career and academic guidance to students in state educational institutions. Around 70 teachers of 35 Greater Chennai Corporation Chennai schools have been trained to execute this program in their respective schools.

3.4.9 Sports facilities

Greater Chennai Corporation Chennai schools are equipped with well-developed playgrounds and indoor play areas for facilitating the holistic development of the students. 310 schools currently have playgrounds and 242 schools have indoor play areas. Greater Chennai Corporation has also developed state-of-the-art

Football turfs to empower students to develop their proficiency in the sport.

3.4.10 Lab Facilities

All High and Higher secondary schools under GCC are equipped with subject-specific lab facilities as per the needs of the school. In addition to this, 6 schools are equipped with STEM labs to encourage innovative thinking in students.

3.4.11 Gender clubs

The Gender and Policy Lab (GPL) is an initiative by the Greater Chennai Corporation (GCC) that aims to make the city safer for women and promote gender mainstreaming. The Gender and Policy Lab's goal is to improve women's access to opportunities by increasing safety and gender responsiveness in public spaces and transportation. Gender clubs are an initiative of the Gender and Policy Lab to train students on gender roles, adolescence, healthy relationships, gender equity, gender-based violence, and other topics.

The program was launched in all middle schools with the clubs consisting of 30 students from each school.

3.4.12 Community outreach and student counseling

Community outreach initiatives to provide awareness regarding parenting and providing psychological and career counseling are being conducted for the students and parents of various Greater Chennai Corporation schools in collaboration with NGOs like Pratham, Arunodhaya, UPLIFT, etc.

Greater Chennai Corporation Education department is also planning to partner with expert agencies to provide dedicated psychological counselors as part of the major announcements 2024-25 to cater to the needs of the students in our Higher Secondary schools.

3.5. Namakku Naame Thittam (NNT)

The Government's flagship "Nammakku Namme Thittam" scheme is being implemented in the Greater Chennai Corporation for the development of public assets and increasing public participation, in the creation and maintenance of civic infrastructure such as schools, water bodies, roads, drains, crematoriums, parks, playfields, CCTVs, etc. An amount of Rs.99.47 crore has been allotted by the Government to Greater Chennai Corporation under "Namakku Naame Thittam".

Under "Namakku Naame Thittam", Greater Chennai Corporation has granted sanction for 600 works at an estimated cost of Rs.95.50 crore, wherein the public contribution is Rs.48.25 crore and the share of the Government is Rs.47.25 crore. The works taken up include renovation of 9 water bodies, improvement to 121 parks and playgrounds, planting of trees, improvement to 172 Chennai schools, 140 beautification works,

improvement of 33 public toilets, improvement of 8 burial grounds and crematoria, improvement works in 117 center medians, storm water drains, hospitals, roadside platforms and providing rainwater harvesting structures.

3.6. Tamil Nadu Urban Employment Scheme

Under the Tamil Nadu Urban Employment Scheme, in Greater Chennai Corporation, two zones, viz. Zone 4 (Tondiarpet) and Zone 6 (Thiru.Vi.Ka. Nagar) have been selected on a pilot basis. A sum of Rs. 10.50 crore has been allocated. Under this scheme, a daily wage of Rs.382.00 crore has been fixed for the desilting work of stormwater drains for the people seeking work under this scheme.

So far, the Greater Chennai Corporation has surveyed nearly 3 lakh households across the two zones and 54,072 people have been identified as eligible beneficiaries to work in the Greater

Chennai Corporation under this scheme. Job cards have been issued to 47,464 beneficiaries.

In Zone 4 (Tondiarpet) and Zone 6 (Thiru.Vi.Ka. Nagar) administrative Sanction was obtained for 38 projects for an amount of Rs. 3.07 Crore, 37 projects are completed, and 1 project is work in progress. So far 48,932.39 Cu.M has been desilted by engaging 88,428 man-days to Desilting Stormwater Drain in various roads.

3.7 Singara Chennai 2.0

During the year 2021-22, the Government of Tamil Nadu launched the “Singara Chennai 2.0” scheme to provide modern civic infrastructure and services in Greater Chennai Corporation. A sum of Rs. 500 crore was allocated during the year 2021-22, 2022-23 and 2023-24. The abstract of the projects, taken up in Greater Chennai Corporation under the scheme during the three financial years, are given in tables 3.20, 3.21 and 3.22.

Singara Chennai 2.0 – 2021-22

Table 3.20

S. No	Name of the Project	No.of works	Approved cost (Rs. in crore)
1	Water Fountain	26	1.29
2	Park	27	23.25
3	Play Field	17	12.49
4	Dynamic Lighting system	1	1.81
5	Roads BT- BRR	59	37.57
6	Crematorium	10	6.14
7	Name Boards for Streets	1	8.43
8	SWD - (Phase I-10, Phase II - 9)	19	260.87
9	Schools	23	49.83
10	Water Bodies	12	9.08
11	Pathway for Differently abled Persons	1	1.14
12	Animal Birth Control Centre	2	0.81
13	Beautification of Bridge	2	0.55
	Total	200	413.26

Singara Chennai 2.0 – 2022-23

Table 3.21

S.No.	Name of the Projects	No.of works	Approved cost (Rs. in crore)
1	Roads – BRR	38	25.91
2	Roads – IRR	414	29.69
3	Animal Birth Control (ABC) Centre	3	19.72
4	Parks	92	33.07
5	Sponge Parks	57	7.67
6	Play field	51	16.33
7	Beautification of Bridges	9	9.47
8	Storm water drain	2	103.88
9	Crematorium	28	23.86
10	Access pathway – Beach	1	1.62
11	School Furniture	1	4.15
12	School Building	19	69.27
13	Victoria Hall	1	32.62
14	Water Bodies	1	2.99
15	Fish Market	1	1.35
16	Slaughter House	1	1.43
	Total	719	383.03

Singara Chennai 2.0 – 2023-24

Table 3.22

Sl. No.	Name of the Project	No.of works	Approved cost (Rs. in crore)
1	GCC- Integrated Storm Water Drain (ISWD) in Kosasthalaiyar Basin – Committed	1	181.00
2	Roads	109	19.90
3	School Buildings	33	49.30
4	Crematorium	15	22.56
5	Parks	19	6.99
6	Play Fields	37	14.30
7	Water bodies	24	13.56
8	Community hall	6	46.61
	Total	247	356.26

4. Directorate of Town Panchayats

Tamil Nadu is one of the states that has established a system of town panchayats under Article 243Q of the Constitution of India. It is the moral duty of the Government to understand the needs of growing urban areas and address them. Town panchayats are predominantly small and medium-sized towns spread across Tamil Nadu. These towns serve as the backbone for the development of larger cities. Therefore, fostering the development of small and medium towns is crucial for the growth and prosperity of major cities. Hence, the development of town panchayats is considered immensely important. Many town panchayats have been centres of tourism, featuring temples and heritage sites, for many years. The Directorate for town panchayats was established in 1981. Presently, there are 490 town panchayats in the state, which are governed by the

Tamil Nadu Urban Local Bodies Act, 1998 and Rules, 2023.

The current population of the 490 town panchayats is approximately 78,87,523 with an area of 5,983.50 sq.km.

The town panchayat administration is working diligently to enhance the standard of living for residents by offering improved civic amenities and infrastructure that foster employment opportunities, among other initiatives. These efforts are crucial due to the rapid growth of the urban population.

4.1 Administration

The Directorate of town panchayats serves as the administrative head for the 490 town panchayats in Tamil Nadu. 37 districts, excluding Chennai are divided into 17 zones for administrative convenience. These zones are under the supervision of Assistant Directors of Town Panchayats. At the district level, the respective

district collectors supervise and provide necessary guidance to the town panchayats. The details of the 17 zones are given in the table 4.1.

Table 4.1

Sl. No	Name of the Zone	Name of the District	No. of Town Panchayats
1	Kancheepuram	Kancheepuram Chengalpattu	9
2	Tiruvallur	Tiruvallur	8
3	Vellore	Vellore Tirupattur Ranipet Thiruvannamalai	25
4	Dharmapuri	Dharmapuri Krishnagiri	16
5	Salem	Salem Namakkal	50
6	Erode	Erode Tiruppur	57
7	Coimbatore	Coimbatore	33
8	Udhagai	The Nilgiris	11
9	Cuddalore	Cuddalore Viluppuram Kallakurichi	26
10	Thanjavur	Thanjavur Nagapattinam Mayiladuthurai Thiruvarur	35

11	Tiruchirappalli	Tiruchirappalli Perambalur Ariyalur Pudukkottai	28
12	Dindigul	Dindigul Karur	31
13	Madurai	Madurai Virudhunagar	18
14	Theni	Theni	22
15	Sivagangai	Sivagangai Ramanathapuram	18
16	Tirunelveli	Tirunelveli Tenkasi Thoothukudi	52
17	Nagercoil	Kanniyakumari	51
Total			490

The town panchayats are categorised into 4 grades based on their annual income as per the G.O. (Ms.) No. 142, Municipal Administration and Water Supply (TP.II) Department, dated.21.11.2014 as given in the table 4.2.

Table 4.2

Classification of town panchayats	Annual Income	Number
Special Grade	Exceeding Rs. 200 lakh	62
Selection Grade	Exceeding Rs. 100 lakh and upto Rs. 200 lakh	179
Grade I	Exceeding Rs. 50 lakh and upto Rs. 100 lakh	190
Grade II	Below Rs. 50 lakh	59
Total		490

4.1.1 New norms and post creation in town panchayats

The town panchayats started to function as a separate department vide G.O. (Ms.) No. 828, Rural Development and Local Administration Department, dated 07.05.1981. The town panchayats are classified into four grades based on

the income criteria. Further, in G.O. (Ms.) No. 92, Rural Development and Local Administration Department, dated 22.04.1993, norms for post creation were fixed for town panchayats. However, posts have not been sanctioned uniformly in town panchayats based on grades.

Further, due to rapid urbanisation, more number of new schemes have been introduced both by the Central and State Government which increases the work load and responsibilities on manifolds. Hence, as per the present needs of the town panchayats and based on the grades, standardised new norms have been fixed in G.O. (Ms.) No. 23, Municipal Administration and Water Supply Department, dated 21.02.2024 as given in the table 4.3.

Table 4.3

Wing	Name of the post	Norms Fixed			
		Special Grade (62 TPs)	Selection Grade (179 TPs)	Grade I (190 TPs)	Grade II (59 TPs)
1	2	3	4	5	6
General Administration wing	Head Clerk	1	1	0	0
	Junior Assistant	2	1	2	2
	Bill Collector	2	2	2	1
	Typist cum Data Entry Operator	1	1	1	1
	Record Clerk	1	1	0	0
	Office Assistant	1	1	1	1
	Sub-Total	8	7	6	5
Public Health wing	Sanitary Officer	1	0	0	0
	Sanitary Inspector	0	1	0	0

Wing	Name of the post	Norms Fixed			
		Special Grade (62 TPs)	Selection Grade (179 TPs)	Grade I (190 TPs)	Grade II (59 TPs)
1	2	3	4	5	6
	Assistant Sanitary Inspector	0	0	1	0
	Sanitary Supervisor	2	1	1	1
	Sub-Total	3	2	2	1
Engineering wing	Assistant Engineer *	0.5	0	0	0
	Junior Engineer *	0	0.5	0.5	0.5
	Overseer *	0	0.5	0.5	0.5
	Work Inspector	1	0	0	1
	Sub-Total	1.5	1	1	2
Town Planning wing	Junior Engineer (Planning)*	1	0.5	0.25	0.25
	Sub-Total	1	0.5	0.25	0.25
	Grand Total	13.5	10.5	9.25	8.25

* Post fixed on cluster basis

As per the above new norms fixed, 1,891 additional/new posts have been created in 490 town panchayats.

4.2 Functions of the town panchayats

The town panchayats are responsible for discharging many functions stipulated in the 74th Constitutional Amendment. Some of the functions of urban local bodies (ULBs) includes:

1. Water supply for domestic, industrial and commercial purposes.
2. Roads and bridges.
3. Public amenities including street lights, parking lots, bus stops and public conveniences.
4. Public health, sanitation, conservancy and solid waste management.
5. Burials and burial grounds, cremations, cremation grounds and electric crematoriums.
6. Maintenance of water bodies.
7. Provision of urban amenities and facilities such as parks, gardens and playgrounds.
8. Regulation of slaughterhouses.

4.2.1 Revenue sources

Town panchayats receive revenue through various sources including taxes, non-tax, water charges and assigned revenues such as surcharges on stamp duty, devolution funds from the State Government and grants from the Central Finance Commission.

4.2.2 Water supply

Besides renewing and enhancing current water supply systems, the Government is implementing new programmes to provide protected water supply connections to all households and commercial buildings in town panchayats. All town panchayats provide 70 litres of water per person per day (LPCD) to the public, while those town panchayats with underground sewerage schemes (UGSS) would provide 135 LPCD. Out of 490 town panchayats, 376 are covered by combined water supply schemes

(CWSS) maintained by the TWAD Board and the remaining town panchayats receive their supply from local sources. Currently, 40% of households have access to house service connections. The goal is to achieve universal coverage of water supply by providing functional tap connections to all households. This will be accomplished through a circular economy of water, involving water source conservation, rejuvenation of water bodies and wells, recycling and reusing treated used water and rainwater harvesting with the participation of the community at large.

Getting 20% of the water demand through recycled water, reducing non-revenue water to less than 20% and rejuvenating water bodies are major water-related reforms being aimed in town panchayats.

In the town panchayats, 130 water supply projects at an estimated cost of Rs. 2,214.56 crore,

with the assistance of AMRUT 2.0 have been taken up. After the completion of these projects, household connections will substantially increase in town panchayats.

4.2.3 Roads

Connecting town panchayats to adjacent villages and cities, roads play a significant role in enhancing the economies of these areas.

At present, 490 town panchayats are maintaining a total of 20,306 km of various types of roads as given in the table 4.4.

Table 4.4

Sl. No.	Types of Roads	Length (Km)
1	BT Roads	11,156.31
2	CC Roads	5,121.16
3	Paver Block Roads	1,037.27
4	Earthen Roads	2,807.05
5	WBM Roads	127.26
6	Gravel Roads	57.09
	Total	20,306.14

So far, 998.78 km of roads were upgraded under various schemes during the year 2021–22 at an estimated cost of Rs.658.06 crore, 1,261.391 km in 2022–23 at an estimated cost of Rs.819.21 crore and 1,463.837 km in 2023–24 at an estimated cost of Rs.859.68 crore.

In the last 3 years, 1,526.773 km of earthen roads at an estimated cost of Rs.1,106.46 crore have been taken up for improvement and an amount of Rs.1,230.49 crore has been utilised for the restoration of 2,197.235 km of damaged roads. The details of the roads upgraded in the last three years are given in the table 4.5.

Table 4.5

Sl. No	Name of the Scheme	2021-22			2022-23			2023-24		
		Works takenup		Estimate (Rs in crore)	Works takenup		Estimate (Rs in crore)	Works takenup		Estimate (Rs in crore)
		Nos	Length in km		Nos	Length in Km		Nos	Length in Km	
1	2	3	4	5	6	7	8	9	10	11
1	KNMT	656	360.43	251.79	223	173.234	151.51	208	219.93	174.11
2	CGF	84	115.57	79.78	72	61.843	49.76	60	72.407	50.70
3	NABARD	191	292.66	181.30	159	257.023	200.70	164	284.89	200.70
4	TURIF	175	122.74	83.00	144	154.991	105.48	168	218.37	105.48
5	TURIF Savings Fund	0	0	0	107	110.021	74.26	0	0	0
6	15 th FC	304	68.09	36.65	0	0	0	0	0	0
7	NNT	163	39.29	25.54	125	24.418	17.50	0	0	0
8	NSMT	0	0	0	196	378.201	154.00	223	375.84	152.00
9	SFC (URDF)	0	0	0	60	101.660	66.00	105	154.83	72.00
10	Dormant Fund	0	0	0	0	0	0	97	137.57	104.69
	Total	1573	998.78	658.06	1086	1261.391	819.21	1025	1463.837	859.68

4.2.4 Street lights

Street lights play a crucial role in enhancing public safety and security by providing visibility on dark nights, thus reducing the occurrence of road accidents and contributing to the decline in crime rates. Currently, a total of 4,06,295 lights are maintained across 490 town panchayats, comprising 2,975 high mass lights, 656 mercury lights, 13,867 sodium vapour lights, 1,79,583 tube lights, 77,563 CFL lamps, 1,28,203 LED lights and 3,448 solar lights.

To address concerns such as excessive energy consumption, high energy costs, carbon emissions and the imperative to combat global warming, there is a pressing need to transition existing street lights to energy-efficient LED lights. Efforts have been made to convert most of the existing lights to LED lights, excluding existing LED and solar lights. A total of 2,66,953 lights have been identified for conversion to LED under the

State Urban Infrastructure Development Fund at an estimated cost of Rs.155.56 crore. Till date, 1,57,810 lights have been converted to LED lights and the remaining work is in progress.

4.2.5 Bus stands

Among the 490 town panchayats, 203 have designated bus stands. As part of the Kalaignar Narpura Mempattu Thittam (KNMT) scheme for the year 2021–22, 10 new bus stand projects with an estimated cost of Rs. 44.69 crore were taken up, out of which 7 have been completed, with the remaining in progress and 21 bus stands at a cost of Rs. 5.44 crore have been renovated under the Operation and Maintenance (O&M) fund. In the fiscal year 2022–23, 13 new bus stand projects under KNMT and Capital Grant Fund (CGF) with an estimated cost of Rs.22.13 crore are currently underway. Further, under Operations and Maintenance fund, 15 bus stands are taken up for renovation at a cost of Rs.6.79 crore, of which

10 works have been completed and the remaining 5 works are in progress. Additionally, for the year 2023–24, 7 new bus stand projects under KNMT at an estimated cost of Rs.12.28 crore are also in progress. In total, 66 New/Improvement bus stand works at a cost of Rs.91.33 crore have been taken up in the last 3 years.

4.2.6 Shandies

Shandies in town panchayats influence commercial activities related to the buying and selling of agricultural products, livestock, and non-agricultural goods in nearby villages, thereby improving the economy of both the town and surrounding rural areas. Every year, new shandies are taken up for construction under KNMT and CGF. Also, existing shandies are renovated under the O&M fund. In total, 51 shandies have been taken up for construction/ improvement at a cost of Rs.110.32 crore in the last 3 years.

4.3 Sanitation

Ensuring high-quality sanitation for citizens and maintaining clean toilets are the primary responsibilities of town panchayats. To achieve this and sustain open-defecation-free status, individual household toilets have to be provided to those in need. City Sanitation Plans have been prepared and approved by the State Level Technical Committee for all town panchayats under Swachh Bharat Mission 2.0 (SBM 2.0). Gaps have been identified and analysed based on these plans. Accordingly, individual household latrines (IHHL), community toilets, public toilets and urinals are sanctioned. So far, 36,581 IHHLs have been sanctioned under SBM 2.0 by various State High Power Committees. Among these, 28,540 IHHLs have been constructed and put into use and the remaining works are under progress in various stages. In cases where IHHLs couldn't be sanctioned due to a lack of available land in

households, community toilets (CT) have been approved. A total of 357 CTs have been sanctioned, providing a total of 3,179 seats. Of these, 187 CTs have been completed and are operational and the remaining works are under progress in various stages. Additionally, 50 public toilets (PTs) with 385 seats were sanctioned in 2022–2023, out of which 45 have been completed and are currently in use and the remaining 5 are nearing completion. Retrofitting of community toilets has also been approved under the 15th Finance Commission Grant. A total of 204 retrofitting toilet works have been undertaken in 160 town panchayats with an estimated cost of Rs. 9.27 crore and 97% of the works have been completed. Special attention is being given to the maintenance of community and public toilets with QR codes fixed for effective handling of public feedback.

4.3.1 Battery operated vehicles

The pushcarts and tricycles are manually operated and prove challenging for cleanliness workers. In order to alleviate the shortfall in primary collection, sometimes additional trips have also been assigned to the workers, adding to their workload. In order to enhance the efficiency of solid waste management (SWM) activities and to improve the confidence levels of cleanliness workers, town panchayats have opted to purchase battery-operated vehicles (BOVs) with greater payload and volume capacities. Furthermore, due to the limited durability of pushcarts and tricycles, which require frequent repairs, there is a decision to replace them with more durable battery-operated vehicles.

So far, a total of 3,069 BOVs have been sanctioned, out of which 2,301 have been procured and are in use.

4.3.2 Solid waste management

Solid waste management activities are increasingly crucial for maintaining a clean environment and safeguarding human health. In accordance with the Solid Waste Management Rules, 2016, all the town panchayats are effectively implementing solid waste management measures. The Government is giving full attention to the development of necessary infrastructure facilities to support solid waste management implementation. Across 490 town panchayats, approximately 1,840 MT of garbage is generated daily with organic waste accounting for 998 MT, inorganic waste for 709 MT and the remaining 133 MT as silt waste. 59 town panchayats generating over 5 MT per day have secured Tamil Nadu Pollution Control Board (TNPCB) clearance for solid waste processing plants.

At present, most town panchayats utilise BOVs for door-to-door waste collection.

Route charts for pushcarts and BOVs are meticulously prepared and regularised to ensure efficient door-to-door waste collection. Currently, 96% of households in town panchayats are covered under door-to-door garbage collection and efforts are underway to promote home composting to bridge any existing gaps. Recyclable dry waste is sold to vendors, while non-recyclable waste is sent to cement factories for co-processing. A total of 13,808 Self-Help Group (SHG) members are actively involved in waste collection and segregation, supported by 6,845 cleanliness workers responsible for street sweeping and solid waste collection, ensuring the effective implementation of solid waste management practices.

In the fiscal year 2022–23, infrastructure development projects totaling Rs. 73.83 crore have been sanctioned for 354 town panchayats to manage 642 MT of wet waste and Rs.22.25 crore

for 313 town panchayats to handle 445 MT of dry waste. Among these projects, 283 windrow platform works (478 MT) have been completed, with 71 works (164 MT) currently underway at various stages. Additionally, 246 Resource Recovery Centre Projects (336 MT) have been completed, with 67 projects (109 MT) currently in progress at various stages.

4.3.3 Community garden

To involve the communities for the improvement of the clean environment and solid waste management activities, 10 town panchayats have been designated for the development of community gardens. This initiative aims to enhance the greenery of town panchayats and promote a healthier natural environment by encouraging residents to establish community gardens in town panchayats. The town panchayats have entered into Memorandums of Understanding with selected community garden groups for the

establishment and maintenance of community gardens.

4.3.4 Bio/vermi composting

The garbage collected in town panchayats is transported to the Resource Recovery Park and further segregated. Biodegradable waste such as fruits, vegetables, leaves, etc., is segregated and converted into biocompost and vermicompost. Each day, the town panchayats produce an average of 100 to 150 metric tonnes of biocompost. Additionally, 15 to 20 metric tonnes of vermicompost are also produced per day in 249 town panchayats. On average, an annual revenue of Rs.40 lakh is generated in Town Panchayats through the sale of biocompost and vermicompost.

4.3.5 Used water management (UWM)

Treatment facilities like Sewage Treatment Plants (STPs) and Faecal Sludge Treatment Plants (FSTPs) are currently in operation only in a few town panchayats. To improve the coverage of STPs

and FSTPs all around the state, various town panchayats are currently undergoing land identification and detailed project report (DPR) preparation.

4.3.6 Underground sewerage system

Out of the 12 Underground Sewerage System (UGSS) projects taken up in town panchayats, completion has been achieved in 10 locations including Orathanadu, Vallam, Mamallapuram, S.Kannanur, Velankanni, Perundurai, Palanichettyatti, Thirumazhisai, Manachanallur and Melachokkanathapuram. The remaining 2 UGSS projects in Sriperumbudur and Thiruporur are in progress. House service connections are currently being provided in these areas.

4.3.7 Faecal sludge and septage management

At present, 10 Faecal Sludge Treatment Plant (FSTP) projects have been taken up in town

panchayats, out of which 6 have been successfully completed and the remaining are nearing completion. The FSTPs in Karunguzhi and Periyanaikanpalayam are operating efficiently and are considered exemplary models for other urban local bodies (ULBs). These sites attract numerous officials, students from various educational institutions and members of the public seeking knowledge in this domain.

In order to scale up the coverage of FSTPs all around the state, town panchayats have been identified based on a cluster approach for setting up FSTPs. So far, 47 FSTP projects have been sanctioned under SBM 2.0. Implementation is being strategized by clustering neighbouring ULBs and RLBs for efficient execution. Efforts are underway to identify land in more town panchayats in order to spread the coverage throughout the State. Additionally, to eliminate manual clearing of

septic tanks, 185 cesspool tankers have been sanctioned across 185 town panchayats.

4.3.8 Toll-free helpline number 14420

The toll-free helpline number 14420 is designated for reporting sanitation-related complaints and services in Tamil Nadu. The public can call this number to report issues such as the cleaning of septic tanks, sewer lines and report the instances of manual scavenging.

4.4 Crematoriums

In town panchayat areas, the traditional fuel-wood burning method has been gradually replaced with gasifier crematoriums to safeguard the environment. Currently, 25 modern crematoriums are operational. Furthermore, in the year 2021–22, 34 gasifier crematoriums were initiated with an estimated cost of Rs.50.35 crore. Of these, 28 projects have been completed, while the remaining are at different stages of progress.

For the year 2022–23, 37 crematoriums have been undertaken at an estimated cost of Rs. 51.94 crore, with 13 projects completed and the remaining works are in progress. Additionally, 28 crematoriums have been started for the years 2023–24 at an estimated cost of Rs. 44.70 crore and the projects are at various stages. Trusts and NGOs responsible for maintaining these crematoriums have been identified and entrusted with the job.

4.5 Environmental development

Climate change has become an important topic for the global community today and its impact has affected every section of society. Therefore, considering the changes caused by climate change, a plan was devised to grow trees in the town panchayats to improve and protect the environment. Planting trees in town panchayats not only protects the environment but also provides economic support.

Trees such as heritage trees, mango, jackfruit, guava and others that are useful to the public are encouraged for plantation in town panchayats. Steps have been taken to plant valuable trees like teakwood, vengai and neem trees in town panchayats areas. It is also encouraged to plant palm trees around water bodies like lakes and ponds to strengthen the bunds. So far, 4,09,413 saplings have been planted in 490 town panchayats.

4.5.1 Rejuvenation of water bodies

Out of the 2,212 water bodies across 490 town panchayats, 1,182 have already been restored. In the remaining 1,030 water bodies, efforts are being taken to rejuvenate 696 water bodies with the aim of recharging groundwater, enhancing water availability, preventing further degradation and ensuring their sustainable use for the benefit of the environment and local communities. Of these, rejuvenation work on 483 water bodies has been

successfully completed, while 213 are currently in progress at various stages. The remaining 334 water bodies will be restored in due course. The details of above works are given in the table 4.6.

Table 4.6

(Rs.in crore)

Sl. No.	Year	Name of the Scheme	No.of Works	Estimate Amount
1	2021-22	KNMT	11	14.83
2		NNT	6	0.37
3		15 th Finance Commission	302	38.56
4		TNUES	124	20.53
5		CGF	5	17.05
6	2022-23	KNMT & AMRUT 2.0	116	77.27
7		KNMT	3	3.94
8		NNT	4	1.91
9		CGF	1	1.06
10	2023-24	KNMT	50	15.83
		AMRUT 2.0	74	25.12
Total			696	216.47

4.5.2 Parks

Parks play a critical role in maintaining healthy ecosystem. Out of the 536 parks in 490 town panchayats, 160 park improvement works were undertaken in 2022–23, of which 138 have been completed and the remaining are in progress. For the year 2023–24, 133 park development works have been initiated, with progress underway. Additionally, 68 park development works have been approved in the 10th State High Powered Committee Meeting.

4.5.3 Rainwater harvesting

Amendments for the provision of rainwater harvesting are included in the Urban Local Bodies Act, 1998 and the Building Rules issued thereunder have made rainwater harvesting mandatory in every building. This requirement had a significant impact on recharging the groundwater table across Tamil Nadu. The focus is on renovating existing rainwater harvesting structures in public and

private buildings and creating new structures. Various measures have been implemented including creating awareness among the public about the importance of rainwater harvesting.

4.6 Centrally sponsored schemes

4.6.1 Swachh Bharat Mission 2.0

In SBM 2.0 for the fiscal year 2021–22, a total of 7,295 individual household latrines (IHHLs), 100 community toilets with 847 seats and 75 urinals with 450 seats were taken up. Additionally, for the fiscal year 2022–23, a total of 27,900 IHHLs, 90 community toilets, 50 public toilets and 38 urinals were sanctioned. Among these, 20,844 IHHLs, 87 community toilets, 45 public toilets and 38 urinals have been completed, with ongoing work for the rest.

4.6.2 Biomining of legacy waste dumpsite

The reclamation of landfill sites filled with legacy waste is currently underway through the process of biomining. Across 131 town panchayats,

147 old and abandoned dump sites have been identified for bioremediation. These sites contain approximately 11.4 lakh cubic metres of legacy waste spread over 257 acres, with a total estimated cost of Rs. 76.32 crore. Biomining operations have been successfully completed in 54 town panchayats (comprising 61 works), resulting in the clearance of 5.20 lakh cubic metres of legacy waste and the reclamation of 108 acres of land. The remaining 86 biomining works are currently in progress at various stages. The Centre for Environmental Studies at Guindy Campus, Anna University, Chennai, is engaged as the third-party inspection agency to provide technical guidance for the biomining works.

4.6.3 Prime Minister's Awas Yojana (Urban)-PMAY (U)

Under the Prime Minister's Awas Yojana (Urban), the state-level nodal agency is the Tamil Nadu Urban Habitat Development Board. In

town panchayats, only the fourth component of the PMAY (U), namely Beneficiary Led Construction (BLC) is being implemented. Under this scheme, a subsidy of Rs. 2.10 lakh is provided to every beneficiary with Rs.1.50 lakh from the Government of India and Rs.0.60 lakh from the State Government. Any additional costs are to be borne by the beneficiary.

So far, 91,944 houses have been sanctioned under this scheme, of which 66,323 houses have been completed. The remaining 20,449 dwelling units are in progress and are expected to be completed soon.

4.6.4 National Urban Livelihood Mission (NULM)

Out of the seven components, the Shelter for Urban Homeless (SUH) component and the Support to Urban Street Vendors (SUSV) component are being implemented with respect to the town panchayats department.

(i) Shelter for the homeless urban poor

Under the National Urban Livelihoods Mission (NULM), there are 38 shelters in the town panchayats department, of which 3 are normal shelters and 35 are special shelters (for attendants of inpatients in Government Hospitals). Out of these, 37 shelters are completed and functioning. The remaining shelter is under construction.

(ii) Support to Urban Street Vendors (SUSV)

A new survey is being conducted and identity cards will be issued to create an environment for the smooth functioning of business.

For the survey, issuance of identity cards and formation of street vending committees, funds amounting to Rs. 2,57,18,340 have been allotted to town panchayats.

Additionally, 228 mobile vending carts have been sanctioned to Velankanni town panchayat at an estimated cost of Rs.188.34 lakh and the same has been supplied to the vendors.

(iii) PM-SVANidhi for street vendors

Under the PM-SVANidhi scheme, street vendors are extended a loan of Rs. 10,000 at a subsidised interest rate. The scheme has a disbursement target of 1,34,170 street vendors. So far, 1,08,447 loan applications have been uploaded to the PM SVANidhi portal. Out of these, 70,977 loan applications have been sanctioned and loans have been disbursed to 67,834 applications. In order to sanction more loans, periodical meetings with banks and beneficiaries are being conducted at the regional level.

4.6.5. 15th Finance Commission – National health mission grant scheme

As per the recommendation of the 15th Finance Commission, the Health Grant scheme is being planned and implemented through the Urban Local Bodies from the financial year 2021-22 to 2025-26 by the Central Government under a separate head for specific components of

the health sector under the three heads of primary health buildings, block-level public health buildings and sub-health buildings in rural and urban areas.

In the financial year 2021–22, administrative sanction has been accorded for 42 works at a cost of Rs. 21.00 crore, of which 39 works have been completed and the remaining 3 works are nearing completion.

In the financial year 2022–23, administrative sanction has been accorded for 24 works at a cost of Rs.11.10 crore and all the works are in progress at various stages.

In the financial year 2023–24, administrative sanction has been accorded for 69 works at a cost of Rs.36.45 crore and all the works are in progress at various stages.

4.7 State Government schemes

4.7.1 Kalaingar Nagarpura Mempattu Thittam (KNMT)

Under the KNMT scheme, conversion of earthen roads to CC, BT and paver block roads, improvement of weekly shandies, establishment of library/knowledge centres and modernization of bus stands are among the 800 works undertaken at an estimated cost of Rs. 473.42 crore during the year 2021-22. Out of these, 789 works have been completed and the remaining 11 works are in progress at various stages.

Likely, administrative sanction has been accorded for the year 2022-23 to take up 15 shandies work, 11 bus stands, 37 crematoriums, 3 water bodies, 1 park improvement work, 1 community hall and 223 road works at an estimated cost of Rs.495.77 crore including fund tie-ups for water supply projects taken up under AMRUT 2.0. Out of these,

220 works have been completed and the remaining 71 works are in progress at various stages.

Administrative sanction has been accorded for the year 2023–24 to take up 9 shandies work, 7 bus stands, 25 crematoriums, 50 water bodies, 63 park improvement works, 74 storm water drains and culverts, 208 road works, 2 knowledge centres and battery-operated vehicles at an estimated cost of Rs.495.00 crore including fund tie-ups for water supply projects taken up under AMRUT 2.0. Out of these, 157 works have been completed and the remaining 282 works are in progress at various stages. More infrastructure work will be taken up in the forthcoming years.

4.7.2 Namakku Namme Thittam (Urban)

In order to enhance the self-support mechanism of the public and increase public participation in creating and maintaining community infrastructure, the Government has announced "Nammakku Naame Thittam".

Regarding town panchayats, 522 projects were undertaken during the year 2021–22, with a total cost of Rs. 57.28 crore, including a public contribution of Rs.20.03 crore and a Government contribution of Rs.37.25 crore. Of these, 518 works have been completed and the remaining 4 are at various stages of implementation. In the year 2022–2023, 429 projects were initiated a total cost of Rs.49.58 crore, with a public contribution of Rs. 16.34 crore and a Government contribution of Rs. 33.24 crore. Among these, 325 works have been completed and the remaining 104 are at various stages of implementation.

In the year 2023–2024, 337 projects have been undertaken at a total cost of Rs. 41.44 crore, with a public contribution of Rs.11.98 crore and a Government contribution of Rs.29.46 crore. Among these, 73 works have been completed and the remaining 264 are at various stages of implementation.

4.7.3 Tamil Nadu Urban Employment Scheme

The Tamil Nadu Urban Employment Scheme was aimed at providing livelihood and social security by increasing job opportunities and creating public assets in the town panchayats. As a pilot project, this scheme was implemented in 37 town panchayats across Tamil Nadu. Under this scheme, every household in 37 town panchayats was surveyed and the eligible beneficiaries were identified, who were then issued identity cards by the respective town panchayats.

Under the scheme, a total of 192 projects were undertaken, including the rejuvenation of ponds, tree plantations, the construction of drainage systems and the establishment of rainwater harvesting structures within town panchayats. Till date, 7,68,708 man-days were generated and 66,312 beneficiaries have benefited from the scheme, with various assets also created. Moreover, the scheme stipulates that not less than

50 percent of the employees are women and equal pay is provided to all employees regardless of gender.

After successful implementation in the town panchayats, the Government expanded the scheme to include 50 town panchayats additionally for the year 2023–2024. Presently, the scheme is implemented in 87 town panchayats, with an allocation of Rs.35.75 crore. Administrative sanction has been granted for 299 works that are at various stages of implementation.

4.7.4 National Bank for Agricultural and Rural Development (NABARD)

Marketing agricultural products and livestock from the villages near town panchayats is crucial for local farmers. It enhances not only the economic well-being of rural farmers but also creates employment opportunities for residents in the town panchayats. Therefore, quality roads and

bridges are indispensable for farmers to efficiently and swiftly market their goods within town panchayats. Funds are allocated for the construction of these roads and bridges under the NABARD scheme.

In the fiscal year 2021–22, 191 road works and 11 bridge works were undertaken at a cost of Rs. 200.70 crore and all the works have been completed. In the year 2022–23, 159 road works were initiated in 150 town panchayats at a cost of Rs. 200.70 crore. Of these, 146 works have been completed and the remaining 13 works are in progress. For the year 2023–24, 164 works have been initiated in 134 town panchayats at a cost of Rs.200.70 crore and works are in progress at various stages.

4.7.5 Capital Grant Fund

The allocation under CGF is distributed to town panchayats where funds are needed for the creation of vital infrastructure, including bridges,

culverts, storm water drains, modernization of bus stands, parks, canals and other essential projects aimed at the development of the town panchayat.

In the year 2021–22, Rs. 223.16 crore has been allocated for 172 works, of which 162 works have been completed and the remaining 10 works are in progress at various stages. In the year 2022–23, 156 works were undertaken at a cost of Rs.178.87 crore, of which 126 works have been completed and the remaining 30 works are in progress. For the year 2023–24, 133 works have been initiated at a cost of Rs.182.88 crore, of which 45 works have been completed and the remaining 88 works are in progress at various stages.

4.7.6 Operation and Maintenance Gap Filling Fund

Gaps in the operation and maintenance of infrastructure in the town panchayats are identified and funds are allocated to address those repairs under this scheme.

In the fiscal year 2021–22, 366 projects were undertaken at a cost of Rs.74.39 crore and all projects were completed. In the following fiscal year 2022–23, 153 projects were initiated at a cost of Rs.66.16 crore, out of which 119 projects have been completed and the remaining 34 projects are in progress. For the year 2023–24, 151 projects have been initiated at a cost of Rs.72.60 crore. Of these, 6 projects have been completed, while the remaining 145 projects are in progress. Also, TWAD water charges and the TNEB bills of needy town panchayats are paid from this fund.

4.7.7 Tamil Nadu Urban Road Infrastructure Programme (TURIP)

The objective of the scheme is to restore and upgrade the roads that are damaged due to various reasons such as natural calamities and execution of water supply and Underground Sewerage schemes, etc.

In the year 2021–22, 175 road works were undertaken, covering a length of 122.72km at an estimated cost of Rs.82.99 crore and all works have been completed and put into public use.

During 2022–23, 144 road works were initiated, spanning 154.991 km with an estimated cost of Rs.105.48 crore. Of these, 129 works have been completed and the remaining 15 works are in progress. Additionally, under the Savings and Interest Fund, 107 road works were undertaken, covering a length of 110.021 km at an estimated cost of Rs.74.26 crore. Of these, 96 works have been completed and the remaining 11 works are in progress.

For the year 2023–24, 168 road works have been initiated, covering a length of 218.37 km at an estimated cost of Rs.105.48 crore. Of these, 132 works have been completed and the remaining 36 works are in progress.

4.7.8 Nagarpura Salai Mempattu Thittam (NSMT)

Roads play a crucial role in enhancing the economy of town panchayats by connecting them to nearby villages and cities. A total length of approximately 20,306 km of various types of roads is being maintained in 490 town panchayats.

These roads face damage due to various factors, such as normal wear and tear and the age of the road. Natural calamities like floods, cyclones, heavy rainfall also contribute to road damage. Further, roads get damaged due to implementation of underground sewerage schemes (UGSS) by laying of water pipelines in urban local bodies (ULB) and the Tamil Nadu Water Supply and Drainage (TWAD) Board. It is essential to repair damaged roads promptly to ensure proper road infrastructure, which is vital for boosting economic activities in urban areas.

To address these issues, the Government in G.O.(D)No.423, Municipal Administration and

Water Supply Department, dated 19.11.2022 have allocated a special fund of Rs.550 crore per annum to all urban local bodies, including town panchayats, for the period 2022–23 to 2025–26. Scheme Guidelines were issued in G.O. (Ms.) No. 19, Municipal Administration and Water Supply Department, dated 13.02.2023.

For the year 2022–23, 196 road works were undertaken, covering a length of 378.201 km, at an estimated cost of Rs.154.00 crore. Of these, 194 works have been completed and the remaining 2 works are in progress. For the year 2023–24, 223 road works have been initiated, covering a length of 375.84 km at an estimated cost of Rs. 152.00 crore. Of these, 157 works have been completed and the remaining 66 works are in progress.

4.7.9 State Finance Commission - Urban Road Development Fund

During the year 2022–23, 60 road works were initiated, covering a length of 101.660 km at an estimated cost of Rs.66.00 crore. Of these, 58 works have been completed and the remaining 2 works are in progress.

For the year 2023–24, 105 road works have been undertaken, covering a length of 154.83 km at an estimated cost of Rs.72.00 crore. Of these, 52 works have been completed and the remaining 53 works are in progress.

4.7.10 Dormant fund

For the year 2023–24, 97 road works have been initiated, covering a length of 137.57 km at an estimated cost of Rs.104.69 crore. Of these, 9 works have been completed and the remaining 88 works are in progress.

4.7.11 Iyothee Thass Pandithar Habitations Development Scheme

To ensure basic amenities in Adi dravidar habitations in town panchayat areas, the Government has allocated Rs.51.81 crore under the Iyothee Thass Pandithar Habitations Development Scheme for the year 2023–24. Under this scheme, 336 works have been taken up, out of which 177 works have been completed and the remaining 159 works are in progress at various stages.

4.7.12 Tourism grants

As per the 6th State Finance Commission recommendation, the Common Project Sanctioning and Monitoring Committee has sanctioned Rs.6.00 crore as a fixed grant per annum for 12 town panchayats and sanctioned Rs. 1.50 crore for 28 town panchayats as a variable grant per annum for special festivals or events that require such additional funding for catering to the service

requirements of such festivals or events for the years 2022–23 and 2023–24.

4.7.13 Improvement of school infrastructure in town panchayats

In G.O.(Ms.)No. 60, Finance (SFC-MC) Department, dated 28.02.2023, the Sixth State Finance Commission recommended the Municipal Administration and Water Supply Department to take up the infrastructure improvement works in the schools located in urban local bodies.

Based on the above recommendation and fund proportion, the town panchayats department has taken 214 capital works at an estimated cost of Rs.6,272.45 lakh and 169 maintenance works at an estimated cost of Rs.3,951.20 lakh for the years 2022–23 and 2023–24. All the works are in progress.

4.7.14 Construction of new libraries in town panchayats

In order to cater the needs of children, adolescents, adults and competitive examination

aspirants, the Director of Public Libraries has sent a proposal to construct 148 new libraries falling under the jurisdiction of town panchayats and released an amount of Rs.32.56 crore (Rs.22.00 lakh for each library). Administrative sanction has been accorded for 148 works and all works are in progress.

4.8 e-Governance

4.8.1 Online payment of taxes/charges

Tax revenue and non-tax revenue are the basic sources of income for the town panchayats. Online services are provided for collecting the same. Various payment options are made available such as debit card, credit card, net-banking, UPI and QR code-based payments, with the assistance of NIC. By enabling this online payment system, citizens will be able to pay their taxes through online from anywhere by visiting the website <https://dtp.tn.gov.in>.

4.8.2 Online building approval

The issuance of building approvals was initially conducted manually, now it was transitioned to an online mode. This shift to online processing has significantly improved the ease of doing tasks for citizens, simplifying the process of obtaining building and layout approvals.

With citizens now able to apply for approvals online and receive them promptly, the entire procedure has become more efficient. The Online Building/Layout Approval System has been successfully implemented across all 490 town panchayats through the website <https://onlineppa.tn.gov.in>.

4.8.3 Online grievance redressal

Currently, the grievances of the town panchayats are received through the "Mudhalvarin Mugavari" portal. Citizens can lodge their grievances via a toll-free phone call at 1100, email, web portal and also manually by uploading the

grievance in the portal for redressal. Grievances received through the portal are addressed within the stipulated time frame, providing instant solutions to the citizens. Additionally, citizens are kept informed of the stage of their grievance through SMS updates.

4.8.4 Online schemes monitoring system CM dash board

In the Chief Minister's dashboard, all capital and maintenance work details are uploaded to monitor the current status of projects being undertaken in the town panchayats. This dashboard proves to be immensely beneficial for higher officials, enabling them to closely monitor and track the progress of ongoing projects.

4.8.5 UTIS (Urban Tree Information System)

In the UTIS, all schemes and general fund work details are uploaded onto the portal to monitor the current status of projects being carried out in the town panchayats. Through this portal,

the stage of work progress and accompanying photos are uploaded for all projects, facilitating a comprehensive review and enabling officials to provide instructions accordingly. Moreover, the portal streamlines the process by eliminating the need for repetitive data entry and reducing time consumption. It is planned to implement all the modules of UTIS currently used by the Directorate of Municipal Administration (DMA) in town panchayats in the near future.

4.9 Financial Management

4.9.1 6th State Finance Commission

The Government have issued orders on the recommendations of the Sixth State Finance Commission (6th SFC) in G.O. (Ms.) No. 60, Finance (SFC-MC) Department, dated.28.02.2023. The award period for the 6th SFC is from 2022–23 to 2026–27.

As per the recommendations of the Sixth State Finance Commission (6th SFC), the funds

released during the year 2023-24 and the allocation for 2024-25 are given in the table 4.7.

Table 4.7

Sl. No.	Type of Grant	Financial Year 2023-24 (Rs.in crore)		Allocation for Financial Year 2024-25 (Rs.in crore)
		Allocation	Released	
1	SFC Grant	1298.23	1298.23	1868.34
2	Capital Grant Fund	181.50	181.50	198.00
3	O&M Gap Filling Fund	72.54	72.54	79.20
	Total	1552.27	1552.27	2145.54

4.9.2 15th Finance Commission

The 15th Finance Commission have recommended grants in two parts, 'Untied and Tied' grants.

Untied Grants: Untied Grants can be utilised by the ULBs for felt needs across the eighteen subjects outlined in the twelfth schedule of the Constitution of India, except for salaries and

establishment costs. A sum of Rs.98.40 crore has been disbursed under untied grants for 1,119 projects during the financial year 2022–23. Among these, 729 projects have been completed, with the remaining 390 projects currently in progress. Additionally, Rs. 131.57 crore has been allocated under untied grants for 1,379 projects for the financial year 2023-2024 with all the projects currently in progress.

Tied Grants: 50% of Tied Grants are designated for sanitation and solid waste management, while the remaining 50% is allocated to drinking water, rainwater harvesting and water recycling projects. An amount of Rs. 141.05 crore has been released for 2,155 projects under tied grants for the financial year 2022–23. Of these, 1,299 projects have been completed, while 856 projects are currently in progress. Furthermore, Rs. 167.70 crore has been disbursed under tied

grants for 2,064 projects for the financial year 2023-2024, with all projects currently in progress.

4.9.3. Income and expenditure details of the town panchayats are given in the table 4.8

Table 4.8

(Rs. in crore)

Sl.No.	Description	2022-23	2023-24
Income			
1	Tax Revenue	323.55	376.59
2	Non-Tax Revenue	284.39	298.02
3	Assigned Revenue	210.96	210.96
4	SFC/CFC Grants	1805.98	2169.34
5	Capital Receipts	431.70	784.17
	Total	3056.58	3839.08
Expenditure			
1	Establishment / Administrative charges	1152.83	1360.87
2	Capital Expenditure	2203.36	858.67
	Total	3356.19	2219.54

4.9.4 Loans and dues

The details of the payable charges and outstanding loans of the town panchayats as of 31.03.2024 which are given in the table 4.9.

Table 4.9

Sl.No.	Description	Amount (Rs.in crore)
1	Outstanding LIC Loan, including Interest	41.84
	Total	41.84

4.10 Awards

(a) The '**Swachh Survekshan Award**' for 2023 in the category of "**Swachh City in South Zone**" with a population of less than 10,000 has been bestowed upon Keelvelur town panchayat in Nagapatinam District.

(b) In the year 2023, Karunkuzhi town panchayat received the "**HUDCO Award**" for

Effective Waste Handling, Segregation, Processing and Recycling.

(c) The Directorate of Town Panchayats was honoured with the '**SKOCH Governance Gold Award**' for 2023 for its exemplary performance in solid waste management within town panchayats.

5. Chennai Metropolitan Water Supply and Sewerage Board

Chennai is the fourth-most populous urban agglomeration in India and 36th largest urban area by population in the world. In 1974, Chennai city and the area contiguous to it were notified as Chennai Metropolitan Area (CMA). Subsequently, during the year 1978, Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) was established as a statutory body under Tamil Nadu Act 28 of 1978 with the objective of exclusively attending to the growing needs and for planned development and appropriate regulation of water supply and sewerage services in the Chennai Metropolitan Area with particular reference to the protection of public health and for all matters connected therewith.

The Board is managed by a full time Managing Director. The constitution of the Board of CMWSSB is as below:

Board of Directors

CHAIRMAN	
1	Hon'ble Minister for Municipal Administration
DIRECTORS	
2	Additional Chief Secretary to Government / Commissioner, Greater Chennai Corporation
3	Principal Secretary to Government, Finance Department
4	Principal Secretary to Government, Municipal Administration and Water Supply Department
5	Managing Director, CMWSS Board
6	Member Secretary, Chennai Metropolitan Development Authority
7	Managing Director, TWAD Board
8	Executive Director, CMWSS Board
9	Finance Director, CMWSS Board
10	Engineering Director, CMWSS Board

Providing safe drinking water and ensuring safe disposal of sewage is mandatory for a healthy environment and good quality of life for people. CMWSSB has been providing these services to the citizens of Chennai city since its formation. At present, CMWSSB is providing services directly to 89.34 lakh people spread over 426 sq km in Chennai city through 15 Area offices and 200 Depots. It also caters to the needs of few urban nodes adjacent to the city and industries.

Vision for the future

- 1) Provide functional water and sewerage connection to every household in Chennai city.
- 2) Address the demand-supply gap through source augmentation and infrastructure strengthening.
- 3) Harness rainwater by implementing and monitoring rainwater harvesting structures in each and every premises in Chennai city and prepare an Aquifer Management Plan.
- 4) Rejuvenate and restore urban water bodies.
- 5) Recycle / reuse at least 20% of used water.
- 6) Reduce non-revenue water (NRW) to less than 15%.
- 7) Provide water supply and underground sewerage facilities to all the left out streets in Chennai city.

- 8) Build adequate sewage treatment capacity by constructing new STPs and rehabilitating existing sewage treatment plants (STPs).
- 9) Prevent sewage outfalls into the city water ways viz Adyar, Cooum and Buckingham canal and their associated drains through short term interception and diversion arrangements and long term infrastructure strengthening works.

5.1 Water Supply Management

5.1.1 Sources of Water Supply

The primary and consistent endeavor of the Board is to provide safe drinking water in adequate quantity to the people of Chennai city and to meet the water requirements of industries. The water requirement is met by drawing water from surface sources, ground water sources, reuse of water, desalination plants and tertiary treatment reverse osmosis (TTRO) plants.

(i) Surface Water Sources

The main source of water supply to Chennai city is surface water. Water is drawn from lakes around Chennai city such as Poondi, Puzhal, Cholavaram, Chembarambakkam and Kannankottai-Thervoykandigai; and Veeranam in Cuddalore district besides water received from the Kandaleru reservoir under Krishna Water Supply Project.

(ii) Ground Water Sources

About 5 MLD of ground water is drawn from the aquifers at Tamaraipakkam and 20 MLD from own sources in added areas.

(iii) Desalination Plants

There are no perennial water sources for Chennai city. The city's water sources are dependent on monsoon and whenever monsoon

fails, the city faces drought. Further, urbanisation of the surrounding areas and the rapid growth of the industries led to drastic increase in demand for water exerting pressure on scarce water resources. Therefore, as part of drought-proofing measure and taking into account the long term drinking water requirements of the city, Government has invested in desalination plants.

a) Minjur Desalination Plant

Desalination plants play a vital role in fulfilling city's water supply requirements.

The first desalination plant with a capacity of 100 MLD at Minjur on Design, Build, Own, Operate and Transfer (DBOOT) basis was inaugurated on 31.07.2010 by the then Chief Minister, Dr.Kalaignar Karunanidhi. This plant caters to the needs of the northern parts of Chennai city viz., Manali, Madhavaram, Ennore, Kathivakkam and

Thiruvottiyur benefiting a population of about 9 lakh.

b) Nemmeli Desalination Plant

Another desalination plant with a capacity of 100 MLD has been constructed at Nemmeli at a cost of Rs.914.42 crore (GoI grant of Rs.871.24 crore and Rs.43.18 crore from GoTN). The foundation stone for the construction of this plant was laid on 23.02.2010 by the Hon'ble Chief Minister when he was Deputy Chief Minister and Minister for Local Administration. The plant became operational in 2013 and water from this plant is being supplied to the southern parts of Chennai viz., Akkarai, Ezhil Nagar, Kannagi Nagar, Sholinganallur, Neelangerai, Injambakkam, Karapakkam, Semmancherry, Thoraipakkam, Perungudi, Kottivakkam, Palavakkam, Tiruvanmiyur and Pallipattu, benefiting a population of about 10 lakh.

c) 150 MLD capacity Desalination Plant at Nemmeli and laying of product water pipeline from desalination plant to Pallavaram

Construction of a 150 MLD capacity desalination plant was taken up at Nemmeli to address the demand-supply gap in water supply in Chennai city. The Government of Tamil Nadu has accorded revised administrative sanction at a cost of Rs.1,516.82 crore to implement the project under AMRUT scheme and financial assistance from KfW (German Development Bank).

The project has been completed and inaugurated by Hon'ble Chief Minister on 24.02.2024. Water produced from this plant is being supplied to the public living in Velachery, Uthandi, Alandur, Pallikaranai, Jalladampet, Madipakkam, Pallipattu, Ullagaram - Puzhudhivakkam and MRC Nagar - Nandanam under the control of Greater Chennai Corporation

and Pallavaram under Tambaram Corporation benefiting nearly 9 lakh people.

(iv) Tertiary Treated Water

In order to cater to the needs of industries in and around Chennai city, CMWSS Board has constructed two tertiary treatment reverse osmosis (TTRO) plants of 45 MLD capacity each at Koyambedu and Kodungaiyur, including pipeline to convey the treated used water to the industries in Irungattukottai, Sriperumbudur and Oragadam and in Manali–Ennore corridor and Manali–Minjur corridor. Both the plants are operational and at present, 23 MLD of TTRO water is being supplied from Kodungaiyur and 15 MLD from Koyambedu TTRO plant.

5.1.2 Water Treatment Plants

The existing water treatment capacity of the CMWSS Board is 1,670 MLD as detailed in

table 5.1. The century old city's first Water treatment plant located at Kilpauk is functioning till now catering to the water needs of the city.

Table 5.1

Sl. No.	Location of the plant	Capacity (MLD)	Year of establishment
1	Kilpauk	270	1914
2	Redhills	300	1996
3	Veeranam	180	2004
4	Chembarambakkam	530	2008
5	Surapet	14	1965 (Taken over from TWAD Board in 2009)
6	Minjur desalination plant	100	2010
7	Nemmeli desalination plant	110	2013
8	Porur	6	2022
9	Kolathur	10	2023
10	Nemmeli desalination plant	150	2024
	Total	1,670	

5.1.3 Water Distribution

Treated water is being distributed from 16 major water distribution stations and 102 subsidiary head works through a pipeline network of 6,196.13 km as given in table 5.2.

Table 5.2

Sl. No.	Water distribution station	Quantity supplied (MLD)
1	Patel Nagar	30
2	Anna Poonga	22
3	Kannappar Thidal	25
4	Vyasarjadi	35
5	Kolathur	25
6	Kilpauk	105
7	Choolaimedu	50
8	Triplicane	15
9	Southern Head works	50
10	Valluvar Kottam	20
11	K.K.Nagar	32
12	Ekkattuthangal	10
13	Mylapore	40
14	Nandanam	20
15	Pallipattu	35
16	Velachery	35
17	Direct supply & other small head works	231
	Piped supply in core areas	780
18	Piped supply in added areas	195
19	Through lorries (core+added areas)	30
20	Bulk consumers	35
21	Treated water to Industries	25
	Total domestic supply	1065
22	Industries	
	(i) Secondary treated used water	23
	(ii) TTRO water	38
	Total supply to industries	61
	Total supply	1,126

5.1.4 Quality Assurance

In order to ensure quality water supply, continuous surveillance, assessment and monitoring of the water quality is essential. A separate quality assurance wing is functioning in CMWSS Board to ensure the quality of water supply. Water samples are collected daily from surface and ground water sources, water treatment plants, desalination plants, water distribution stations, subsidiary head works and the city distribution system. These samples are tested for physical, chemical and bacteriological parameters by the quality assurance wing of CMWSSB to ensure that water quality conforms to IS Standard 10500-2012.

Currently, 300 water samples are taken daily by the quality assurance laboratory and tested for water quality. A new water and waste water testing laboratory has been set up by the Board at an

estimated cost of Rs.7.05 crore with a built up area of 12,000 sq ft. This laboratory comprises of separate water laboratory and used water laboratory sections, with advanced instrumentation and infrastructure facilities. These sections include separate Physio chemical analysis and micro biological analysis facilities. The laboratory was inaugurated by the Hon'ble Chief Minister on 22.11.2022. CMWSSB is in the process of obtaining NABL accreditation for the laboratory.

5.2 Water Supply Schemes

5.2.1 Schemes under Implementation

(i) Perur Desalination Plant (400 MLD Capacity)

Chennai city's present water demand is 1,407 MLD against which nearly 1,126 MLD is supplied leaving a gap of 281 MLD. In order to bridge this gap, it is essential to augment the water supply by identifying additional sources.

Accordingly, Government has accorded administrative sanction for setting up a 400 MLD capacity desalination plant at Perur along East Coast Road, product water transmission main from the desalination plant to the city, at a cost of Rs.6,078.40 crore, with financial assistance from JICA, TNIDF and state budgetary support.

The work involves Construction of 400 MLD capacity SWRO Desalination plant, Construction of Pumping station & Reservoirs, Installation of Product water transmission main, Improvement of existing water distribution networks and Power Transmission Line. Hon'ble Chief Minister has laid foundation stone for this project on 21.08.2023 and is in progress. The entire scheme is expected to be completed and commissioned by March 2026.

On completion of the project, about 22.67 lakh people living in Greater Chennai Corporation, Tambaram Corporation and

20 panchayats in the vicinity of Chennai Corporation viz. Kulathur, Moovarasampet, Nanmangalam, Perundhavakkam, Thirisoolam, Kovilancherry, Maduraipakkam, Meppedu, Mulachery, Ottiyambakkam, Perumbakkam, Chithalapakkam, Thiruvanchery, Vengaivasal, Vengapakakkam, Nedungundram, Putthur, Kilampakkam, Vandalur, Kolpakkam areas will be benefited and receive adequate water supply.

(ii) Water supply schemes under progress in added areas

Water supply schemes taken up by CMWSSB for Uthandi, Manapakkam, Ramapuram, Okkiyam-Thoraipakkam, Madhavaram, Nerkundram and Madipakkam have been inaugurated by Hon'ble Chief Minister during 2023-24 and put to public use.

Further, Water supply schemes are under progress at a cost of Rs.158.22 crore in the

4 added areas viz, Manali, Chinnasekkadu, Semmenchery and Neelankarai. In this, Manali and Chinnasekkadu water supply schemes will be commissioned in the current year (2024-25). Semmenchery and Neelankarai water supply schemes will be commissioned in the year 2025-26.

5.2.2 Improvement to existing water distribution network to reduce wastage

One of the components of the proposed 400 MLD capacity desalination plant at Perur is the improvement to the existing water distribution system in the core city. Most of the distribution pipe lines in the core city are over 30 year old and the Project Management Consultant is preparing detailed project report (DPR) for improving the existing water distribution system.

The main components of the DPR are:

- Replacement of old pipes in the Chennai core city
- Providing supplementary pipes in uncovered streets
- Hydraulic reinforcement of the existing distribution network
- Storage reinforcement by constructing underground reservoir and elevated service reservoir
- Establishment of District Metered Areas
- Service connections and water meters

CMWSSB has engaged Water Corporation of Odisha (WATCO) as Project Management Consultant (PMC) for the work of 'Improvement of existing water distribution network in all the water distribution systems in Areas-X and XIII on nomination basis. Final DPR expected shortly for Area X and Area XIII.

M/s SMEC International Pvt. Ltd. is preparing detailed project reports (DPR) for improving the existing water supply distribution network in all the core areas of Chennai city and the final DPRs are expected shortly.

5.2.3 Rehabilitation of 300 MLD capacity Water Treatment Plant at Puzhal and 14 MLD capacity Water Treatment Plant at Surapet

Due to aging of the 300 MLD capacity Water Treatment Plant at Puzhal and 14 MLD capacity Water Treatment Plant at Surapet, CMWSSB has proposed to rehabilitate both the plants to attain maximum treatment capacity. In this regard, detailed project report (DPR) for the Rehabilitation is being prepared through a consultant. The final DPR is expected shortly.

5.2.4 Ring Main System

At present, Water Supply to the different zones (WDSs) of Greater Chennai Corporation is

from 6 Water Treatment Plants and 3 Desalination Plants. Water supply from each of these plants is designed on standalone basis through Transmission Mains to the designated areas of the city. In times of distress, surplus water from one source cannot be transferred to another source at times of deficit. Hence, the Ring main project (RMP) has been proposed to connect all the WTPs for effecting equitable distribution of water to all the Water Distribution Stations in Chennai city.

Ring main 1:

The Ring main will be covering the Greater Chennai Corporation Area (426 Sq.Km) for a length of about 100 Km with pipe diameter ranging from 1000 mm to 1800 mm connecting all the existing WTPs and WDSs.

Ring main 2:

The Ring main will be covering the area excluding core city in Chennai Metropolitan Area (763 sq.km) for a length of about 135 Km with pipe diameter ranging from 1000 mm to 2000 mm.

The detailed project report (DPR) for formulating the Ring Main System (RMS) connecting all WTPs and WDSs is under preparation by the consultant. The final DPR for Ring Main 1 has been submitted and for Ring Main 2 is expected shortly.

5.2.5 Rainwater Harvesting

Tamil Nadu is a pioneer in implementing rainwater harvesting (RWH) programme in the country. Tamil Nadu is the first state in India to make installation of RWH structures mandatory for both existing and new buildings.

Installation of rainwater harvesting structures has been made mandatory for all buildings irrespective of size and area while applying for new/ renewal of water and sewer connections.

A communication strategy has been devised by CMWSSB to create awareness about the importance of rainwater harvesting and encourage consumers to build RWH structures. The campaign is carried out every year before the onset of monsoon by sensitizing citizens about rainwater harvesting to reap maximum benefits during the monsoon season.

5.2.5.1 Awareness Programme on Rainwater Harvesting Campaign and special water security mission 2023

On 10th October, 2023, the Honorable Minister for Municipal Administration launched a

campaign to create awareness about the methods and maintenance of rainwater harvesting and water quality. The following IEC activities were taken up:

1. Letters sent to all the Government Departments requesting to take action on the maintenance of RWH structures installed in the buildings coming under their control in Chennai city.

2. An appeal to the public was made through FM Radio.

3. Display of RWH methods and their maintenance– to create awareness among the public through the following various media.

- a) Metro Water Lorry vehicle Branding– 30 Nos
- b) CMWSSB Bolero vehicle Branding - 20 Nos
- c) Long Route MTC Bus Wrapping - 30 Nos
- d) Metro Train inserts (Wimco Nagar to Airport) - 1 No
- e) Mall Dropdown (@ VR Mall, Thirumangalam) - 1 No
- f) Public Appeal in F.M Radio - 5 Nos
- g) RWH Standees in Public places - 20 Nos
- h) Bus shelters advertisements - 100 Nos

- i) Digital Board display (Visual communication) @ Central & Egmore Railway stations Airport Baggage Counters & GCC public LED screens - 100 places
- j) Aavin Milk Pocket branding(Chennai City) - 50 Lakh

CMWSSB has installed digital water level recorders (DWLR) in all the 200 Depots to monitor the ground water levels periodically. Observations show that there is a significant improvement in water levels and water quality after every monsoon. Readings are updated on CMWSSB website so that public can know the water levels.

Observations from digital water level recorders (DWLR) in all the 200 Depots reveal that the average water levels in Chennai city have increased from 5.59 metres (Pre-monsoon) to 2.95 metres (Post-monsoon) in the year 2023 which is, an increase of 2.64 metres.

5.3 Sewerage Management

Collection, treatment and safe disposal of used water in Chennai city are the primary duties of CMWSS Board. The sewerage system in the core city was installed initially in 1917 and has been divided into five drainage zones. These zones of macro system cover the entire city and have independent zonal collections, conveyance, treatment and disposal facilities. The sewage generated is collected in 342 sewage pumping stations through 4,154 km long pipe line network. The sewage is then conveyed to sewage treatment plants and disposed safely after treatment.

5.3.1 Operation and Maintenance of Sewerage System

The Board has mechanized the operation and maintenance of the sewerage system to eradicate manual scavenging. The obstructions in the pipeline are removed by jet rodding machines and

the solid waste in the machine holes are removed by super sucker machines and desilting machines. At present, 539 machines are deployed for maintaining the sewerage system as shown in table 5.3.

Table 5.3

Sl. No.	Machinery Details	Numbers
1	Desilting machines	300
2	Jet rodding machines (2KL, 6KL & 9KL)	141
3	Jetting cum suction machines	35
4	Super sucker machines	63
Total		539

To improve maintenance, additional machines and equipment are procured periodically, based on requirement.

5.3.2 Sewage Treatment Plants

The present installed capacity of sewerage treatment in the city is 1,082.80 MLD as detailed in table 5.4.

Table 5.4

Zone	Location of STPs	Existing Treatment Capacity (MLD)
I & II	Kodungaiyur (120+120+110+80+80)	510
	Thiruvottiyur	31
III	Koyambedu (34+60+120)	214
IV	Nesapakkam (54+40+50+23)	167
	Nesapakkam TTUF	10
V	Perungudi (60+54+12)	126
	Sholinganallur – I	18
	Modular STPs	
	Chetpet	1
	Choolaimedu	1.2
	Todd Hunter Nagar	4
	Kotturpuram	0.6
	Total	1,082.80

5.3.3 Construction of new STPs and improvement to existing STPs

The Tamil Nadu Pollution Control Board in its fifth updated compilation released on 30.05.2020 has prescribed revised discharge norms based on central enactments, rules, notifications and orders. These norms shown in table 5.5 would come into effect from 26.05.2026.

Table 5.5

Standards for sewage treatment plants (STPs)		
Sl. No.	Parameters	Mega and Metropolitan Cities (Chennai)
1.	pH	5.5 - 9.0
2.	Bio-chemical oxygen demand (BOD)	10 mg/l
3.	Total suspended solids (TSS)	20 mg/l
4.	Chemical oxygen demand (COD)	50 mg/l
5.	Nitrogen-total	10 mg/l
6.	Phosphorus total (for discharge into ponds, lakes)	1.0 mg/l
7.	Faecal Coliform (FC) (most probable number per 100 ml, MPN/100)	Desirable-100 ; Permissible-230

Accordingly, CMWSSB took up construction of 4 new STPs viz. Kodungaiyur-I, Kodungaiyur-II, Perungudi and Nesapakkam and improvement works in 7 existing STPs at a cost of Rs.811.40 crore as shown in table 5.6, to enhance treatment capacity and to achieve new disposal standards.

Table 5.6

Construction of new STPs		Improvement to existing STPs	
Location	Capacity (MLD)	Location	Capacity (MLD)
Kodungaiyur -I	120	Kodungaiyur	110
Kodungaiyur -II	120	Koyambedu (120+60)	180
Nesapakkam	50		
Perungudi	60	Nesapakkam(40+54)	94
Total	350	Perungudi (60+54)	114
		Total	498

CMWSSB has completed Kodungaiyur –I & II and Nesapakkam STPs and they have been inaugurated by Hon’ble Chief Minister in 2023-24 and are in operation. The remaining STPs will be completed in 2024-25.

5.3.4 Construction of additional 54 MLD Sewage Treatment Plant at Sholinganallur

This sewage treatment plant was sanctioned at a cost of Rs.65.97 crore. Already, one unit of 18 MLD capacity has been completed and is under trial run. It uses sequential batch reactor (SBR) technology to treat sewage generated from added

areas located along East Coast Road and Old Mahabalipuram Road in the southern parts of Chennai. Another 36 MLD capacity plant is under construction and will be commissioned this year.

5.3.5 Modular Sewage Treatment Plants

As part of Chennai Rivers Restoration Trust (CRRT) works, modular STPs have been established at Chetpet (1 MLD), Choolaimedu (1.2 MLD), ToddHunter Nagar (4 MLD) and Kotturpuram (0.6 MLD) to prevent sewage outfalls into the waterways.

5.3.6 Villivakkam TTUF

The Villivakkam -Konnur lake is one of the main water body of the Villivakkam area and is located adjacent to the thickly populated SIDCO nagar and drains into the Otteri Nullah.

CMWSSB is setting up a 5 MLD Capacity TTUF Plant based on Membrane Bio Reactor (MBR) Technology adjacent to Villivakkam-Konnur lake on Design, Engineering, Procurement and Construction basis including Operation & Maintenance for 7 Years for the restoration and rejuvenation of the lake with treated water.

The necessary fund approval and administrative sanction has been accorded by the Government of Tamil Nadu for an amount of Rs.17.97 crore under Singara Chennai 2.0 vide G.O(D)No.383, Muncipal Administration and Water Supply department Dated 20.10.2022. The work for establishing the plant has been commenced on 15.03.2024 and is in progress. This project will help in rejuvenating the lake by improving the quality of water besides recharging the ground water.

5.4 Sewerage Schemes

5.4.1 Schemes under implementation in added areas

During the year 2023-24, Hon'ble Chief Minister inaugurated the Underground Sewerage Schemes for Ramapuram, Manapakkam and Nerkundram (Part) and the schemes have been put to Public use.

Underground sewerage schemes are being implemented in the following 24 added areas namely Nerkundram (Part), Pallikaranai, Manali, Chinnasekkadu, Karambakkam, Mugalivakkam, Madipakkam, Nandhambakkam, Kottivakkam, Palavakkam, Neelankarai, Uthandi, Injambakkam, Jalladampet, Puzhal, Mathur, vadaperumbakkam, Theeyambakkam, Edayanchavadi, Sadyankuppam, Kadapakkam, Okkiyam Thoraipakkam, Semmenchery and left out areas of

Madhavarm at a cost of Rs.3,161.32 crore. The above works will be completed in coming years.

5.4.2 Improvement of Existing Sewerage System in Core Areas of Greater Chennai City

The existing sewerage system in the core areas which includes Areas – IV (Tondairpet), V (Royapuram), VI (Thiru Vi.Ka. Nagar), VIII (Anna Nagar), IX (Teynampet), X (Kodambakkam) & XIII (Adyar) have been in existence for over 30 years. The capacity of the Gravity Main, Wells, Pumping Main and pumping equipments are inadequate to meet the present population requirements and hence, the sewerage system could not be operated under full efficiency. Therefore, it is necessary to improve the existing Sewerage system in the project area for the effective disposal of sewage.

CMWSSB has engaged a consultant for the work of “Preparation of Detailed Project Reports for Improvement of Existing Sewerage System in Core Areas of Greater Chennai city (174 sq.km) and Providing SCADA for the entire Greater Chennai city (426 sq.km)”. Sewage Treatment plant wise DPRs are being prepared by the consultant in a phased manner and the final DPR is expected to be submitted by the consultant by August 2024.

5.4.3 Projects under Chennai Rivers Restoration Trust

Chennai Rivers Restoration Trust (CRRT) has taken up the eco-restoration of the Chennai city waterways on behalf of Government of Tamil Nadu. CMWSSB, along with CRRT, has formulated mitigation proposals for the prevention of sewage outfalls into Cooum and Adyar rivers and Buckingham canal and its associated drains. Mitigation measures for Cooum and Adyar rivers at a cost of Rs.186.19 crore and Rs.123.19 crore

respectively have been taken up by CMWSSB and work is in progress.

In Adyar, some works (modular STP and I&D works) have been dropped due to ongoing and proposed under ground sewerage schemes in added areas resulting in savings of Rs.64.89 crore from the total project cost of Rs.123.19 crore. To prevent outfalls into Adyar river, 9 works are taken up with the savings for implementation in Areas X and XIII and are under progress. These works would strengthen the existing sewerage system.

The Government has given top priority to the restoration of Chennai city waterways. Accordingly, CMWSSB has taken up the proposal of plugging of sewage outfalls in Adyar and Cooum rivers, Buckingham canal and their associated drains. The proposal includes interception and diversion arrangements, strengthening / refurbishment of existing sewerage infrastructure.

The Government has accorded in-principle approval for a total project cost of Rs.2,371 crore to carry out the mitigation proposals and have also accorded administrative sanction for Rs.1,001 crore under Phase-I to carry out the works. Work orders were issued for 36 works for a value of Rs.364.80 crore. Out of 36 works, 32 have been completed and the remaining 4 works are in progress. Revised administrative sanction has been obtained for the works already awarded for a value of Rs.385.38 crore.

Further, CMWSSB has been taken up the plugging of 23 sewage outfalls in River Cooum at a cost of Rs.50 crore and the works are under progress.

5.4.4 Restoration of Adyar River in PPP mode

The Government have announced that the state is committed to creating clean and green

living spaces for urban residents in the State. It is also committed to revitalizing the major waterways of Chennai including Adyar, Cooum, Buckingham canal and Kosasthalaiyar. In the initial phase, the Adyar River which flows from Guduvanchery in Chengalpet district through Tambaram, Tiruneermalai, Manapakkam, Alandur and Saidapet before reaching the Bay of Bengal will undergo restoration and beautification through the Chennai Rivers Restoration Trust. This initiative, with an estimated cost of around Rs.1,500 crore, will be implemented through public-private partnership. This includes notable features such as the installation of a 70 km long sewerage pipeline on the banks of Adyar River as an alternative channel for sewerage discharge, establishment of 14 sewage treatment plants with cumulative capacity of 110 MLD, and increasing green spaces by developing four parks along the riverbanks. The project is scheduled to commence shortly and is

expected to be completed within a duration of 30 months. The works from Saidapet to Thiru.Vi.ka bridge will be prioritized and completed within a target period of 15 months. In this regard, the Government has accorded both administrative and financial sanctions for this project vide G.O.(Ms) No 50, Municipal Administration and Water Supply department, dated 14.03.2024 for a total project cost of Rs.4,778.26 crore.

5.5 Recycle and Reuse

Chennai is a pioneer in recycling and reuse of used water. 20% of used water should be recycled and reused as per the guidelines of Atal Mission for Rejuvenation and Urban Transformation (AMRUT 2.0). As part of water conservation measures, secondary treated sewage (23 MLD) is being supplied to industries in Manali area. The secondary treated sewage is further treated by the industries through tertiary

treatment and reverse osmosis (TTRO) and product water is used for industrial purposes.

CMWSSB has also set up two TTRO plants for producing industrial-grade water.

5.5.1 Tertiary Treatment Reverse Osmosis Plants

Two tertiary treatment reverse osmosis (TTRO) plants of 45 MLD capacity each at Koyambedu and Kodungaiyur are operational and supplying water to industries. This ensures assured and sustainable water supply to industries and reduces the fresh water demand from industries.

5.5.2 Tertiary Treatment Ultra Filtration Plants

In order to ensure sustainability, the CMWSSB has taken up construction of three tertiary treatment ultra filtration (TTUF) plants of 10 MLD capacity each at Perungudi, Nesapakkam

and Langs Garden. Among these, Nesappakkam TTUF Plant was completed and inaugurated by Hon'ble Chief Minister on 22.11.2022 and is under operation. The product water from Perungudi and Nesapakkam TTUF is to be used to supplement the storage in Perungudi and Porur lakes respectively and the product water from Langs Garden plant will be supplied to Southern Railways for wagon cleaning and to the Greater Chennai Corporation.

On completion of the Perungudi TTUF plant, 60 MLD capacity STP at Perungudi and 54 MLD capacity STP at Sholinganallur, CMWSSB will have an overall treatment capacity of 1,206.80 MLD.

Preparation of DPR for using 260 MLD of recycled used water for recharging of lakes in and around Chennai has been taken up in association with Indian Institute of Technology (IIT) and Department of Science and Technology (DST), Government of India. The draft detailed project

reports for Perungudi and Nesapakkam, in the first phase, have been prepared for tertiary treatment of used water and recharging of nearby lakes.

5.5.3 Tamil Nadu Urban Local Bodies and Chennai Metropolitan Area Septage Management (Regulation) Rules, 2022

The Government of Tamil Nadu has recognized the importance of Faecal Sludge and Septage Management (FSSM) as a viable method of sanitation for smaller cities, towns and outgrowths in metropolitan cities. In pursuance of the National Policy on Faecal Sludge and Septage Management, a comprehensive programme has been formulated, for regulating periodic cleaning of septic tanks and transportation, treatment and disposal of faecal sludge and septage. The operation and movement of specified vehicles for the purpose of transportation of faecal sludge or septage, to the places identified for decantation and matters connected thereto, shall be now

regulated in accordance with the provisions of the Chennai Metropolitan Water Supply and Sewerage Act, 1978.

Accordingly, the CMWSSB Act, 1978 has been suitably amended for the above purpose by enacting the Chennai Metropolitan Water Supply and Sewerage (Amendment) Act, 2022 (Tamil Nadu Act 34 of 2022). The Government has also issued the Tamil Nadu Urban Local Bodies and Chennai Metropolitan Area Septage Management (Regulation) Rules, 2022, vide the notification of Municipal Administration and Water Supply Department in G.O.(MS) No.183 Dated 31.12.2022.

The Government has approved and issued the new septage management regulations and operative guidelines to regulate the removal of septage from unsewered areas, operation of sewer tanker lorries in the local bodies, prevention of

illegal discharge of sewerage, and thus protect the environment. The Faecal Sludge and Septage Management and Septage Management (Regulation) Rules, 2022 regulate desludging operators (DSOs), who provide collection and conveyance services by i) introducing adequate legal provisions to prevent unsafe disposal; and ii) improving receiving/treatment facilities for disposal of septage.

Some of the key features included in the new Septage Management (Regulation) Rules, 2022 are,

- Licence for collection, transportation and disposal of faecal sludge and septage (Under Section 69-B of the Act)
- Rules and regulations with respect to transportation of faecal sludge and septage
- Ensure that the operators' vehicles are equipped with GPS for vehicle tracking

system, as specified by the Board and are functional.

- The operators are required to maintain a log book containing the septage / faecal sludge transport trip details in the format prescribed and submit it periodically for review.
- Monitoring the desludging operations and prohibition of unsafe disposal
- CMWSSB will monitor the activities of the licensees in the Greater Chennai Corporation (GCC) area in order to prevent any illegal disposal of faecal sludge and septage other than the locations notified for disposal. CMWSSB has notified 19 locations which can be used as a disposal facility by the desludging operators.

A person or operator who intend to collect, transport and dispose faecal and septage from any building, whether used for residential or commercial or institutional purposes within the city

should submit an application to the licensing authority for grant of license in the prescribed format along with required documents and licence fee of Rs. 2000/-.

The licensee is required to comply with the rules and regulations specified and also ensure that each driver and worker employed undergoes annual health check-up and shall submit a record of the same to the licensing authority. Further, the licensee is also required to insure each driver and worker employed for a sum of Rs.10 Lakh (Rupees ten lakh only) towards personal accidental insurance.

The new rules and regulations also give powers to seize specified vehicles. Where an offence under the Act, rules, bye-laws or any other regulations is committed, the Area Engineer of the Board in case of GCC Area, may seize the vehicle or other article or equipment used for the

commission of such offence and shall produce the same within 24 hours before the concerned territorial Superintending Engineer of the Board within whose jurisdiction the vehicle or other article including motor, pump, tube, tool or equipment used for the commission of such offence is seized.

Failure to comply with the rules shall attract a fine of up to Rs.25,000/- for the first violation, fine of up to Rs.50,000/- for second or any subsequent violation and seizure of the vehicles along with its equipment for continuing violation.

5.6 Capacity Building

The CMWSS Board has established its training centre in 1982 to impart various in-house training programmes, CPHEEO sponsored training programmes and special training programmes for the Board staff as well as staff from other organisations and states. Every year, around

42 courses related to the day-to-day activities of Board and 5 refresher courses sponsored by CPHEEO are conducted. Many special training programmes including exclusive tailor-made training programmes for other Government organizations are also being conducted.

As part of the initiatives taken by the Board to support entrepreneurs / start-ups, the training centre has conducted training programme in co-ordination with Entrepreneurship Development and Innovation Institute - Tamil Nadu (EDII-TN).

It has been proposed to bring all activities of training centre under an End-to-End IT solution to introduce web based e-learning courses.

5.7 Use of Technology

5.7.1 Geographical Information System (GIS)

The work of preparation of assets and utility maps using geospatial techniques for CMWSSB

under Asian Development Bank (ADB) assisted Tamil Nadu Urban Flagship Investment Programme (TNUFIP) is being carried out through a consultant engaged by Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL).

Under this project, all the underground and above ground assets and utilities are being mapped in a GIS platform for optimum management and maintenance of assets and better service delivery to the citizens. This project also covers capacity building programme for the CMWSSB engineers for managing the assets using this GIS platform in future.

The GIS Project has captured 1,60,174 Machineholes covering a distance of 4,154.84 km Sewer Main and 599.6 Km of Sewer Pumping Main. Also, nearly 200 WDS are captured in the 15 areas together with 1,159.92 Km of Transmission Main and 6,196.13 Km of Distribution Main.

For the above project, administrative approval has been accorded at a cost of Rs.17.80 crore vide G.O. (Ms) No.8, Municipal Administration and Water Supply department Dated 20.01.2023 under AMRUT 2.0 for setting up of a dedicated GIS control room at the Board's Head office at, Chinthadripet.

5.7.2 Monitoring of Water Tankers using Global Positioning System (GPS)

Water is being supplied through hired water tankers for the streets without water mains and streets with inadequate pressure either directly or by filling the HDPE tanks erected in these localities regularly. Everyday, nearly 30 ML of water is supplied through 3,600 lorry trips. These tankers are being monitored by GPS tracking system to have continuous vigil, thus ensuring the timely delivery of water to the right people.

5.7.3 Online Services

Consumers can avail the following online services through the Board's website <https://chennaietrowater.tn.gov.in>.

- Public grievances and redressal system
- Payment of water tax and charges
- New water/sewer connection for residential premises (G+2 floor)
- New water connection for industries
- Azhaithal Inaippu (sewer connection - G+2 floor)
- Booking water tanker
- Booking for septic tank clearance
- Provision for groundwater license

5.7.4 Information Technology (IT) Initiatives

CMWSSB in coordination with TNeGA (Tamil Nadu e-Governance Agency) is in the process of developing an End-to-End IT implementation and new ERP (Enterprise Resource Planning) solution at

a cost of Rs.3.49 crore to cover all the activities/services of CMWSSB. This project is expected to be completed by June 2024.

5.7.4.1 e-Office Implementation

e-Office implementation has been taken up at CMWSSB and all the stages has been successfully tested at CMWSSB head office by TNeGA. e-Office training has been conducted to 250 staff members of CMWSSB by TNeGA. The implementation of e-Office application is started from 01.05.2024.

5.7.4.2 “Septic Clearance at Door Step” App

CMWSSB has proposed & initiated the work to develop a user-friendly Web and Mobile application for the consumers to book the Sewage Tankers and Licensed Sewer Lorry Operators to register and render their service through the developing application. The application is

developed to facilitate the operator to provide and the consumers to avail Septic Tank Clearance seamlessly. In this regard, the Tamil Nadu e-Governance Agency (TNeGA) has developed a user-friendly Web and Mobile application for “Septic Clearance at Door Step” to CMWSSB.

One of the key features of the App is to ensure that the collected sewage/septage is being properly discharged at the authorized decanting facilities of CMWSSB. This ensures that there is no unauthorized discharge of sewage in open lands and water bodies.

5.8 Chennai City Partnership Programme

The Government have accorded in-principle approval for Chennai City Partnership Program and its Disbursement Linked Indicators (DLI) vide G.O.(1D) No.289, Finance (Infrastructure Cell) Department dated 16.09.2021. The participating

agencies are Greater Chennai Corporation, Metropolitan Transport Corporation, Water Resources Department, CMWSSB and Chennai Unified Metropolitan Transport Authority. The partnership adopts a framework with three result areas to enable a transition to higher quality, sustainable and resilient services through

- i. strengthening and professionalizing service delivery institutions
- ii. improving their operational efficiency and service delivery performance and
- iii. enhancing financial sustainability.

It is a multi-sector program for results operation (P for R) linked to achievement of key results and indicators. The program development objectives (PDO) for CMWSSB are improvement in service delivery performance and increase in share of operation and maintenance costs recovered

through user charges. CMWSSB has to achieve 4 DLIs during the program period.

- i. DLI 4 – Enhance efficiency and transparency of public procurement
- ii. DLI 7 – Improved operational efficiency in water supply
- iii. DLI 8 – Improved access to water supply services
- iv. DLI 10 – Improved financial sustainability of water supply services

5.8.1 Metering Policy

As part of DLI 7 of the Chennai City Partnership, CMWSSB has to adopt a policy for metering. The Board, in its meeting dated 23.11.2022, resolved to approve the metering policy.

The key objectives of the policy are:

- a) To promote water conservation by encouraging efficient water use
- b) To reduce non-revenue water (NRW) and increase cost recovery.
- c) To ensure fairness and equity to all consumers in charging for water services.
- d) To achieve 100% metering of all high-rise buildings and commercial connections by the year 2023 and to achieve 80% of domestic connections (G+2 and below buildings) by the year 2027.
- e) To set out roles and responsibilities of both CMWSSB and consumers in relation to the installation of metered connections, maintenance of the water meters.

This policy covers types of consumers for metering, selection of meter and meter specification and installation guidelines. It also covers the tariff, billing and collection and grievance redressal procedures related to

metering. The responsibilities of the Board and consumers with regard to metering are described. The policy further stipulates that CMWSSB shall install water consumption meters for all the consumers having water connections in a phased and progressive manner commencing with high water consumption and high revenue categories and all non-residential and new consumers.

Draft metering policy is approved by Board and Draft DPR submitted to World Bank and TNIDB. Revised financial model sought by TNIDB and the same has been submitted. TNIDB suggested that to formulate model for installing meters (i) Based on Various Meter Technologies ii) Based on rate of consumption for different categories. Based on the above directions, a revised financial model is being prepared by the consultant for fixing smart meters (1,00,000 nos.) for commercial, partly commercial, Industries, Institutions and MSB for both core & added areas.

5.8.2 Bulk Water Metering

Bulk water metering helps in water audit and assessment of non-revenue water (NRW). Water audit provides essential data for system performance studies, facility planning and evaluation of conservation measures.

Based on the proposal from CMWSSB, Government have accorded administrative approval for Rs.43.01 crore under Singara Chennai 2.0 vide G.O. (D) No.54, Muncipal Administration and Water Supply department, dated 08.02.2023 for supply, installation and commissioning of electromagnetic flow meters with IoT technology based data transfer facility and allied works in water treatment plants, water distribution stations and filling stations of the Board including comprehensive operation and maintenance for five years. The works for installation of bulk water meters are under progress.

5.8.3 Adoption of e-Procurement Roadmap by CMWSSB

The Board, in its meeting dated 23.11.2022, accorded approval for the e-procurement roadmap. The roadmap clearly delineates the types of tenders that will be invited through e-procurement. It also states that the General Technical Evaluation (GTE) module has been adopted from April 2023 for online evaluation of tenders. Training on GTE module and evaluation of tenders under quality cum cost based selection for consulting services were conducted by NIC for the staff of Contracts and Monitoring wing during August 2022.

5.8.4 Establishment of Service level Bench Marks in CMWSSB

CMWSSB has to establish service level benchmark (SLB) baseline through survey including baseline household connections and hours of supply. The Board, in its meeting dated

23.11.2022, accorded approval for conducting the baseline survey work.

The following five main types of activities will be taken up to develop a robust baseline

1. Validate and update CMWSSB's consumer database
2. Design and implement a household sample survey on access and quality of water services
3. On-site assessment of water supply at the household level on a sample basis
4. Produce baseline estimates, water-services related composite index and reporting system
5. Produce a mapping and data report of un-served pockets in Chennai's core city area

Further, the pilot survey has been completed and the consultant has been taken up regular survey for 15,000 samples along with NRW

methodology. The entire survey is expected to be completed by August 2024.

5.9 Monitoring Consumers Grievances

5.9.1 24x7 Monitoring and Control Centre

A 24x7 monitoring and control centre (MCC) has been established at a cost of Rs.1.13 crore and was inaugurated by the Hon'ble Chief Minister on 13.03.2023. The MCC has a 24 x 7 grievance redressal cell as well as a video wall to monitor the important activities of the Board including GPS tracking of mobile water lorries and sewer maintenance vehicles, SCADA monitoring of STP, TTRO plants, desalination plants and monitoring of water filling points through CCTV cameras. Consumers can dial 044-45674567 (20 lines) and toll free number 1916 and register their complaints. The registered complaints are immediately transferred online and also by SMS to

the respective Depot Engineers to rectify the defects. Accordingly, rectification of the defects is being done immediately.

24 x 7 helpline number 14420 has been introduced for sewer and septic tank cleaning process and also report any unauthorized entry into the machine holes.

5.9.2 'Metro Water' App

The CMWSSB has introduced a mobile app 'Metro Water' enabling consumers to register their water/ sewage related complaints to the concerned officers at any time, from any place through their smart mobile phones. 'Metro Water' app can be downloaded from Google play store.

Further, public can register their details such as name, mobile number and e-mail address once and can send images / photographs related to the complaints through their mobile phones and inform

the status. An exclusive complaint number is generated and sent to the concerned person through SMS. Status of the complaints can also be checked through this app.

5.9.3 QR code Poster

As a new model for citizen focused service delivery, a standard QR code design poster has been created. A total no. of 300 QR Code posters were installed in 15 Areas, 200 Depots and 85 other prominent places in Chennai city for making the grievances redressal more user friendly and easily accessible.

5.9.4 Grievance Redressal Meeting

To improve the service delivery to the public/ consumers, the Board conducts Grievance redressal meeting in all the Area Offices between 10.00 A.M. and 1.00 P.M. on the 2nd Saturday of every month. Senior officers at the level of

Superintending Engineers preside over these meetings. The complaints / grievances / suggestions received during these meetings are attended immediately.

5.10 Employee Welfare

The Board considers its employees as its major asset and therefore the Board gives due importance to their welfare.

In order to improve the personal hygiene of field workers, various welfare measures such as provision of uniform cloth with stitching charges, oil, bathing soap, rain coats, shoes, chappals and safety gears are provided to the employees periodically by the Board.

The following welfare measures are also provided to the employees:

- A dispensary with a full time Doctor and Pharmacist and Lab Technical Assistant with first aid equipments.

- Special medical camps for eye, ear, lungs and heart check up are being conducted from time to time for the benefit of the staff and employees.
- As per the Government rules, all the differently-abled employees in the Board are provided with conveyance allowance.
- As per the Government New Health Insurance Scheme, medical facilities are being provided to the employees and pensioners of the Board.
- Retirement benefits are paid to the employees on the date of retirement.
- Death benefits are settled immediately to the legal heirs of the deceased employee after receipt of the claims.
- All workers involved in sanitation works are provided with all essential safety equipments. The Hon'ble Minister issued Safety Gadgets to 2149 Nos. of permanent

and outsourced sanitary workers of CMWSS Board, at the cost of Rs.65.65 lakh on 12.10.2023.

- In order to avoid accidents during operation and maintenance of the sewerage system, special awareness camps regarding safety measures are being conducted to the Board's contractors and contract workers.
- The CMWSS Board follows the safety aspects for the sewer allied works as per the "The Tamil Nadu Prohibition of Employment as Manual Scavengers and their Rehabilitation Rules, 2022" issued by the Municipal Administration and Water Supply Department dated 12.08.2022.
- Based on the above rules, the contract conditions have been modified for operations and maintenance contracts by including the provisions contained in these rules assuring that no person is engaged as manual

scavenger and they are supplied with personal protective equipment (PPE).

5.10.1 Sanitation Workers Development Scheme

Hon'ble Chief Minister launched the "Sanitation Workers Development Scheme" on 09.12.2022 for the welfare of sanitary workers. Under this scheme, the core sanitation workers will be identified through field survey, and they will be linked with Welfare Board and provided with ID Card to avail various welfare schemes of the Government.

The scheme also ensures access to Social Security Benefits for Core Sanitation Workers and their Families. Survey has been conducted for 3,019 Nos. of Core Sanitation workers, including 667 permanent workers, and out of which, 1,289 number of non-permanent sanitation workers have been registered in Tamil Nadu Sanitation Workers Welfare Board and provided

with ID card to avail various welfare schemes of the Government. Skill Training in mechanized safety operations will be provided to them on safety aspects.

Training has also been provided to the 879 nos. of drivers/ workers of De-sludging operators of licensed sewer lorries on safe disposal methods of septage as well as appropriate usage of PPEs, safety gear, safety tools and first aid kits.

5.11 Financial Position

The total revenue expenditure as per Budget Estimate for the year 2023-24 is Rs.1,526.86 crore whereas the total income is Rs.1,619.68 crore.

The details of income, expenditure and deficit for the Year 2021-22 to 2023-24 are given below in table 5.7

Table 5.7**(Rs. in crore)**

Sl. No.	Particulars	R.E	R.E	B.E
		2021-22	2022-23	2023-24
I.	Revenue Income			
1	Sale of water	403	377	489
2	Water & sewerage tax	240	425	446
3	Sale of treated used water & sewerage charges	164	166	198
4	Other income	64	88	88
5	Grants	236	258	399
	Total	1,107	1,314	1,620
II.	Revenue Expenditure			
1	Power excluding desal	150	183	192
2	Water lorry hire charges	69	74	74
3	O&M and R&M excluding desal	317	382	387
4	Desal (including power & O&M)	298	221	369
5	Office & administration	17	17	17
6	Payments & provision to employees	241	259	289
7	Debt service charges	82	72	64
8	Depreciation	200	135	135
	Total	1,374	1,343	1,527
	Surplus/ Deficit	-267	-29	93

The details of amount payable, receivable and outstanding loan as on 31.03.2024 are given below in table 5.8

Table 5.8

(Rs. in crore)

Sl. No.	Particulars	Amount as on 31.03.2024
		(Tentative)
I.	Payable	
1	CMWSSB – O&M contractors	67
2	Refundable deposits	221
3	Contractors payment (Scheme funds)	113
	Total	401
II	Receivable (Water and sewer taxes and charges)	
1	Local bodies	20
2	Government departments	55
3	Consumers	201
	Total	276
III	Outstanding Loans	
	a) Principal (including Rs.1,522 crore payable to Government)	1825
	b) Interest (Government due Rs.358 crore; TUFIDCO Rs.7 crore)	365
	Total	2,190

The total revenue expenditure as per the Budget Estimate for the year 2023-24 is Rs.1,527 crore. The total income of the Board as per the Budget Estimate is Rs.1,620 crore. Of this, the income from water supply and sewerage tax is Rs.446 crore, sale of water charges is Rs.489 crore, sale of treated used water & sewerage charges is Rs.198 crore and other income is Rs.88 crore.

6. Tamil Nadu Water Supply and Drainage Board

"நீர்இன்று அமையாது உலகெனின் யார்யார்க்கும்வான்
இன்று அமையாது ஒழுக்கு"

In harmony with the above slogan of Valluva Perundhagai, the Tamil Nadu Water Supply and Drainage Board (TWAD Board) was formed by the then Hon'ble Chief Minister, Muthamizh Arignar Dr.Kalaignar on 14th April, 1971 with a visionary idea to alleviate the thirst of the people of Tamil Nadu. The TWAD Board has been providing safe drinking water to the people of Tamil Nadu for more than 50 years. Besides implementation of Combined Water Supply Schemes (CWSS) in rural and urban areas of Tamil Nadu (except Chennai Metropolitan Area), the Board has been maintaining the Combined Water Supply Schemes where the beneficiaries are more than one local body. In order to improve the hygiene of the people in the Urban areas, Underground Sewerage

Schemes are also being implemented by TWAD Board to treat and safely dispose the wastewater.

Board of Directors

Chairman	
1.	Principal Secretary to Government, Municipal Administration and Water Supply Department
Directors	
2.	Managing Director, Tamil Nadu Water Supply and Drainage Board
3.	Additional Chief Secretary to Government, Water Resources Department
4.	Additional Chief Secretary to Government, Health and Family Welfare Department
5.	Principal Secretary to Government, Rural Development and Panchayat Raj Department
6.	Special Secretary to Government, Finance Department
7.	Managing Director, Chennai Metropolitan Water Supply and Sewerage Board
8.	Director of Town Panchayats
9.	Director of Rural Development and Panchayat Raj
10.	Director of Municipal Administration
11.	Joint Managing Director, Tamil Nadu Water Supply and Drainage Board

12.	Engineering Director, Tamil Nadu Water Supply and Drainage Board
13.	Finance Director, Tamil Nadu Water Supply and Drainage Board

Tamil Nadu Water Supply and Drainage Board is functioning with four regional offices, namely, Vellore, Thanjavur, Coimbatore and Madurai with its headquarters in Chennai. Each regional office functions under the control of a Chief Engineer. Under these four regional offices, 16 Circle Offices, 85 Divisional Offices and 259 Sub-Divisional Offices carryout the design and implementation of CWSS, stand-alone water supply schemes and sewerage schemes and also the maintenance of combined water supply schemes.

6.1 Vision of TWAD Board

- Design and implementation of combined water supply schemes and stand-alone water supply schemes to provide protected water supply to rural and urban areas of Tamil Nadu with focus

on adopting latest technologies for timely completion.

- Design and implementation of underground sewerage schemes in urban areas.
- Operation and maintenance of combined water supply schemes covering more than one local body so as to provide adequate water to rural and urban local bodies.
- Fixing of smart water meters in all the CWSS maintained by TWAD Board and monitoring the water supplied through Internet of Things (IoT) so as to reduce the Non- Revenue water and ensure designed supply to the beneficiaries.
- To take necessary action for reuse of treated wastewater in underground sewerage schemes.
- To take measures for sustainability of water sources.

6.2 Functions of TWAD Board

- Planning, design and implementation of water supply schemes to rural and urban areas in Tamil Nadu.

- Planning, design and implementation of underground sewerage schemes in urban areas.
- Operation and maintenance of combined water supply schemes.
- Testing and monitoring the quality of water supplied.
- Research and training activities.

6.3 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, Municipal Administration and Water Supply Department, dated 10.03.1994.

At present there are 544 combined water supply schemes under the maintenance of TWAD Board, covering 13 corporations, 70 municipalities, 323 town panchayats, 51,048 rural habitations and

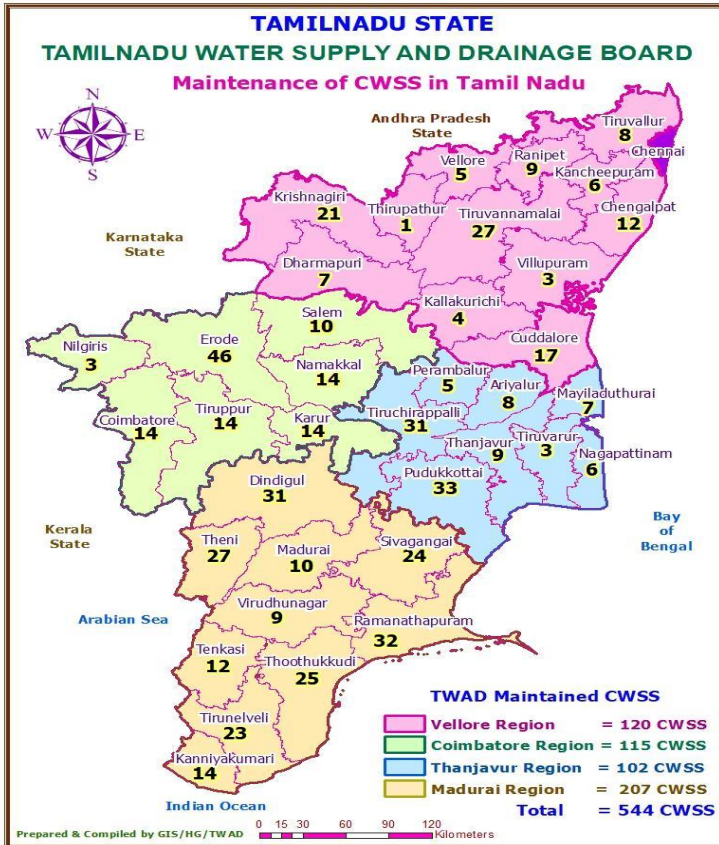
576 industries / institutions, benefiting a population of 5.02 crore.

An average of 2,286 million litres of water is supplied daily through the above 544 combined water supply schemes.

The details are given in the table 6.1.

Table 6.1

Sl. No.	Name of the beneficiary	No. of beneficiaries	Earmarked quantity (in MLD)	Average supplied quantity (in MLD)
1	Corporations	13	533	452
2	Municipalities	70	293	253
3	Town panchayats	323	390	345
4	Rural habitations	51,048	1,253	1,199
5	Industries / institutions / commercial organisations	576	65	37
	Total	52,030	2,534	2,286 (90%)



Retrofitting of Combined Water Supply Schemes (CWSS) under Jal Jeevan Mission Fund

Under retrofitting of Combined Water Supply Schemes with Jal Jeevan Mission Funds, 56 CWSS were taken up in Tiruchirapalli, Ariyalur,

Perambalur, Coimbatore, Tiruppur, Namakkal, Salem, Nilgiris, Chengalpattu, Thiruvallur, Cuddalore, Kallakurichi, Villupuram, Ramanathapuram, Sivagangai and Dindigul, districts to provide 55 lpcd of water supply to rural habitations through FHTCs at a cost of Rs.1,658.35 crore (TWAD Components – Rs.1,299.85 crore and RD Components – Rs.358.50 crore). At present 43 works are completed and the remaining 13 works are under progress.

Michaung Cyclone

During the Michaung cyclone, Chennai, Thiruvallur, Kancheepuram and Chengalpattu districts received continuous heavy rainfall from 02.12.2023 to 04.12.2023 for a total of 73 cm which is highest in the last 47 years. The incessant rainfall caused heavy flooding in Kosasthalaiyar, Palar and Araniyar rivers and 7 CWSS in Thiruvallur, 4 CWSS in Chengalpattu and 1 CWSS

in Ranipet districts maintained by TWAD Board were severely affected.

Connecting mains and electrical cables in these Combined Water Supply Schemes were affected in the flood. Power supply was also affected. Hence electric motors were powered by Generators to effect immediate water supply to the public. By expeditious action, 12 affected CWSS were temporarily restored at a cost of Rs.1.28 crore and brought to beneficial use, quickly.

For permanent restoration of 12 Combined Water Supply Schemes, administrative sanction was accorded by the Government vide G.O.(Ms) No.52, Municipal Administration and Water Supply department, dated 14.03.2024 for Rs.3.89 crore under flexi funds of Jal Jeevan Mission. After completion of these works, designed quantity of water will be supplied to all beneficiaries.

Cooperation extended by Tamil Nadu Water Supply and Drainage Board to Greater Chennai Corporation

During Michaung cyclone, flood water entered the residential and industrial areas of Greater Chennai Corporation which affected the normal life of public severely. The Greater Chennai Corporation carried out relief and rehabilitation activities in co-ordination with the National Disaster Response Force and other departments on a war-footing basis.

The Government directed other local bodies/ essential service departments to co-ordinate with the Greater Chennai Corporation by arranging available resources and equipments to restore normal life quickly in flood-affected areas in and around Chennai.

As per the instructions, Tamil Nadu Water Supply and Drainage Board arranged 47 pumpsets ranging from 3 HP to 50 HP to dewater the inundated areas of Chennai Corporation Zones

such as Sholinganallur, Tiruvottiyur, Perungudi, Kottivakkam & Madhavaram and coordinated with Greater Chennai Corporation to restore normalcy at the earliest.

Northeast Monsoon Floods

During North East Monsoon, from 16.12.2023 to 18.12.2023, continuous huge rainfall of around 95 cm in Thoothukudi, Tirunelveli, Tenkasi, Virudhunagar, Kanniyakumari and Theni districts was received, which is unprecedented in last 100 years. The incessant rainfall caused heavy flooding in the river Thamirabarani, Moolavaigai, MullaiPeriyar, Gadana river, Kothaiyar, Kuthirayaru, Vaigai river and its tributaries. Due to this, many infiltration wells, electric motors, connecting pipes, electric cables and pipe carrying bridges were damaged in 70 Combined Water Supply Schemes maintained by TWAD Board (Thoothukudi District - 18 CWSS, Tirunelveli District - 20 CWSS, Tenkasi District -

9 CWSS, Virudhunagar District - 4 CWSS, Theni District - 18 CWSS and Kanniyakumari District -1 CWSS). Hence water supply was affected in 12 municipalities, 61 town panchayats and 5700 rural habitations.

About 300 Engineers and labourers from various districts were diverted and teams were formed to restore the damages temporarily on a war- footing basis.

- Mud and dirt accumulated in the infiltration wells and pumps were removed.
- Damaged connecting pipes were temporarily restored with HDPE pipes.
- Damaged and washed away pipelines in the highway roads were replaced.
- Faulty transformers, motors, starters were repaired / replaced.
- Flood-damaged pipe carrying masonry link bridges were temporarily rectified.

By expeditious action all the damaged infrastructures were temporarily restored in 15 days at a cost of Rs.34.13 crore and water supplied to the public.

The proposal for the permanent restoration works at an estimated cost of Rs.145.48 crore was administratively sanctioned by the Government vide G.O.Ms.No.52, Municipal Administration and Water Supply department, dated 14.03.2024 under flexi funds of Jal Jeevan Mission. After completion of the works, designed quantity of water will be supplied to all beneficiaries.

Cooperation extended by Tamil Nadu Water Supply and Drainage Board to Thoothukudi Corporation

During Northeast Monsoon floods, due to rise in floodwater in rivers, water entered into the residential and industrial areas of Thoothukudi Corporation affecting normal life of the public severely. Thoothukudi Corporation and District

administration carried out various relief and rehabilitation works on a war-footing basis.

In this regard, as per the directions of the Government, TWAD Board arranged 53 tanker lorries from nearby districts and about 16.47 lakh litres of water was supplied to the affected people in Thoothukudi Corporation.

6.4 Schemes completed by TWAD Board during the year 2023-24

6.4.1. Combined Water Supply Schemes/ Stand-alone Water Supply Schemes

During 2023-24, 36 Water Supply Schemes covering 3 Corporations, 9 Municipalities, 12 Town Panchayats and 5,296 rural habitations in Tiruchirapalli, Thanjavur, Mayiladuthurai, Nagapattinam, Perambalur, Tenkasi, Virudhunagar, Thoothukudi, Kanniyakumari, Madurai, Tirunelveli, Theni, Tiruppathur, Tiruvallur, Krishnagiri, Ranipet, Erode, Salem, Karur, Coimbatore, Tiruppur and Nilgris districts benefiting a total population of 70.30 lakh have

been completed at an estimated cost of Rs.5,305.62 crore for providing protected water supply of 497.99 MLD.

The details of schemes completed are given in the table 6.2.

Table 6.2

Sl. No	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
1.	Coimbatore	WSIS to expanded Coimbatore Corporation including newly merged areas with river Bhavani as source - Pillur - III (178.30 MLD)	779.86	24.87
2.	Salem	CWSS to Ilampillai, Attayampatti, Panamarathupatti, Mallur and Edanganasalai town panchayats, 778 rural habitations in Veerapandi, Panamarathupatti and Salem unions in Salem district (53.03 MLD)	652.84	5.24
3.	Tenkasi and Virudhunagar	CWSS to Sankarankoil, Puliyanakudi municipalities, Thiruvankadam town panchayat in Tenkasi district and Rajapalayam, Sivakasi, Thiruthangal municipalities in Virudhunagar district. (46.07 MLD)	543.20	5.17

Sl. No	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
4.	Coimbatore	WSIS to 8 added areas of Coimbatore Corporation (Distribution system only)	487.71	-
5.	Karur	CWSS to 756 rural habitations in K.Paramathi and Aravakurichi unions in Karur district (14.93 MLD)	440.63	1.86
6.	Erode	CWSS to 442 rural habitations of Modakurichi union in Erode district (18.41 MLD)	412.12	2.82
7.	Coimbatore and Tiruppur	Augmentation of water supply to 708 habitations in Annur, Avinashi and Sulur unions with bulk provision to 165 rural habitations in Tiruppur union in Coimbatore and Tiruppur districts (26.34 MLD)	362.20	4.75
8.	Kanniyakumari	WSIS to Nagercoil Corporation in Kanniyakumari district (41.12 MLD)	296.08	3.20
9.	Tirunelveli	50 MLD water supply improvement scheme to Tirunelveli Corporation in Tirunelveli district (35.00 MLD)	295.00	5.91
10.	Tiruppathur	CWSS to 759 rural habitations in Tiruppathur, Jolarpet, Natrampalli, Kandhili unions in Tiruppathur district (12.76 MLD)	182.09	2.15

Sl. No	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
11.	Thanjavur	CWSS to 67 rural habitations in Kumbakonam, Thirupanandal and Thiruvidaimarudur unions and 2 hamlets in Veppathur and Thiruvidaimarudur town panchayats in Thanjavur district (5.37 MLD)	117.09	0.91
12.	Tiruvallur	WSIS to Tiruthani municipality in Tiruvallur district (7.39 MLD)	109.68	0.66
13.	Thanjavur	CWSS to 134 rural habitations in Kumbakonam union in Thanjavur district (5.45 MLD)	91.13	0.97
14.	Erode	CWSS to 144 rural habitations of Kodumudi union in Erode district (2.84 MLD)	87.68	0.45
15.	Madurai	WSIS to Usilampatti municipality in Madurai district (7.95 MLD)	73.03	0.51
16.	Tiruppur	CWSS to 165 rural habitations in 10 village panchayats of Tiruppur union in Tiruppur district (3.37 MLD)	70.43	0.89
17.	Nagapattinam	Source augmentation to existing CWSS to 893 habitations in Nagapattinam district (14.93 MLD)	42.46	5.85
18.	Ranipet	CWSS to Sembedu and 88 other habitations in Kaveripakkam, Sholingar and Arakonnam unions in Ranipet district (2.70 MLD)	41.98	0.65

Sl. No	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
19.	Mayiladuthurai	CWSS to 32 rural habitations in 7 Panchayats of Sirkazhi union in Mayiladuthurai district (1.33 MLD)	36.14	0.18
20.	Krishnagiri	CWSS to Ennegollu and 122 other rural habitations in Veppanapalli union in Krishnagiri district (2.31 MLD)	31.00	0.41
21.	Kanniyakumari	WSIS to Kuzhithurai municipality in Kanniyakumari district (4.25 MLD)	30.94	0.27
22.	Perambalur	CWSS to 73 rural habitations in Veppur union in Perambalur district (3.47 MLD)	22.84	0.75
23.	Erode	WSS to 55 rural habitations in Kavundapadi village panchayat of Bhavani union in Erode district (1.43 MLD)	17.55	0.44
24.	Theni	WSIS to Thenkarai town panchayat in Theni district (1.35 MLD)	13.31	0.22
25.	Erode	WSIS to Sivagiri town panchayat in Erode district (2.18 MLD)	13.12	0.23
26.	Salem	WSS to 8 habitations in Yercaud panchayat of Yercaud union in Salem district (0.89 MLD)	12.70	0.13
27.	Tirunelveli	CWSS to Vagaikulam and 12 rural habitations of Ambasamudram union in Tirunelveli district (1.12 MLD)	12.05	0.14

Sl. No	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
28.	Tiruchirappalli	WSIS to 13 habitations in M.Pudupatti panchayat of Thathaiyengarpettai union in Tiruchirappalli district (0.92 MLD)	7.24	0.14
29.	Nilgris	CWSS to Kinnakorai and 8 other habitations in Melkudah panchayat of Udhagamandalam union in Nilgris district (0.096 MLD)	5.45	0.014
30.	Tiruvallur	CWSS to Nallathur and 15 other habitations of Nallathur, N.N.Kandigai and Poonimangadu panchayats in Thiruvallangadu union in Tiruvallur district (0.51 MLD)	4.04	0.10
31.	Tiruchirappalli	WSS to 3 habitations in Pettavaithalai village panchayat of Andhanallur union in Tiruchirappalli district (0.37 MLD)	3.79	0.06
32.	Kanniyakumari	WSS to 3 habitations in Muttom village panchayat in Kurunthencode union in Kanniyakumari district (0.20 MLD)	3.69	0.12
33.	Kanniyakumari	WSS to 5 habitations in Thoothur village panchayat in Munchirai union in Kanniyakumari district (1.35 MLD)	3.51	0.20
34.	Nilgris	CWSS to Arukutchi and 5 other habitations in Melur Panchayats of Coonoor union in Nilgris district (0.16 MLD)	1.21	0.024

Sl. No	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
35.	Thoothukudi	WSS to 4 habitations in Pallipattu panchayat of Tiruchendur union in Thoothukudi district (0.07 MLD)	1.08	0.01
36.	Tiruchirappalli	WSS to Muthigramam (1 tribal habitation) of kombai panchayat in Thuraiyur union in Tiruchirappalli district (0.021 MLD)	0.75	0.0034
		Total (497.99 MLD)	5305.62	70.30

6.4.2. Underground Sewerage schemes

During 2023-24, 3 Underground Sewerage Schemes covering 2 Municipalities and 1 Town Panchayat in Virudhunagar, Tiruppathur and Chengalpattu Districts benefiting a total population of 3.78 lakh have been completed at an estimated cost of Rs. 468.33 crore so as to convey and treat 42.58 MLD of sewage.

The details of Underground Sewerage Schemes completed are given in the table 6.3.

Table 6.3

Sl. No.	District	Urban local body	Estimated cost (Rs. in crore)	Population benefitted (lakh)
1	Virudhunagar	UGSS to Rajapalayam Municipality (21.85 MLD)	251.20	1.90
2	Tiruppathur	UGSS to Ambur Municipality (16.71 MLD)	165.55	1.55
3	Chengalpattu	UGSS to Thiruporur Town Panchayat (4.02 MLD)	51.58	0.33
		Total (42.58 MLD)	468.33	3.78

6.5 Schemes under Implementation

6.5.1 Water Supply Schemes

In the areas where local sources have depleted and there is need for drinking water, Combined Water Supply Schemes, with rivers, dams and reservoirs as water source, are being implemented by integrating more than one local body so as to provide 135/90/70 lpcd to Urban Local Bodies (Corporations, Municipalities, Town Panchayats) and 55 lpcd to Rural Local Bodies.

At present, 32 water supply schemes covering 14 Municipalities, 41 Town panchayats

and 15,051 rural habitations in Tiruchirappali, Thiruvarur, Nagapattinam, Thanjavur, Perambalur, Sivagangai, Virudhunagar, Madurai, Theni, Tirunelveli, Thoothukudi, Ramanathapuram, Dindigul, Chengalpattu, Tiruvallur, Cuddalore, Namakkal and Erode districts at an estimated cost of Rs.17,939.02 crore with a designed quantity of 868.62 MLD to benefit 133.01 lakh population, are under implementation with different sources of funding.

6.5.1.1 Combined Water Supply Schemes

Out of the above mentioned 32 schemes, 3 CWSS covering 3 municipalities, 14 town panchayats and 3,327 rural habitations in Sivagangai, Cuddalore and Theni districts are under implementation at an estimated cost of Rs.2,394.16 crore under NABARD and MNP funding. The total designed capacity of these schemes is 136.55 MLD, which will benefit a population of 25.82 lakh.

The details of these schemes are given in the table 6.4.

Table 6.4

Sl. No.	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
1.	Sivagangai	CWSS to 8 town panchayats and 2,452 rural habitations in 11 unions with bulk provision to 3 municipalities in Sivagangai district (86.42 MLD)	1,752.73	16.12
2.	Cuddalore	CWSS to Thittakudi, Pennadam, Mangalampettai, Vadalur, Kurinjipadi and Gangaikondan town panchayats and 625 rural habitations in Mangalore, Nallur and Vridhachalam unions in Cuddalore district (39.43 MLD)	479.00	7.92
3.	Theni	CWSS to 250 rural habitations in Kadamalaikundu - Myladumparai, Andipatti and Theni unions in Theni district (10.70 MLD)	162.43	1.78
		Total (136.55 MLD)	2,394.16	25.82

27 CWSS covering 7 municipalities, 27 town panchayats and 11,724 rural habitations in Ramanathapuram, Dindigul, Nagapattinam, Madurai, Virudhunagar, Thoothukudi, Tiruvarur, Namakkal, Tirunelveli, Erode, Thanjavur,

Cuddalore, Tiruchirapalli, Tiruvallur, Perambalur and Chengalpattu districts are under implementation at an estimated cost of Rs.14,996.16 crore under Jal Jeevan Mission (JJM) and Atal Mission for Rejuvenation and Urban Transformation (AMRUT 2.0) funding.

These schemes are designed to supply 644.76 MLD of water by providing 12,60,230 functional household tap connections (FHTCs), which will benefit 104.06 lakh population.

The details of the schemes are given in the Table 6.5.

Table 6.5

Sl. No.	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
1.	Ramanathapuram and Dindigul	CWSS to 2 municipalities, 5 town panchayats and 2306 rural habitations in 11 unions in Ramanathapuram district and Oddanchatram municipality, 2 town panchayats and 1,366 rural habitations in 7 unions in Dindigul district (128.25 MLD)	4187.84	30.42

Sl. No.	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
2.	Nagapattinam	CWSS to Nagapattinam Municipality, 4 town panchayats and 980 rural habitations in 6 unions in Nagapattinam district (93.00 MLD)	1782.48	9.66
3.	Madurai	CWSS to 867 rural habitations in Alanganallur, Chellampatti, Kallikudi, Thirumangalam, Thiruparankundram, Usilampatti and Vadipatti unions in Madurai district (60.00 MLD)	1559.07	10.93
4.	Madurai	CWSIS to 236 rural habitations in T.Kallupatty and Sedapatty unions in Madurai district (15.55 MLD)	240.45	2.09
5.	Madurai	CWSIS to 88 rural habitations in Kottampatty and Melur unions in Madurai district (6.46 MLD)	127.18	1.77
6.	Virudhunagar and Thoothukudi	CWSS to 1,286 rural habitations in 8 unions of Virudhunagar district and 45 rural habitations in 2 unions of Thoothukudi district (43.70 MLD)	1387.73	9.51
7.	Tiruvarur	CWSS to 667 rural habitations in Tiruvarur, Nannilam, Koradachery, Kottur, Mannargudi and Thiruthurai poondi unions in Tiruvarur district (32.55 MLD)	1127.20	5.23

Sl. No.	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
8.	Namakkal	CWSS to Rasipuram municipality, 8 town panchayats and 523 rural habitations in Rasipuram, Vennandur, Namagiripettai and Puduchatram unions with bulk provision to 547 rural habitations in Elachipalayam, Mallasamudram and Paramathi unions in Namakkal district (86.04 MLD)	854.37	5.83
9.	Namakkal	CWSS to 547 rural habitations in Mallasamudram union, Elachipallayam union and 11 panchayats in paramathi union in Namakkal district (Bulk Provision from Rasipuram CWSS)	284.04	2.41
10.	Tirunelveli	CWSS to 831 rural habitations in 6 unions in Tirunelveli district (22.79 MLD)	605.75	3.66
11.	Tirunelveli	CWSS to Kalakkadu Municipality and Nanguneri, Eruvadi, Moolakaraipatti, Thirukurunkudi, Vadakku Valliyoor, Thisayannvilai and Panagudi town panchayats in Tirunelveli district (30.16 MLD)	423.13	2.50
12.	Tirunelveli	CWSS to 41 Rural habitations in Palayamkottai union in Tirunelveli district (4.06 MLD)	45.10	0.51

Sl. No.	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
13.	Tirunelveli	CWSS to Gangaikondan and 21 other rural habitations in Manur union in Tirunelveli district (1.93 MLD)	19.25	0.33
14.	Thoothukudi	CWSS to 363 rural habitations in 6 unions in Thoothukudi district (16.57 MLD)	515.72	3.96
15.	Thoothukudi	CWSS to 20 rural habitations in Srivaikundam union in Thoothukudi district (1.17 MLD)	15.48	0.19
16.	Erode	CWSS to 434 rural habitations in 22 village panchayats of Chennimalai union in Erode district (17.74 MLD)	482.36	2.26
17.	Thanjavur	CWSS to 252 habitations in Ammapettai and Papanasam unions in Thanjavur district (15.20 MLD)	288.02	2.78
18.	Thanjavur	CWSIS to 214 rural habitations in Budalur, Thiruvaiyaru and Thanjavur unions in Thanjavur district (16.78 MLD)	248.67	2.25
19.	Cuddalore	CWSS to Chidambaram municipality, Annamalai Nagar town panchayat, and 36 rural habitations in 10 village panchayats in 2 unions in Cuddalore district (17.17 MLD)	255.64	1.59

Sl. No.	District	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
20.	Tiruchirapalli	CWSS to 109 rural habitations in Lalgudi and Pullambadi unions in Tiruchirapalli district (11.26 MLD)	248.59	1.90
21.	Tiruchirapalli	CWSIS to 174 rural habitations in Manikandam union in Tiruchirappalli district (11.71 MLD)	124.13	1.98
22.	Tiruchirapalli	CWSS to Koodapalli and 97 habitations in Manachanallur and Musiri unions in Tiruchirapalli district (6.80 MLD)	73.97	1.15
23.	Tiruvallur	CWSS to Cherukkanur and 114 other habitations in Tiruthani and R.K.pet unions in Tiruvallur district (2.76 MLD)	44.58	0.54
24.	Tiruvallur	CWSS to Ammambakkam and 10 other habitations of 2 panchayats in Poondi union in Tiruvallur district (0.23 MLD)	3.64	0.05
25.	Tiruvallur	CWSS to Velagapuram and 10 other habitations of 2 panchayats in Poondi union in Tiruvallur district (0.25 MLD)	3.18	0.05
26.	Perambalur	WSS to 15 rural habitations in Veppanthattai union in Perambalur district (1.81 MLD)	34.97	0.37
27.	Chengalpattu	CWSS to Kovalam and 10 other habitations in Thiruporur union in Chengalpattu district (0.82 MLD)	13.62	0.14
		Total (644.76 MLD)	14996.16	104.06

Under other source of funding, CWSS to Aruppukottai, Sattur and Virudhunagar municipalities in Virudhunagar district is under implementation at an estimated cost of Rs.444.71 crore to provide 26.94 MLD of water. The Phase I of this Scheme has been completed and water supply effected. On completion of Distribution system and House service connections in 3 Municipalities, 2.60 lakh population will be benefitted.

6.5.2 Stand-alone Water Supply Schemes

TWAD Board also implements stand-alone water supply schemes for municipal corporations, municipalities and town panchayats as a project implementation agency. On completion, these schemes are handed over to the respective urban local bodies for operation and maintenance.

Under AMRUT 2.0, Water Supply Scheme to Thuraiyur Municipality in Tiruchirappalli district is under implementation at an estimated cost of

Rs.108.90 crore. The total designed capacity of this scheme is 8.57 MLD, which will benefit a population of 0.54 lakh.

6.6 Special Scheme Hogenakkal Combined Water Supply Scheme - Phase –II

The Hon'ble Chief Minister has announced on 20.01.2022, that a detailed project report for implementing the Hogenakkal Combined Drinking Water Supply scheme (Phase –II) will be prepared for enhancing the present level of supply to the people in Dharmapuri and Krishnagiri districts.

Based on the announcement, to provide water supply at the rate of 135 LPCD to corporation and municipalities, 70 LPCD to town panchayats and 55 LPCD to the rural areas in Dharmapuri and Krishnagiri districts, a detailed project report for Hogenakkal Combined Drinking Water Supply scheme (Phase-II) with river Cauvery as source has been prepared at an estimated cost of Rs.7,890.00 crore to supply 304.83 MLD of water.

The central Government share for rural component of Rs.2,283.41 crore is approved in the State Level Scheme Sanctioning Committee (SLSSC) of Jal Jeevan Mission (JJM) held on 15.6.2023. For the state Government share of rural and urban component, the Preliminary Project Proposal Report (PPPR) was uploaded in Department of Economic Affairs (DEA) website on 20.04.2023 under Externally Aided Projects.

The proposal was approved by the Screening Committee of Department of Economic Affairs, Government of India on 03.11.2023 and also included the proposal in the Japan International Cooperation Agency (JICA) Rolling Plan on 22.11.2023.

As per the remarks of the Central Public Health and Environmental Engineering Organization (CPHEEO), the Detailed Project Report was revised amounting to Rs.7955.37 crore, approved for Rs.7386.18 crore

and recommended for Japan International Cooperation Agency (JICA) funding.

Japan International Cooperation Agency's contact mission visited Project site on 11.03.2024 and had discussions on 12.03.2024 with Managing Director, TWAD Board & on 13.03.2024 with the Principal Secretary to Government, Municipal Administration and Water Supply Department, in Chennai. During the discussions, JICA was requested to shorten the timeline for loan agreement so as to implement the project soon.

The project is under active consideration of Japan International Cooperation Agency. On completion of this project a population of 38.82 lakh in Hosur corporation, Dharmapuri & Krishnagiri municipalities, 16 town panchayats and 6,802 rural habitations in 20 unions in Dharmapuri and Krishnagiri districts will be benefited.

6.7 New Combined Water Supply Schemes

6.7.1 Combined Water Supply Schemes taken up for preparation of Detailed Project Report (DPR) during the year 2023-24

Detailed project reports have been prepared for 7 Combined Water Supply Schemes covering Dindigul Corporation, Perambalur Municipality, Chinnalapatty, Sevugampatty Town panchayats and 706 rural habitations in Kallakurichi, Kanniyakumari, Coimbatore, Perambalur, Dindigul and Namakkal districts at an estimated cost of Rs.1,395.77 crore to benefit a population of 9.25 lakh is under various stages for obtaining fund tie-up and Administrative Approval.

Out of this, 3 Combined Water Supply Schemes covering Dindigul Corporation, Perambalur Municipality, Chinnalapatty, Sevugampatty Town panchayats and 641 rural habitations in Dindigul and Namakkal Districts at an estimated cost of Rs.1,356.78 crore to benefit a

population of 8.80 lakh is announced in the budget Speech for 2024-25 for implementation.

Also, Detailed Project Reports are under preparation for 10 Combined Water Supply Schemes covering 7 municipalities, 5 town panchayats and 10,304 rural habitations in Pudukottai, Thoothukudi, Tiruvallur, Tiruvannamalai, Kallakurichi, Villupuram, Tirunelveli, Tenkasi, Mayiladuthurai, Erode and Dindigul districts at a tentative cost of Rs.14,940 crore, to benefit a population of 73.99 lakh.

6.8 Ongoing Underground Sewerage Schemes

6.8.1 Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

Under AMRUT Funding, 2 Under Ground Sewerage Schemes covering Coimbatore Corporation (Kurichi and Kuniyamuthur) in Coimbatore district and Rameswaram Municipality in Ramanathapuram district, to benefit a population of 5.60 Lakh at an estimated cost of

Rs.643.74 crore are in various stages of implementation so as to treat 34.61 MLD of waste water.

The details of schemes are given in the Table 6.6.

Table 6.6

Sl. No.	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
1	UGSS to Kurichi and Kuniyamuthur areas of Coimbatore corporation in Coimbatore district (30.53 MLD)	591.14	5.17
2	UGSS to Rameswaram municipality in Ramanathapuram district (4.08 MLD)	52.60	0.43
	Total (34.61 MLD)	643.74	5.60

Atal Mission for Rejuvenation and Urban Transformation (AMRUT-2.0)

Under AMRUT 2.0 Funding, 2 Underground Sewerage Schemes covering Coimbatore Corporation (Vellakinaru, Chinnavedampatti and Saravanampatti) in Coimbatore district and Thoothukudi corporation (Non - ABD areas) in Thoothukudi district, to benefit a population of 1.32 lakh at an estimated cost of Rs.471.04 crore

are in various stages of implementation so as to treat 15.33 MLD of waste water.

The details of schemes are given in the Table 6.7

Table 6.7

Sl. No.	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
1	UGSS to added areas of Vellakinaru, Chinnavedampatti and Saravanampatti of Coimbatore Corporation - Zone VI (9.95 MLD)	318.90	0.85
2	UGSS to Thoothukudi corporation (Non Area Based Development) in Thoothukudi district. (5.38 MLD)	152.14	0.47
	Total (15.33 MLD)	471.04	1.32

6.8.2 Underground Sewerage Schemes with other sources of funding

A total of 8 underground sewerage schemes covering 2 corporations and 5 municipalities in Coimbatore, Villupuram, Kanniyakumari, Thoothukudi, Tiruvallur, Virudhunagar and Tiruvarur districts have been taken up with other sources of funding and are under implementation at an

estimated cost of Rs.2292.71 crore. On completion of these schemes, 107.00 MLD of sewage will be collected and treated as per standards, benefiting 8.67 lakh population.

The details of schemes are given in the Table 6.8.

Table 6.8

Sl. No.	Name of the scheme	Funding	Estimated cost (Rs. in crore)	Population benefitted (lakh)
1.	UGSS to 4 added areas (Koundampalayam, Vadavalli, Veerakeralam, Thudiyalur) in Coimbatore Corporation in Coimbatore District. (34.92 MLD)	ADB	922.16	2.40
2.	UGSS to Tindivanam Municipality in Villupuram district (11.44 MLD)	IUDM / SBM 2.0	268.00	1.00
3.	UGSS to Villupuram Municipality (added areas) in Villupuram district (6.91 MLD)	IUDM / SBM 2.0	263.00	0.60
4.	UGSS to Nagercoil Corporation in Kanniyakumari district (17.66 MLD)	UIDSSMT	129.95	1.54
5.	UGSS to Thoothukudi Corporation (Area Based Development) in Thoothukudi district (6.25 MLD)	Smart Cities Mission	120.53	0.54
6.	UGSS to Ponneri Municipality in Thiruvallur district (6.52 MLD)	IUDM	62.82	0.57

Sl. No.	Name of the scheme	Funding	Estimated cost (Rs. in crore)	Population benefitted (lakh)
7.	UGSS to Aruppukottai Municipality in Virudhunagar District. (13.25 MLD)	KfW & SBM	297.25	1.15
8.	UGSS to Mannargudi Municipality in Tiruvarur District. (10.05 MLD)	KfW & SBM	229.00	0.87
	Total (107.00 MLD)		2292.71	8.67

6.9 New Underground Sewerage Schemes (UGSS)

Government have accorded Administrative Approval for 2 Underground Sewerage Schemes covering Hosur Corporation in Krishnagiri District and Chengalpattu Municipality in Chengalpattu district at a cost of Rs.770.79 crore under AMRUT 2.0, KfW, SBM 2.0 funding to benefit a population of 3.15 lakh and works will be commenced shortly.

The details of the schemes are given in the table 6.9.

Table 6.9

Sl. No.	Name of the scheme	Estimated cost (Rs. in crore)	Population benefitted (lakh)
1	UGSS to Hosur corporation in Krishnagiri district	582.54	2.25
2	UGSS to Chengalpattu Municipality in Chengalpattu District.	188.25	0.90
	Total	770.79	3.15

6.10 Research, Design, Training and Project Management Centre

6.10.1 Research and Design Unit

1. Leak/ Blockage detection in pipeline by Robots.

Pilot study has been carried out in TWAD Board to reduce the Non-Revenue Water (NRW) by usage of Artificial Intelligence enabled robots in water supply pipeline for detection of leakages, blockages, illegal connections in pipeline.

A trial has been carried out in CWSS to Kayathar, Kazhugumalai, Ettayapuram Town Panchayats in Thoothukudi District along the

alignment of Nalattinputhur to Kazhugumalai. Root blockages inside pipeline were detected and cleared in the pipeline to restore designed water supply. Certain improvements in the trial work were pointed out and TWAD Board will take up further trials in the coming financial year.

2. Feasibility study on Solar Power Plant

TWAD Board is maintaining combined water supply schemes in Tamil Nadu providing drinking water supply to Rural and Urban local bodies except Chennai metropolitan area. For pumping water, TWAD Board has around 200 Nos. of High Tension service connections summing to 97 MW connected load and 43,000 MW.hr of average monthly energy consumption.

For sustainability in maintenance, this major part of expense is to be optimized. On this analysis, a detailed feasibility study is to be carried out for Solar panel installation. For this purpose 500 acres of land is identified in Tamil Nadu Salt Corporation

(TNSALT) in Thiruporur, Chengalpattu District. Feasibility Study will be carried out for solar energy generation and usage in this land area.

3. Fixing of smart water meters and Centralised Monitoring System

It has been proposed to fix smart water meters in the CWSS maintained by TWAD Board to monitor the quantity of water supplied to the beneficiaries of TWAD Board through Internet of Things (IoT) technology by installation of water meters and this will be monitored on a Centralised Monitoring system.

In this regard, a Detailed Feasibility Report has been prepared by the Consultant at a cost of Rs.668.05 crore. Action is being taken to obtain administrative approval and fund tie up from the Government, for installation of IoT based smart water meters in a phased manner.

4. Energy Audit of Pumpset

In order to reduce the expenditure on Electricity charges for operation of CWSS under the maintenance of TWAD Board, it is proposed to carry out energy audit of pumpsets which are more than 15 years old with capacity of above 50 HP. Based on the audit, it is proposed to rectify/ replace the pumpsets to improve the efficiency of pumpsets thereby save the energy cost.

Preparation of Detailed Feasibility Report (DFR) for carrying out pumpset audit is under progress through consultant.

5. Capacity Building – India and Denmark

Under the Green Strategic Partnership between India and Denmark, Tamil Nadu has been identified as the state to implement the Joint Work Plan to support Government of India's objective to provide drinking water supply to all rural households.

In this regard, experts from Denmark visited Tamil Nadu for studying the feasibility of Capacity Building in areas of energy efficiency and volumetric data collection regarding water supply. The team visited Coimbatore Local Planning and Rural Area (CLPRA) combined water supply scheme (CWSS). In the upcoming financial year such capacity building programmes will be conducted in Tamil Nadu.

Centre for Research, Anna University, Chennai has recognized Tamil Nadu Water Supply and Drainage Board, Research and Design unit as a "Research Centre" with effect from 19.03.2020 for a period of five years upto June 2025 to do collaborative research for the purpose of pursuing Ph.D. programme.

6.10.2 Training and Capacity Building Activities

- TWAD Board has a nodal training centre at Head Office and sub training centres at Trichy, Madurai and Coimbatore. Regular training and capacity building programmes are being organized for the technical and other staff of the Board through these centres.
- During 2023-24, twelve training programmes were conducted for the Engineers, Hydrogeologists, Draughting Officers, Administrative and Account Staffs of TWAD Board benefitting 1,101 personnel under Jal Jeevan Mission Support Activity Fund for an amount of Rs.1.13 crore.
- Apart from that, Orientation Training has been given to 150 newly recruited / promoted by transfer of service from the lower categories of Junior Draughting Officers, Junior Assistants,

Record Clerks, Junior Water Analysts and other lab incharges.

- Further, Training has also been arranged to 165 officials such as IAS Probationers, Pro Deputy Collectors, Under Secretaries to Government and Section Officers deputed by Government of Tamil Nadu to undergo the "Compulsory Training in Heads of Departments and District Training Programmes".
- In addition, 353 officials have been deputed to Capacity building training programme conducted by various institutions such as TNUIFSL, JICA, Engineering Staff College of India, Centre of Science and Environment, Central Ground Water Board, CPHEEO, CSIR, Anna University and Anna Administrative Staff College etc.,

In order to impart training to the employees of TWAD Board on the various activities of the

organization and as a capacity building measure, the following topics are proposed for the year 2024-25.

- Design of Water Supply Schemes including Economic size of Pumping main (ECP) calculation, LOOP design and Water GeM in Distribution system, Structural Analysis and Design (STAAD) Pro.
- Design of Underground Sewerage Schemes including STP design using Sewer GeM.
- Innovative technologies in implementation of Underground Sewerage Schemes (including field visit).
- Innovative technologies for water hammer and surge analysis in implementation of Combined Water Supply Schemes (including field visit).
- Energy Audit, Water Audit in Operation & Maintenance of CWSS/UGSS and Usage of Water Meters including Smart Water Meter (including field visit).

- Geographic Information System (GIS) with field survey using latest methodologies - Drone Survey.
- Exposure Visit to Mega CWSS.
- Hydro Geomorphological Maps (HGM) & Geo Physical Survey Investigations (including field visit).
- Tender Procedures, Contract Management and Online e-Procurement.
- Water Quality Monitoring and Surveillance (including lab visit).
- Office Procedure to Administrative Staff.
- Motivation and behavior aspects to Drivers and Office Assistants.

6.11 Material Testing and Quality Control Laboratory

There are four material quality control laboratories functioning in TWAD Board at Coimbatore, Madurai, Tiruchirapalli and Tindivanam. National Accreditation Board for

Testing and Calibration Laboratories (NABL) certifications have been awarded to the laboratories in Coimbatore and Madurai.

In these laboratories, the following materials are being tested:

- Cement, steel rods, river sand, crushed stone sand, coarse aggregates, bricks and concrete cubes, mix design of concrete.
- Filter media
- PVC pipes, UPVC pipes, O- PVC pipes, HDPE pipes, DWC pipes, GI pipes, stoneware pipes and DI pipes.
- Electric cables.

During the year 2023-24, from April 2023 to March 2024, a total of 15,189 samples have been tested. It is proposed to test about 15,000 samples during the year 2024-25.

6.12 Water Quality Testing and Surveillance

With a view to ensure safe drinking water supply to the public, TWAD Board has established

one State level laboratory at Chennai, 31 laboratories at district level, 56 laboratories at sub district level and 25 laboratories at block level. Chemical and bacteriological parameters in the water supplied are tested in these laboratories and appropriate action is taken.

The state level water testing laboratory at Chennai is National Accreditation Board for Testing and calibration Laboratories (NABL) accredited and recognized as state referral institute for Tamil Nadu by Government of India since 2016. Further, under Jal Jeevan Mission, NABL accreditation have been obtained for 31 district level water testing laboratories (other than newly formed districts) and NABL recognition is obtained for 56 sub district level laboratories and 25 block level laboratories.

During the year 2023-24, nearly 8.45 lakh water samples have been tested in the state and district laboratories with JJM and State funds.

In the current financial year 2024-25, it is proposed to test the water samples of all drinking water sources, Schools, Anganwadis and Functional Household Tap Connection (FHTC) provided by the Jal Jeevan Mission Scheme through the labs of Tamil Nadu Water Supply and Drainage Board.

6.13 Hydro- Geological Activities

The Hydrogeological wing of TWAD Board is vested with the responsibility of scientific source identification works through the exploration, assessment, conservation and management of the water resource for providing protected, potable water on regular basis to the water supply schemes executed by TWAD Board.

The Remote Sensing (RS) and Geographical Information System (GIS) technology is extensively used for generating the Ground water prospects Atlas maps (Hydro Geo-morphological maps – HGM). The atlas is prepared by integrating

various thematic maps & field data in GIS platform which will assist to pinpoint the ground water potential areas for locating the water supply sources and identification of suitable locations for the construction of recharge structures for sustainability of water sources. The Block wise Hydro Geo-morphological maps are effectively used by the field Hydrogeologists.

To understand the ground water extraction, categorization of Firkas was classified by the Water Resource Department (WRD). In order to visualise the spatial distribution, District wise Firka maps were prepared in GIS platform and furnished to the field Hydrogeologists.

In addition, District wise saturation plans and Index plans for water supply schemes and the Major infrastructure projects (i.e. more than 100 Crore) were generated in GIS platform and submitted to TNeGA and PM Gatishakti portal.

Sources were identified for 38 Combined Water Supply Schemes, placed in the Regional Scientific Source Finding Committee (RSSFC) meeting and approved.

Further, 830 sources have been identified through Hydrogeological investigations and Geophysical surveys for providing water supply schemes to the line departments.

Rainwater Harvesting

Water Security

TWAD Board acts as a Nodal Agency and provides technical assistance in the Sustainable Water Security Mission ("SuWaSeM") for Tamil Nadu State and the objective is to ensure water security in the urban local bodies through various methods of rainwater harvesting structures.

The total expenditure incurred so far under Sustainable Water Security Mission ("SuWaSeM") is Rs.8.13 crore.

Rain Water Harvesting (RWH) - Awareness

Tamil Nadu is a pioneer State in the implementation of Rainwater harvesting (RWH) and TWAD Board has taken various steps for creating awareness among the general public all over the State. To implement the task, Campaigns/Rallies and Dissemination on the importance of RWH in all the Districts of Tamil Nadu through Float LED Van for public viewing, Schools, Colleges and other common places were conducted and RWH Pamphlets were distributed, during October 2023.

The average Ground water details in the district of the State are measured through 1286 observation wells, every year before and after the monsoon.

The district-wise average ground water level in metre during May 2023 (pre monsoon) and January 2024 (post monsoon) is given in Table 6.10.

Table 6.10**Observation Wells - Water Levels (in Metre)**

District	Total observation wells (borewell/open well) Nos.	Ground Water level in (M) May-23	Ground Water level in (M) January -24	Ground Water level rise(+) / fall(-)
Ariyalur	27	21.96	13.90	+8.06
Chengalpet	29	5.00	4.01	+0.99
Coimbatore	38	11.70	9.48	+2.22
Cuddalore	42	21.80	17.67	+4.13
Dharmapuri	37	7.30	8.80	-1.5
Dindigul	51	10.91	21.70	-10.79
Erode	42	6.46	6.08	+0.38
Kallakurichi	42	6.56	4.29	+2.27
Kanchipuram	17	6.50	4.40	+2.1
Kanniyakumari	16	7.21	4.76	+2.45
Karur	34	9.22	8.66	+0.56
Krishnagiri	44	4.22	5.36	-1.14
Madurai	31	4.34	3.11	+1.23
Mayiladuthurai	13	7.34	5.71	+1.63
Nagapattinam	13	2.45	1.50	+0.95
Namakkal	37	6.19	5.46	+0.73
Perambalur	16	4.91	4.97	-0.06
Pudukkottai	24	10.73	9.10	+1.63
Ramanathapuram	91	6.77	5.02	+1.75
Ranipet	20	4.97	3.94	+1.03
Salem	41	6.70	4.14	+2.56
Sivagangai	79	10.68	7.11	+3.57
Tenkasi	27	7.13	2.77	+4.36
Thanjavur	35	13.11	11.12	+1.99
Theni	20	12.93	9.17	+3.76
Thoothukudi	49	5.44	2.64	+2.8
Tirupathur	17	5.70	4.54	+1.16
Tiruchy	45	18.10	13.62	+4.48
Tirunelveli	36	5.91	2.65	+3.26
Tiruppur	39	7.41	7.82	-0.41
Tiruvannamalai	58	3.84	4.27	-0.43

District	Total observation wells (borewell/open well) Nos.	Ground Water level in (M) May-23	Ground Water level in (M) January -24	Ground Water level rise(+) / fall(-)
Tiruvarur	19	7.39	5.24	+2.15
Tiruvallur	35	5.77	5.50	+0.27
Vellore	15	5.51	4.18	+1.33
Villupuram	47	9.50	6.47	+3.03
Virudhunagar	60	5.51	2.17	+3.34
State average	286	8.25	6.70	+1.55

Besides understanding the changes in the ground water levels from the above data, it will be possible to plan and implement water supply schemes based on the variations in the past years.

6.14 Electronic Data Processing Wing

Tamil Nadu Water Supply and Drainage Board has implemented integrated e-Governance System (TWADNEST) to cater to the needs of the functional areas of Project Management, Financial Accounting System and Human Resource Management System, Pay roll, Pension, Billing of water charges (DCB) etc.

To strengthen the MIS in TWAD Board, it has been proposed to re-engineer the existing TWADNEST software with a new comprehensive software using current technological advancement through Tamil Nadu e-Governance Agency (TNeGA).

For facilitating Business Reform Action Plan (BRAP)-GoTN, implementation of Ease of Doing Business (EoDB) in TWAD, for new water supply connections for industrial and commercial beneficiaries, software application is implemented. The portal is integrated with single window portal at Guidance Bureau.

The e-office is being implemented in TWAD Board.

In order to monitor the progress of ongoing water supply and sewerage schemes, the Project Monitoring software System is implemented.

Further, a new software application for monitoring the Operation and Maintenance of Combined Water Supply Schemes is under use.

6.15 Financial Position

The total revenue expenditure as per the Annual Accounts for the year 2023-24 upto 31.03.2024 is Rs.1,822.13 crore whereas the total income is Rs.1,898.93 crore.

The details of income, expenditure, Deficit and cumulative deficit for the year 2021-22 to 2023-24 (Tentative as on 31-03-2024) are given in table 6.11.

Table 6.11

(Rs.in crore)

Sl. No.	Particulars	FY 2021-22	FY 2022-23	FY 2023-24 as on 31.03.2024 (Tentative)
I	Revenue Income			
1.	Centage Charges	314.54	307.20	620.25
2.	Water Charges	729.75	770.92	956.57
3.	Other income (including Investigation Charges)	128.79	227.02	76.95

Sl. No.	Particulars	FY 2021-22	FY 2022-23	FY 2023-24 as on 31.03.2024 (Tentative)
4.	Grants	217.13	286.77	245.16
	Income – Total	1,390.21	1,591.91	1,898.93
II	Revenue Expenditure			
1.	Salary	110.40	110.59	112.66
2.	Pension and Retirement Benefits	371.42	397.58	400.48
3.	Maintenance of CWSS	1034.89	1115.44	1277.85
4.	Other expenditure	30.04	30.09	31.14
	Expenditure – Total	1,546.75	1,653.70	1,822.13
	Deficit/Excess	-156.54	-61.79	76.80
	Cumulativ Deficit	2,800.32	2,862.11	2,785.31

6.16 Jal Jeevan Mission

Jal Jeevan Mission aims to provide Functional Household Tap Connections (FHTCs) to every rural household with 55 LPCD of potable water on regular basis.

Components of Jal Jeevan Mission

- Creation of sustainable drinking water sources and augmentation of existing sources to ensure long-term sustainability.

- To provide bulk water transfer wherever required, to construct water treatment plant(s) and to strengthen the distribution network.
- Provision of in-village piped water supply infrastructure to provide tap water connection to every rural household.
- to provide the minimum service level of 55 LPCD in rural areas through FHTCs by retrofitting of TWAD Board maintained schemes and ongoing schemes.
- To undertake information, education and communication (IEC), human resource development, training, water quality testing and surveillance activities.

State Nodal Department and State Nodal Officer

The Government of Tamil Nadu, nominated Municipal Administration and Water Supply Department as Nodal Department and the Principal Secretary to Government, Municipal Administration and Water Supply Department, Secretariat,

Chennai, as the State Nodal Officer for implementation of Jal Jeevan Mission in Tamil Nadu.

The Managing Director, Tamil Nadu Water Supply and Drainage Board is the State Mission Director for Jal Jeevan Mission in Tamil Nadu. A State Project Management Unit (SPMU) has been set up to assist the Mission Director, JJM in the implementation of JJM activities.

Committees

As per G.O.(Ms.) No.33, Municipal Administration and Water Supply department, dated 15.02.2022, the following committees have been reconstituted.

i.Apex Committee

The Chief Secretary to Government is the Chairman of this committee and Principal Secretary to Government, Municipal Administration and Water Supply Department is Member Secretary with 7 Additional Chief Secretaries / Principal

Secretaries / Secretaries to Government; Mission Director, JJM; representative from Government of India; and 3 other officers as members. This committee takes policy decisions and finalizes the State Action Plan.

ii.State Level Scheme Sanctioning Committee (SLSSC)

The State Level Scheme Sanctioning Committee (SLSSC) has been constituted with the Principal Secretary to Government, Municipal Administration and Water Supply Department as Chairman and 13 other members including representative from Government of India, to provide technical sanction to the projects approved by the Apex Committee.

iii.Executive Committee

The Executive Committee is constituted with the Mission Director, Jal Jeevan Mission as Chairman; Director, Rural Development and Panchayat Raj department; representative from

Finance department; and 4 other officers of the State Government as members to monitor the implementation of the mission.

Finance

Under Jal Jeevan Mission, the Government of India provides 50 percent funding and the state Government provides 50 percent funding for the implementation of piped water supply connections to rural households. For support activities and water quality monitoring and surveillance activities, Government of India provides 60 percent and the state Government provides 40 percent of the funds required.

Community Contribution

To encourage people's participation, 5% of the capital cost of the in-village component is collected from the public in hilly / forest areas and SC/ST habitations and 10% in other village panchayats in cash / kind / manpower towards community contribution.

Implementation

Jal Jeevan Mission is jointly implemented by the Tamil Nadu Water Supply and Drainage Board and the Rural Development and Panchayat Raj Department.

Tamil Nadu Water Supply and Drainage Board (TWAD Board)

- i. Combined Water Supply Schemes / Multi-Village Schemes are designed and implemented by TWAD Board to cover more than one village panchayat.
- ii. Combined Water Supply Schemes maintained by TWAD Board are retrofitted to augment the water sources, improve the capacity of electro mechanical equipments and replacement of pipelines to enhance the water supply level.

Rural Development and Panchayat Raj Department

- i. The Rural Development and Panchayat Raj Department design and implement Single Village Schemes (SVS). These works include the creation of water source, in-village infrastructure,

construction of overhead tanks and provision of Functional Household Tap Connections (FHTCs).

ii. In addition, the Rural Development and Panchayat Raj Department design and implement in-village infrastructure works as well as providing Functional Household Tap Connections for Combined Water Supply Schemes / Multi-Village Schemes implemented by the TWAD Board.

Other Special Features of Jal Jeevan Mission

i. Third party inspection of all the Jal Jeevan Mission works to ensure quality.

ii. Functionality assessment for quality, quantity and regularity of water supply.

iii. Monitoring the implementation of schemes using Integrated Management Information System (IMIS).

iv. Water quality testing through Field Test Kits (FTKs).

v. IEC activities for water conservation, rainwater harvesting, water security, water distribution, etc.,

Convergence of funds

Fifteenth Finance Commission grant, State Finance Commission (SFC) grant, District Mineral Foundation Trust (DMFT) and other grant funds are also converged to carry out the Jal Jeevan Mission works included in the approved annual action plan.

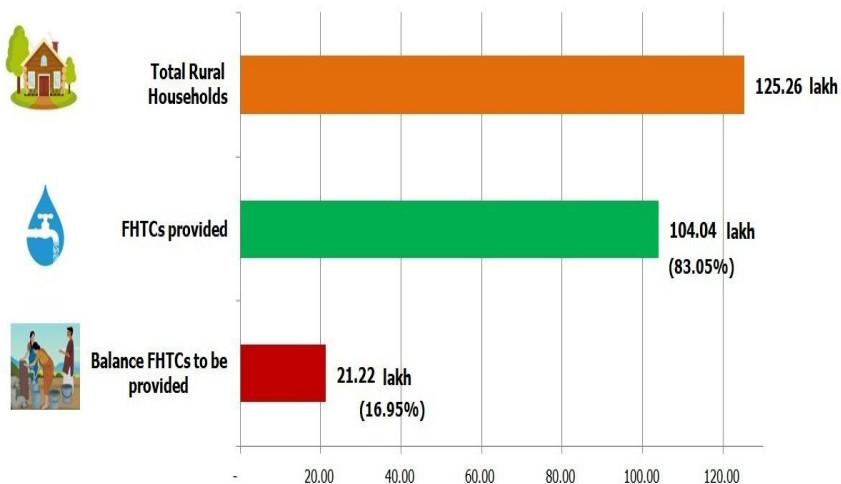
Operation and Maintenance Policy

The Government of Tamil Nadu in its G.O.(Ms.) No.26, Municipal Administration and Water Supply Department, Dated 27.02.2024 has approved and issued the Operation and Maintenance (O&M) policy of water supply schemes so as to ensure uninterrupted water supply to the beneficiaries.

Present Status of Jal Jeevan Mission

Out of 125.26 lakh households in the rural areas of Tamil Nadu, so far 104.04 lakh (83.05 %) households have been provided with Functional Household Tap Connections (FHTCs). Out of this,

23.05 lakh connections have been provided during the year 2023-24.



The District wise coverage of FHTCs is given in Table 6.12.

Table 6.12

Sl. No	District	Total no. of house holds	FHTCs provided	% of coverage	FHTC to be provided	Total no. of villages	Villages having 100% FHTCs
1	Ariyalur	2,07,503	2,07,503	100.00	0	201	174
2	Chengalpattu	4,16,458	3,96,937	95.31	19,521	359	247
3	Coimbatore	3,72,578	3,72,578	100.00	0	228	222
4	Cuddalore	5,21,124	5,14,343	98.70	6,781	683	551
5	Dharmapuri	3,42,902	1,71,056	49.88	1,71,846	251	4

Sl. No	District	Total no. of house holds	FHTCs provided	% of coverage	FHTC to be provided	Total no. of villages	Villages having 100% FHTCs
6	Dindigul	4,55,187	3,59,158	78.90	96,029	306	40
7	Erode	4,19,003	3,77,867	90.18	41,136	225	149
8	Kallakurichi	3,03,411	1,68,101	55.40	1,35,310	412	52
9	Kanchipuram	2,16,311	2,16,311	100.00	0	274	267
10	Kanniyakumari	2,16,738	2,16,738	100.00	0	95	79
11	Karur	2,04,464	1,74,715	85.45	29,749	157	56
12	Krishnagiri	4,09,438	2,82,712	69.05	1,26,726	333	38
13	Madurai	4,50,815	3,70,849	82.26	79,966	420	85
14	Mayiladuthurai	2,02,565	1,85,933	91.79	16,632	241	77
15	Nagapattinam	1,57,427	67,513	42.89	89,914	193	29
16	Namakkal	3,52,086	3,47,727	98.76	4,359	322	231
17	Nilgiris	96,916	96,916	100.00	0	35	34
18	Perambalur	1,48,124	1,10,891	74.86	37,233	121	39
19	Pudukkottai	3,70,681	2,03,409	54.87	1,67,272	497	36
20	Ramanathapuram	3,33,314	1,01,236	30.37	2,32,078	429	6
21	Ranipet	1,89,334	1,89,334	100.00	0	288	275
22	Salem	6,47,476	5,36,890	82.92	1,10,586	385	114
23	Sivaganga	3,31,483	1,89,661	57.22	1,41,822	445	29
24	Tenkasi	3,39,932	2,26,337	66.58	1,13,595	221	68
25	Thanjavur	4,21,955	4,21,708	99.94	247	589	556
26	Theni	1,85,013	1,85,013	100.00	0	130	79
27	Thoothukudi	3,58,973	2,79,158	77.77	79,815	403	178
28	Tiruchirappalli	4,73,334	4,32,923	91.46	40,411	404	270
29	Tirunelveli	2,82,103	2,11,871	75.10	70,232	204	68
30	Tirupathur	2,14,808	1,92,742	89.73	22,066	208	66
31	Tiruppur	4,56,552	3,95,382	86.60	61,170	265	98
32	Tiruvallur	4,75,915	4,75,915	100.00	0	526	443
33	Tiruvannamalai	5,30,692	5,13,482	96.76	17,210	860	656
34	Tiruvarur	3,05,169	2,37,796	77.92	67,373	430	136
35	Vellore	2,12,528	2,12,528	100.00	0	247	240
36	Villupuram	4,40,041	3,61,885	82.24	78,156	688	204
37	Virudhunagar	4,64,075	3,98,644	85.90	65,431	450	214
	Total	1,25,26,428	1,04,03,762	83.05	21,22,666	12,525	6,110

100 % Coverage (Har Ghar Jal) Districts and Villages

9 Districts, i.e., Kanchipuram, Ranipet, Vellore, Kanniyakumari, Theni, Tiruvallur,

Coimbatore, Nilgiris and Ariyalur Districts and 6,110 Village Panchayats have achieved 100 % coverage of FHTCs (Har Ghar Jal).

Details of works taken up

The Government of Tamil Nadu envisions to connect every village in the state with a Combined Water Supply Scheme (CWSS) based on the sustainable river sources.

Approval has been accorded to take up 45 new Combined Water Supply Schemes, 56 retrofitting of Combined Water Supply Schemes and Single Village Schemes where local sources are sustainable at a cost of Rs.18,228.40 crore. So far, 19 new Combined Water Supply Schemes, 43 retrofitting Combined Water Supply Schemes have been completed and balance schemes are under implementation.

Nal Jal Mitra – Multi Skilling Programme

Under Nal Jal Mitra Multi Skilling Programme, it has been planned to skill 12,525 candidates from

all village panchayats throughout the state and so far training has been provided to 3,671 candidates. This programme is being implemented in co-ordination with Rural Development and Panchayat Raj Department, Tamil Nadu Skill Development Corporation (TNSDC), Directorate of Employment and Training and Directorate of Technical Education.

Funds available under Jal Jeevan Mission and 15th Finance Commission are being utilised for this programme.

PM-JANMAN programme:

Under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan programme, the proposal for 'Providing water supply through CWSS to Particularly Vulnerable Tribal Group (PVTG) habitations in Velliangadu and Tholampalayam panchayats of Karamadai union and Veerapandi panchayat of Periyanaickenpalayam union in Coimbatore district with river Bhavani as Source'

has been approved by the State Level Scheme Sanctioning committee for an amount of Rs.11.75 crore for benefitting 3,949 tribal population in the 14th SLSSC meeting held on 01.02.2024 and further action is in progress.

Geo tagging

In Tamil Nadu, out of 22,564 water sources of JJM schemes, the information of 19,051 sources have been geo tagged in the JJM Field User Application by the field Engineers for effective monitoring of water supply schemes. Similarly, the information of 15,559 scheme information boards have been geo tagged.

7. Tamil Nadu Urban Infrastructure Financial Services Limited

The Government of Tamil Nadu established Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL), in November 1996, as a Public Limited Company, with private sector participation from ICICI Bank Limited (ICICI), HDFC Bank Limited (HDFC) and IL and FS Financial Services Limited (IL and FS). The authorized capital of the company is Rs.2.00 crore and the paid-up share capital is Rs.1.00 crore, of which a sum of Rs.49.00 lakh is contributed by the Government of Tamil Nadu.

TNUIFSL manages funds like Tamil Nadu Urban Development Fund, Water and Sanitation Pooled Fund and other Government Grant Funds and provides a spectrum of solutions towards the development of urban infrastructure, right from concept to commissioning of the projects. The main tasks of the company include project development,

project appraisal, project structuring, resource mobilization and fund management. The company has been operating on profit since its establishment and dividends are declared and paid regularly.

7.1 Tamil Nadu Urban Development Fund (TNUDF)

The Government of Tamil Nadu established TNUDF, in November 1996, as a Trust, with private sector participation from ICICI, HDFC and IL and FS.

TNUDF functions as a sustainable financial intermediary that enhances the flow of private capital to urban sector in the State of Tamil Nadu and facilitates Urban Local Bodies to become capable and sustainable organisations, sensitive to stakeholders in providing highest quality of urban services.

TNUDF has a mission “to contribute to the improvement in urban quality of life in Tamil Nadu by facilitating efficient urban infrastructure asset

creation and provision of urban services through innovative project development, independent appraisal and sustainable financing”.

7.1.1 Objectives of TNUDF

The objectives of TNUDF are as follows:

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

TNUDF provides financial assistance to Urban Local Bodies for implementation of basic service projects such as roads, bridges, storm water drains, sewerage and sanitation, water supply, solid waste management and commercially viable

remunerative projects, such as bus stands and market complexes.

TNUDF 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.

The total corpus of the Fund is Rs.199.60 crore, of which a sum of Rs.142.91 crore has been contributed by Government of Tamil Nadu and a sum of Rs.56.69 crore has been contributed by ICICI, HDFC and IL and FS.

7.2 Externally Aided Projects

Tamil Nadu Urban Infrastructure Financial Services Limited is operating five external lines of credit as detailed below:

- (i) Tamil Nadu Urban Flagship Investment Program (TNUFIP) assisted by Asian

Development Bank in three Phases (viz, Phase-I, Phase-II and Phase-III)

- (ii) Sustainable Municipal Infrastructure Financing in Tamil Nadu-Phase-II-Part-2 (SMIF-TN-II-2) Program assisted by KfW
- (iii) Municipal Infrastructure Development in Tamil Nadu (MID-TN) Grant Program assisted by KfW
- (iv) Sustainable Municipal Infrastructure Financing in Tamil Nadu-Phase-III (SMIF-TN-III) Program assisted by KfW and
- (v) Tamil Nadu Climate Resilient Urban Development Program (TNCRUDP) assisted by World Bank.

The Funds totaling Rs.17,319.53 crore are available under the above programs with external assistance of Rs.10,713.78 crore. The details are furnished in Table 7.1 below:

Table 7.1**Size of External Lines of Credit**

(Rs. in crore)

Sl. No.	Components	TNUFIP			SMIF-TN-II-2	MID-TN-Grant	SMIF-TN-III	TNCR UDP	Total
		Phase -I	Phase -II	Phase -III					
1	Loan to ULBs	356.43	487.01	294.45	0.00	0.00	2,132.75	637.98	3,908.62
2	Capital Grants to ULBs	774.60	834.10	634.57	0.00	151.43	2,132.75	1,004.88	5,532.33
3	Technical Assistance Grant / performance-based incentive / fees	179.83	120.89	25.98	22.39	7.97	68.25	847.52	1,272.83
	Total external assistance	1,310.86	1,442.00	955.00	22.39	159.40	4,333.75	2,490.38	10,713.78
4	Government and ULB Contribution	2,007.44	2,709.00	523.34	0.00	17.70	0.00	1,348.27	6,605.75
	Total	3,318.30	4,151.00	1,478.34	22.39	177.10	4,333.75	3,838.65	17,319.53

7.2.1 Tamil Nadu Urban Flagship Investment Program (TNUFIP) assisted by Asian Development Bank (ADB)

The Tamil Nadu Urban Flagship Investment Program commenced in the year 2018 with the assistance of Asian Development Bank. The objective of this Program is to develop priority water supply, sewerage and drainage infrastructure located within strategic industrial

corridors of Tamil Nadu, support innovative pilots, improve urban governance and strengthen the capacity of State and local institutions to enhance environmental sustainability, climate resilience and urban livability.

Tamil Nadu Urban Flagship Investment Program has three phases (Phase-I, Phase-II and Phase-III). The assistance from ADB is US\$ 502 million for all the three phases.

The total outlay of Phase-I was Rs.3,070.33 crore (US \$ 477.50 million) with ADB assistance of Rs.1,099.53 crore (US \$ 171.00 million). The project implementation period is between November 2018 and June 2023.

The project implementation period of Phase-I has been extended up to December 2024 with an revised total outlay of Rs.3,318.30 crore (US \$ 477.50 million) considering the funds available due to exchange rate variations. Of the above, the ADB assistance is Rs.1,310.86 crore

(US \$ 171.00 million) and the contribution of the State Government and other sources being Rs.2,007.44 crore (US \$ 306.50 million). The funding assistance of Rs.1,131.03 crore has been committed for 9 sub-projects under TNUFIP Phase-I. Of the above, 1 sub-project (Coimbatore Corporation Solar Development Project) has been completed and the balance 8 sub-projects are under various stages of implementation. The details are furnished below:

- Coimbatore Corporation Underground Sewerage Scheme
- Trichy Corporation Underground Sewerage Scheme–Phase-II
- Tirunelveli Corporation Underground Sewerage Scheme–Phase-II
- Tirunelveli Corporation Underground Sewerage Scheme–Phase-III
- Vellore Corporation Underground Sewerage Scheme – Phase-II

- Rajapalayam Municipality Underground Sewerage Scheme
- Chennai Metropolitan Water Supply and Sewerage Board – Underground Sewerage Scheme in 4 added areas
- Chennai Metropolitan Water Supply and Sewerage Board – Water Supply Scheme in 4 added areas

The total outlay of Phase-II is Rs.4,151.00 crore (US \$ 593.00 million) with ADB assistance of Rs.1,442.00 crore (US \$ 206.00 million). The contribution of the State Government and other sources being Rs.2,709.00 crore (US \$ 387.00 million). The project implementation period is between December 2019 and December 2025. The funding assistance of Rs.1,321.11 crore has been committed for 6 sub-projects under TNUFIP Phase-II and all these sub-projects are under various stages of implementation.

The details are furnished below:

- Trichy Corporation Underground Sewerage Scheme – Phase-III
- Ambur Municipality Underground Sewerage Scheme
- Tiruppur Corporation Underground Sewerage Scheme – Phase-II
- Vellore Corporation Underground Sewerage Scheme – Phase-III
- Tiruppur Corporation Water Supply Improvement Scheme
- Madurai Corporation Water Supply Improvement Scheme

The total outlay of Phase-III is Rs.1,478.34 crore (US \$ 193.50 million) with ADB assistance of Rs.955.00 crore (US \$ 125.00 million). The contribution of the State Government and other sources being Rs.523.34 crore (US \$ 68.50 million). The project implementation period is between December 2022 and June 2026. The

funding assistance of Rs.1,241.80 crore (ADB assistance of Rs.929.02 crore and Government Contribution of Rs.312.78 crore) has been committed for 3 sub-projects under TNUFIP Phase-III and all these sub-projects are under various stages of implementation. The details are furnished below:

- Madurai Corporation Water Supply Improvement Scheme
- Coimbatore Corporation Underground Sewerage Scheme and
- Thoothukudi Corporation Storm Water Drains Project – Phase-IV

7.2.2 Sustainable Municipal Infrastructure Financing –Tamil Nadu -Phase-II-Part-2 (SMIF–TN-II-2) Program assisted by KfW (German Development Bank)

The Sustainable Municipal Infrastructure Financing in Tamil Nadu-Phase-II-Part-2 Program assisted by KfW commenced in the year 2014 has been completed in December 2022. However, the

Technical Assistance grant component of Rs.22.39 crore (Euro 2.75 million) for enhancing the technical capabilities of the Urban Local Bodies has been extended by KfW upto December 2024. Under this program about 5,200 officials and elected representatives of urban local bodies are proposed to be trained in urban governance, finance, project development, implementation, operation and maintenance.

7.2.3 Municipal Infrastructure Development in Tamil Nadu (MID-TN) Grant Program assisted by KfW (German Development Bank)

The Municipal Infrastructure Development in Tamil Nadu (MID-TN) Grant Program commenced in the year 2022 with the assistance of KfW. The objective of the Program is to finance innovative projects to promote environmental protection and/or to increase climate resilience in the State of Tamil Nadu.

The total outlay of this Program is Rs.177.10 crore (Euro 22.22 million), of which KfW's grant assistance is Rs.159.40 crore (Euro 20.00 million) and ULB contribution of Rs.17.70 crore (Euro 2.22 million). The project implementation period is between August 2022 and December 2027. The sub-projects to be taken up under MID-TN Grant Program are being identified.

7.2.4 Sustainable Municipal Infrastructure Financing –Tamil Nadu -Phase-III (SMIF–TN-III) Program assisted by KfW (German Development Bank)

The Sustainable Municipal Infrastructure Financing in Tamil Nadu-Phase-III Program assisted by KfW commenced in the year 2022 with the assistance of KfW. The objective of the Program is to finance climate resilient municipal infrastructure projects in the State of Tamil Nadu.

The total outlay of this Program is Rs.4,333.75 crore {Rs.4,265.50 crore (Euro 500

million) for implementing urban infrastructure projects and Rs.68.25 crore (Euro 8 million) for providing Technical Assistance}. The project implementation period is between November 2022 and June 2030. The funding assistance of Rs.2,760.05 crore has been committed for 19 sub-projects under SMIF-TN-III and all these sub-projects are under various stages of approval / procurement / implementation. The details are furnished below:

- Okkiam Thoraipakkam Underground Sewerage Scheme
- Madhavaram Underground Sewerage Scheme
- Edayanchavadi, Sadayankuppam and Kadapakkam Underground Sewerage Scheme
- Puzhal, Mathur, Vadaperumbakkam and Theeyambakkam Underground Sewerage Scheme

- Trichy Corporation Seweage Treatment Plant
- Hosur Corporation Underground Sewerage Scheme
- Mannargudi Municipality Underground Sewerage Scheme
- Coimbatore Corporation Underground Sewerage Scheme in 3 added areas
- Coimbatore Corporation Ondiputhur Underground Sewerage Scheme
- Aruppukottai Municipality Underground Sewerage Scheme
- Greater Chennai Corporation Biomining
- Madurai Corporation Underground Sewerage Scheme
- Chengalpattu Municipality Underground Sewerage Scheme
- Trichy Corporation Underground Seweage Scheme
- Tiruppur Corporation Underground Sewerage Scheme in added areas

- Maraimalainagar Municipality Underground Sewerage Scheme
- Palani Municipality Underground Sewerage Scheme
- Mayiladuthurai Municipality Underground Sewerage Scheme and
- Tirunelveli Corporation 58 MLD Sewerage Treatment Plant

7.2.5 Tamil Nadu Climate Resilient Urban Development Program (TNCRUDP) assisted by World Bank

The loan documents for Tamil Nadu Climate Resilient Urban Development Program (TNCRUDP) assisted by World Bank has been executed on 05.03.2024. The objective of the Program is to strengthen urban management and improve access to climate resilient urban services in Water Supply and Sanitation sector in participating ULBs in Tamil Nadu.

The total outlay of the project is Rs.3,838.65 crore (JPY 69.68 billion) with World

Bank assistance of Rs.2,490.38 crore (JPY 45.20 billion) and the contribution of the State Government and other sources being Rs.1,348.27 crore (JPY 24.48 billion). The project implementation period is between March 2024 and December 2030.

Of the above, Rs.3,585.22 crore is under Program-for-Results (P for R), Rs.247.20 crore under Investment Project Finance (IPF) and Rs.6.23 crore is towards Front End Fee. The funding assistance of Rs.1,609.65 crore has been committed for 28 sub-projects under TNCRUDP and all these sub-projects are under various stages of approval / procurement / implementation. The details are furnished below:

- Salem Corporation Underground Sewerage Scheme
- Thoothukudi Corporation Underground Sewerage Scheme

- Tiruvannamalai Municipality Underground Sewerage Scheme
- Pudukottai Municipality Underground Sewerage Scheme
- Avadi Corporation Underground Sewerage Scheme
- Avadi Corporation Water Supply improvement Scheme
- Karaikudi Municipality Underground Sewerage Scheme
- Karaikudi Municipality 24 X 7 Water Supply Scheme
- Pudukottai Municipality 24 X 7 Water Supply Scheme
- Trichy Corporation 24 X 7 Water Supply Scheme
- Thoothukudi Corporation 24 X 7 Water Supply Scheme
- Tirunelveli Corporation 24 X 7 Water Supply Scheme
- Erode Corporation 24 X 7 Water Supply Scheme

- Vellore Corporation 24 X 7 Water Supply Scheme
- Cuddalore Corporation 24 X 7 Water Supply Scheme
- Dindigul Corporation 24 X 7 Water Supply Scheme
- Tambaram Corporation 24 X 7 Water Supply Scheme
- Nagercoil Corporation 24 X 7 Water Supply Scheme
- Rajaplayam Municipality 24 X 7 Water Supply Scheme
- Namakkal Municipality Underground Sewerage Scheme
- Dharmapuri Municipality Underground Sewerage Scheme
- Theni-Allinagaram Municipality Underground Sewerage Scheme
- Kancheepuram Corporation Water Supply Improvement Scheme

- Kancheepuram Corporation Underground Sewerage Scheme
- Krishnagiri Municipality Underground Sewerage Scheme
- Dindigul Corporation Underground Sewerage Scheme
- Cuddalore Corporation Underground Sewerage Scheme
- Tiruvarur Municipality Underground Sewerage Scheme

7.3. Project Development Services

TNUIFSL is providing Project Development Services to Urban Local Bodies and other Government entities in preparation of concept plans, feasibility studies, planning studies and Detailed Project Reports through Project Development Grant Fund assisted under Tamil Nadu Urban Flagship Investment Program, Sustainable Municipal Infrastructure Financing in Tamil Nadu III Program, Tamil Nadu Climate

Resilient Urban Development Program and funds provided by Government of Tamil Nadu. The details are furnished below:-

- Detailed Feasibility Report and Bid Process Management for Restoration of Adyar River in Hybrid Annuity Mode.
- Detailed Project Report for Semmozhi Poonga in Coimbatore.
- Detailed Project Report for Redevelopment of Tholkappia Poonga in Chennai.
- Setting up of Realtime Flood Forecasting & Spatial Decision Support System in Chennai Basin.
- Detailed Feasibility Report and Transaction Advisory Services for Reclamation of land and setting up of Waste to Energy plants in Kodungaiyur Dumping Ground.
- Detailed Feasibility Report and Transaction Advisory Services for Integrated Waste

Processing Facilities in Perungudi Dumping Ground.

- Detailed Project Report for Eco-Park at Perungudi Dumping Ground, Chennai.
- Detailed Project Report for forming a Water Supply Ring Mains for Chennai Metropolitan Area (One for 174 Sq.km and another for 1015 Sq.km).
- Detailed Project Report for improvement of 174 Sq.km of existing Sewerage System in Core Area of Greater Chennai Corporation.
- Detailed Project Report for providing Underground Sewerage System to Kallakurichi Municipality.
- Detailed Project Report for Dedicated Water Supply Scheme for Tambaram City.
- Detailed Project Report for providing Underground Sewerage System for added areas of Tambaram Corporation.

- Detailed Project Report for providing Underground Sewerage System on cluster basis for Kundrathur Municipality with 20 Village Panchayats.
- Detailed Project Report for providing Underground Sewerage System on cluster basis for Nandhivaram Guduvancherry Municipality with 5 Village Panchayats.

7.4. Project Management Services

TNUIFSL is providing Project Management Services under ADB assisted Tamil Nadu Urban Flagship Investment Program through Consultants for Urban Local Bodies and Chennai Metropolitan Water Supply and Sewerage Board. The Details are furnished below:

- Construction Management and Supervision Services for implementing Under Ground Sewerage Scheme under Phases II & III for Tiruchirappalli City Municipal Corporation.

- Construction Management and Supervision Services for implementing Under Ground Sewerage Scheme under Phases II & III for Tirunelveli City Municipal Corporation.
- Construction Management and Supervision Services for implementing Under Ground Sewerage Scheme under Phases II & III for Vellore City Municipal Corporation.
- Construction Management and Supervision Services for implementing Under Ground Sewerage Scheme & Water Supply Improvement Scheme for Chennai Metropolitan Water Supply and Sewerage Board.
- Construction Management and Supervision Services for implementing Water supply Improvement Scheme under Phases II & III for Madurai City Municipal Corporation.

7.5 Water and Sanitation Pooled Fund (WSPF)

The Government of Tamil Nadu has created WSPF as a Trust to cater to civic infrastructure needs like water and sanitation in small and medium towns by raising resources from capital markets. This Trust has been created as a not-for-profit entity.

The objectives of WSPF are:

- To provide financial assistance for setting up infrastructure projects,
- To mobilize resources from the capital market under pooled finance structure,
- To facilitate the participation of private sector in water and used water sectors through direct investment and public private partnership,
- To enable urban local bodies to access debt finance from markets and

- To act as the Nodal Agency on behalf of Union and / or State Government for water, sanitation and / or any other infrastructure projects.

A sum of Rs.302.30 crore has been mobilized via taxable bonds and tax-free bonds by WSPF. Of the above, bonds of Rs.222.30 crore have been fully redeemed.

A sum of Rs.624.04 crore has been availed as loan from Housing and Urban Development Corporation Limited for on-lending to Urban Local Bodies for implementing Vellore Combined Water Supply Improvement Scheme, Aruppukottai Combined Water Supply Improvement Scheme, Tindivanam Underground Sewerage Scheme and Villupuram Underground Sewerage Scheme.

8. Chennai Rivers Restoration Trust

The Government of Tamil Nadu envisions providing clean, green and sustainable healthy environment for all in urban areas. To achieve this vision, the Chennai Rivers Restoration Trust (CRRT) was set up by the Government to enhance the ecological conditions of rivers, waterbodies, creek & estuarine eco-system.

Further, Chennai Rivers Restoration Trust is directed to carry out the primary functions of planning, coordinating and monitoring activities for the environmental restoration of rivers and water bodies viz., Cooum, Adyar, Kosasthalaiyar Rivers, Buckingham Canal along with other canals, drains, estuaries and creeks in Chennai Metropolitan Area.

In this direction, Chennai Rivers Restoration Trust has undertaken various initiatives to improve ecology of the city by engaging various line departments in its eco-restoration projects.

8.1 Completed Eco-restoration projects

8.1.1 Tholkappia Poonga - Eco-Restoration of Adyar Creek (58 acre)

The Government of Tamil Nadu had initiated a pioneering urban coastal wetland ecological restoration project for the Adyar Creek in an extent of 58 acre under Phase-I. The Government of Tamil Nadu had accorded administrative sanction of Rs.100 crore for the restoration of 358 acre of Adyar Creek area and also to restore the Adyar Estuary area located in the eastern side of Thiru.Vi.Ka. bridge.

The Adyar Creek and Estuary area were degraded due to infestation of *Prosopis juliflora*, indiscriminate disposal of sewage, solid waste and debris which subsequently resulted in shrinking of water spread area, reduced tidal interaction and decrease in biodiversity.

As Phase-I, the Eco-Restoration of Adyar Creek (58 acre) commenced in 2008 and the major restoration activities undertaken were to increase the water spread and tidal interaction area, plantation of native vegetation such as Tropical Dry Evergreen Forest species, mangrove species, etc., and landscaping for interactive environmental programmes. All restoration activities were completed in 2011 and continuous maintenance is being carried out.

Tholkappia Poonga is now functioning as a Centre for environmental education and research. Regular environmental education programmes are being conducted to impart knowledge on environment to the community primarily for students. So far, 1,12,826 students and 6,070 teachers from 1,446 schools have visited the eco-park and have been sensitized on the significance of urban wetlands restoration. Moreover, Corporate Social Responsibility (CSR)

funds have been received from Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL) for conducting education programmes for school students at the Tholkappia Poonga.

General Public are allowed to visit the Tholkappia Poonga from Monday to Saturday (except Public Holidays). Thus far, a total of 32,973 persons have visited the Poonga. General Public are also allowed for walking inside the Poonga and so far, 24,528 individuals have visited. Tholkappia Poonga is now a standing example of urban wetland eco-restoration initiative of the Government.

8.1.2. Eco-Restoration of Adyar Estuary (300 acre)

In continuation of the restoration of the Eco-Restoration of Adyar Creek in 58 acre as indicated above, the adjoining estuary with an extent of 300 acre was taken up by the Government with an estimated cost of Rs.24.93 crore.

The eco-restoration works were taken up with the components of bund stabilization, continuous removal of debris and plastics and removal of invasive species of *Prosopis juliflora*, which has now enhanced the tidal interaction and increased the water spread in the creek and estuary. Mangroves and Native riverine vegetation were planted to rejuvenate and enhance the biodiversity of riverine ecosystem.

In the restored Adyar creek and estuary (358 acre), a recent faunal survey reported the presence of around 424 species such as molluscans, crabs, dragonflies, butterflies, fishes, amphibians, reptiles, birds and mammals. This figure stood at 141 before the restoration activity.

8.2. Ongoing Eco-Restoration projects

Under the aegis of CRRT, the Integrated Cooum River Eco-Restoration Project (ICRERP) and Adyar River Restoration Project (ARRP) have been

implemented by the Government to enhance the ecological condition of city waterways.

Under these eco-restoration initiatives, various sub-projects are being executed by line departments concerned viz., desilting works, baby canal formation and construction of flood protection wall by Water Resources Department - Solid waste removal, fencing, beautification of bridges, boom deployment and plantation of native species and riverfront development by Greater Chennai Corporation, Directorate of Municipal Administration and Directorate of Rural Development and Panchayat Raj in their respective areas; Laying interceptor pipelines, installing modular sewage treatment plants and underground sewerage system by Chennai Metropolitan Water Supply and Sewerage Board; Resettlement and Rehabilitation of Project Affected Families by Tamil Nadu Urban Habitat Development Board.

8.2.1 Integrated Cooum River Eco-Restoration Project (ICRERP)

The Government of Tamil Nadu have accorded administrative sanction of Rs.735.08 crore for the implementation of ICRERP for the stretch from Paruthipattu check dam to the Cooum river mouth in the Bay of Bengal for a length of 32 km. The major restoration components are river channel improvement, interception and diversion of wastewater, solid waste removal, rehabilitation and resettlement, plantation and riverfront development.

Thus far, Rs.572.58 crore has been disbursed to implementing agencies based on the work progress. All restoration works are expected to be completed by October, 2024 (Except Resettlement & Rehabilitation of remaining Project Affected Families in Cooum River).

8.2.2. Adyar River Restoration Project (ARRP)

For the ecological restoration of Adyar River from its origin at Adhanur lake to the river mouth for a distance of 42 km, the Government have accorded administrative sanction at an estimated cost of Rs.744.60 crore. The major restoration works being implemented are sewage management, solid waste removal, river channel improvement, rehabilitation and resettlement, plantation and riverfront development.

The on-going eco-restoration activities are under various stages of implementation by concerned line departments and are expected to be completed by October, 2024 (Except Sustainable River Mouth Opening in Adyar River and Resettlement & Rehabilitation of remaining Project Affected Families in Adyar River). Thus far, Rs.409.21 crore has been disbursed to implementing agencies based on the work progress.

8.2.3 Restoration of Buckingham Canal and its associated Drains and Drains of Adyar and Cooum River

In order to ensure a comprehensive restoration of waterways in Chennai city, the Government have accorded administrative sanction at an estimated cost of Rs.1,281.88 crore for the restoration of Buckingham Canal and its associated drains and major drains of Adyar and Cooum River. Preliminary works such as boundary survey and boundary demarcation through Differential Global Positioning System (DGPS) survey and fixing of boundary stone are being taken up by respective implementing agencies i.e Water Resources Department and Greater Chennai Corporation.

8.2.4. Eco-Restoration of Ennore Creek

The Government have accorded administrative sanction at an estimated cost of Rs.45.99 crore to Chennai Rivers Restoration Trust for the Eco-Restoration of Ennore Creek. Now,

Habitat Restoration (Plantation) work is being implemented by Forest Department.

Forest Department has planned to complete the plantation works in 2 years (2023 to 2025) and initiated the clearing of *Prosopis juliflora* and plantation of mangroves & its associated species. So far, 1,000 number out of 1,60,000 number of mangroves and 50,000 number out of 2,00,000 number of mangrove associated species have been planted and *Prosopis juliflora* has been cleared in 160 *hec.* out of 200 *hec.* within Ennore Creek. CRRT is monitoring these works.

8.2.5. Re-development of Tholkappia Poonga

The Government have accorded administrative sanction for Re-development of Tholkappia Poonga at an estimated cost of Rs.42.45 crore and re-development works are being carried out by Chennai Rivers Restoration Trust and Greater Chennai Corporation.

Under Phase-I, Chennai Rivers Restoration Trust is entrusted with the implementation of Re-development of Tholkappia Poonga work components viz., Entrance Arch, Watch Tower, Visitor Centre, Viewing Decks, Pathways, Cafeteria, New Toilet block, Spillway bridge and Compound wall repair, etc. and works are under progress. The works are to be completed by September, 2024.

Under Phase-II, Construction of connecting Skywalk & Improvements to existing causeway as Box culvert in Santhome High Road is entrusted to Greater Chennai Corporation. CRZ Clearance obtained and works are being commenced.

8.2.6 Developing Semmozhi Poonga in Coimbatore

The Government have accorded Administrative Sanction for developing Semmozhi Poonga (Garden of Classical Tamil) in Coimbatore in 45 acre of the vacant land adjacent to the Coimbatore Central Prison as Phase-I at a cost of

Rs.167.25 crore and works are being carried out by Coimbatore City Municipal Corporation.

Foundation stone was laid by the Hon'ble Chief Minister of Tamil Nadu on 18.12.2023. The work components viz., Botanical Garden, Convention Centre and Pipeline work are under progress. The works are expected to be completed by May, 2025.

8.2.7 Restoration of Adyar River in PPP mode

The Government have announced that the State is committed to creating clean and green living spaces for urban residents in the State.

It is also committed to revitalizing the major waterways of Chennai including Adyar, Cooum, Buckingham canal and Kosasthalaiyar. In the initial phase, the Adyar River which flows from Guduvanchery in Chengalpet district through Tambaram, Tiruneermalai, Manapakkam, Alandur and Saidapet before reaching the Bay of Bengal will undergo restoration and beautification through the

Chennai Rivers Restoration Trust. This initiative, with an estimated cost of around Rs.1,500 crore, will be implemented through public-private partnership (PPP). This includes notable features such as the installation of 70 km long trunk sewerage pipeline on the banks of Adyar River as an alternative channel for sewerage discharge, establishment of 14 sewage treatment plants with cumulative capacity of 110 MLD and increasing green spaces by developing four parks and enhancing green cover by planting riverine species along the riverbanks. The project is scheduled to commence shortly and is expected to be completed within a duration of 30 months. The works from Saidapet to Thiru.Vi.ka. bridge will be prioritized and completed within a target period of 15 months.

9. Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited

Tamil Nadu Urban Finance and Infrastructure Development Corporation Ltd (TUFIDCO) was formed by Government of Tamil Nadu on 20th March, 1990 under the Companies Act, 1956 to provide financial and technical assistance and guidance to Urban Local Bodies for infrastructure schemes.

9.1. Mission Directorate / Nodal Agency

TUFIDCO serves as the Mission Directorate for the programs of the Union and State Governments. TUFIDCO is implementing the following programs and schemes as Mission Directorate / Nodal agency.

- Smart Cities Mission
- Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

- Atal Mission for Rejuvenation and Urban Transformation 2.0 (AMRUT 2.0)
- Kalaigiar Nagarpura MEMPATTU Thittam (KNMT)
- Singara Chennai 2.0
- Nagarpura Salaigal MEMPATTU Thittam (NSMT)

9.2 Fund Manager

TUFIDCO is also managing the following scheme fund:

- Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) – Revolving Fund
- State Urban Infrastructure Development Fund (SUIDF)

9.3 Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

The Atal Mission for Rejuvenation and Urban Transformation [AMRUT] was launched in 2015, by

the Union Government, which encompasses the following significant projects.

- Water supply
- Sewerage facilities and septage management
- Storm Water Drains
- Pedestrian, non-motorized and public transport facilities, parking spaces.
- Creating and upgrading green spaces, parks and recreation centers especially for children.

The Mission was phased out from 31st March 2024.

In the year 2015, the Union Government designated 28 Urban Local Bodies to carry out AMRUT projects in Tamil Nadu.

Table 9.1

1.	Greater Chennai Corporation	15.	Avadi Corporation
2.	Coimbatore Corporation	16.	Pallavapuram Municipality
3.	Madurai Corporation	17.	Tambaram Corporation
4.	Tiruchirappalli Corporation	18.	Cuddalore Corporation
5.	Salem Corporation	19.	Kumbakonam Corporation
6.	Tirunelveli Corporation	20.	Kancheepuram Corporation
7.	Tiruppur Corporation	21.	Tiruvannamalai Municipality

8.	Thoothukudi Corporation	22.	Pudukottai Municipality
9.	Thanjavur Corporation	23.	Karaikudi Municipality
10.	Erode Corporation	24.	Nagapattinam Municipality
11.	Vellore Corporation	25.	Ambur Municipality
12.	Dindigul Corporation	26.	Rajapalayam Municipality
13.	Nagercoil Corporation	27.	Rameswaram Municipality and
14.	Hosur Corporation	28.	Velankanni Town Panchayat

Funding Pattern

The following are the funding pattern of the Union and State Governments, as well as the contributions of Urban Local Bodies for the implementation of AMRUT projects.

Table 9.2

Sl. No.	Population	Union Govt. Share – Grant	State Govt. Share – Grant	ULB share
1	Cities with more than 10 lakh population	33.33%	20%	46.67%
2	Cities with below 10 lakh population	50%	20%	30%
3	Green space (all AMRUT cities)	50%	20%	30%

9.3.1 Details of State Annual Action Plan (I,II,III)-AMRUT projects

As per State Annual Action Plans (SAAP) (I, II, III), AMRUT projects are implemented in AMRUT cities and towns. Under AMRUT, 445 projects at a cost of Rs.11,441.42 crore have been taken up, as given in the table below.

Table 9.3

(Rs. in crore)

SAAP	Total No. of projects sanctioned	Approved cost	GoI Share	GoTN Share	ULB share
SAAP I	111	3,245.51	1,355.29	649.10	1,241.12
SAAP II	171	3,700.45	1,531.47	740.09	1,428.89
SAAP III	163	4,495.46	1,854.39	899.08	1,741.99
Total	445	11,441.42	4,741.15	2,288.27	4,412.00

Out of the 445 projects sanctioned, 431 projects at a cost of Rs.6,522.00 crore have been completed and the balance 14 projects at a cost of Rs.4,919.42 crore are in various stages of implementation, as shown in the table below.

Table 9.4**(Rs in crore)**

Sl. No.	Name of the Project	Project Cost
1	Implementation of 24x7 water supply system in the core areas of Coimbatore Corporation	506.04
2	Dedicated water supply scheme to Madurai Corporation with source at Mullai Periyar River at Lower Camp.	1,020.00
3	Tirunelveli Corporation underground sewerage scheme – Phase – II	289.01
4	Tirunelveli Corporation underground sewerage scheme – Phase – III	381.86
5	Providing Comprehensive underground sewerage scheme to Manali, Chinnasekkadu, Karambakkam and Manapakkam areas of Chennai City	223.00
6	Rameswaram Municipality underground sewerage scheme	40.34
7	Tiruchirappalli Corporation underground sewerage scheme - Phase II	344.00
8	Tiruchirappalli Corporation underground sewerage scheme - Phase III	264.12
9	Vellore Corporation underground sewerage scheme – Phase - II	343.69
10	Vellore Corporation underground sewerage scheme – Phase – III	248.26
11	CMWSSB- Valasaravakkam water supply scheme	67.74
12	Tiruppur Corporation underground sewerage scheme	525.92
13	Coimbatore Corporation underground sewerage scheme	442.00
14	Nagercoil Corporation – water supply scheme	223.44

9.4 Atal Mission for Rejuvenation and Urban Transformation 2.0 (AMRUT 2.0)

The "Atal Mission for Rejuvenation and Urban Transformation 2.0 (AMRUT 2.0)" was launched by the Union Government on 01.10.2021. In Tamil Nadu, 21 Municipal Corporations, 138 Municipalities and 490 Town Panchayats are covered under AMRUT 2.0.

The primary goal of AMRUT 2.0 is to provide universal access to piped water supply throughout cities/towns and to enhance sanitation in AMRUT towns. In addition to rejuvenation of water bodies (urban wetlands), creation of green spaces is the most significant task of this Mission.

9.4.1. Funding for projects:

The fund sharing pattern among the Union Government and State and the various categories of urban local bodies is as follows:

Table 9.5

SI No	Population	Union Govt. Share – Grant	State Govt. Share – Grant	ULB's share
1	Cities with more than 10 lakh population	25%	30%	45%
2	Cities with 1 lakh to 10 lakh population	33%	30%	47%
3	Towns having population less than 1 lakh	50%	30%	20%

Under the Mission, Tamil Nadu will receive a total of Rs.4,942 crore from Union Government. Under the AMRUT 2.0, 1,270 projects totalling Rs 14,039.49 crore have been sanctioned under three tranches as shown in the table below.

Table 9.6

S. No	Sectors	Nos.	Approved project cost (Rs.in crore)
1	Water supply	201	7,376.79
2	Underground sewerage scheme	30	6,225.28
3	Water bodies	474	274.36
4	Green space	565	163.06
	Total	1,270	14,039.49

Out of 1,270 projects, 469 projects at a cost of Rs.203.41 crore have been completed, 615 projects at a cost of Rs.9,762.91 crore are under execution level and the remaining projects are under various stages of implementation.

9.5 Smart Cities Mission

In 2015, the Union Government launched the Smart Cities Mission programme. Eleven cities in Tamil Nadu viz., Chennai, Coimbatore, Madurai, Thanjavur, Salem, Vellore, Tiruppur, Thoothukudi, Tirunelveli, Tiruchirappalli, and Erode have been selected under this mission. Each city receives contributions of Rs. 500 crore from the Union Government and Rs. 500 crore from the State Government, for a total of Rs. 1,000 crore per city.

The State Level High Powered Steering Committee has approved 731 projects for the 11 Smart Cities in Tamil Nadu. Out of 731 projects sanctioned at a cost of Rs.10,711.04 crore, 693 projects worth of Rs.9,052.53 crore have been completed, while 38 projects worth

Rs.1,658.51 crore are under implementation. The details are provided below.

Table 9.7

(Rs. in crore)

Sl. No.	Name of the Smart City	No.of Projects	Project Cost
1	Chennai	49	1052.56
2	Coimbatore	54	956.52
3	Madurai	16	983.90
4	Thanjavur	102	963.82
5	Salem	103	965.00
6	Vellore	52	963.40
7	Tiruppur	28	965.00
8	Tirunelveli	81	965.00
9	Thoothukkudi	75	965.67
10	Tiruchirappalli	83	965.17
11	Erode	88	965.00
	Total	731	10711.04

The Government of India has informed that this mission will be phased out on 30.06.2024.

9.6 Kalaigiar Nagarpura Mempattu Thittam (KNMT)

The Tamil Nadu Government launched Kalaigiar Nagarpura Mempattu Thittam (KNMT) in 2021 to overcome the infrastructure development gap in urban local bodies (excluding Greater Chennai Corporation). Commencing from 2021, the Government is providing an annual grant of Rs. 1,000 crore. The scheme aims to provide 100% of households with access to water supply tap connections, sewage lines, internal roads, streetlights, sanitation, modernization of crematoria and other community infrastructure development. The program also aims to overcome infrastructure gaps in underdeveloped areas, slums, and areas recently added to Municipalities and Town Panchayats. In order to assist students and job seekers, the program always emphasis on creation of

computerized modern libraries and knowledge centres.

Furthermore, the Kalaingar Nagarpura Mempattu Thittam focusses on urban infrastructure projects such as the development of bus stands, parks and play fields, construction of shandies and markets, rejuvenation of water bodies, procurement of e-vehicles for solid waste disposal and construction of public toilets, among others.

The Government has released Rs.2,400 crore under this programme till March 2023.

Projects approved for Directorate of Municipal Administration

A total of 1,532 projects under various sectors at a cost of Rs.1,527 crore have been approved under KNMT for the urban local bodies under the purview of Directorate of Municipal Administration during the Financial Years 2021–2022 to 2023-24 as abstracted below:

Table 9.8**(Rs.in crore)**

Sl. No.	Name of the sector	No. of works	Approved Project Cost (2021-24)
1	Water Supply	25	222.13
2	Parks	331	104.61
3	Crematorium	83	107.59
4	Knowledge Centre	70	131.55
5	Rejuvenation of Ponds /Water bodies	254	152.90
6	Roads	643	461.38
7	Bus stands	37	88.41
8	Daily Market	61	199.92
9	Weekly Market	20	40.03
10	Fish Markets	6	6.09
11	Commercial Complex	1	11.34
12	Parking	1	1.05
	Total	1,532	1,527

Out of the 1,532 projects approved, 995 have been completed at a cost of Rs.691.95 crore, while the other works are in various stages of implementation.

Projects approved for Town Panchayats

During the Financial Years 2021-22 to 2023-24, a total of 2,154 projects at a total cost of Rs.1,445.24 crore have been sanctioned to the Town Panchayats (KNMT share of Rs.1,445.24 crore) as given below:

Table 9.9**(Rs.in crore)**

Sl. No.	Name of the Project	No. of works	Approved project cost (2021-24)
1	Knowledge Centre	13	20.44
2	Crematorium	77	113.42
3	Bus Stands	28	54.6
4	Weekly market / Shandy	37	75.53
5	Daily Market	1	2.02
6	Fish Market	1	0.29
7	Roads	1127	584.76
8	Ponds / Water Bodies	250	73.04
9	Parks	360	55.77
10	Water Supply	148	303.25
11	Community hall	2	2.45
12	Metal Beam Crash Barrier	33	5.06
13	BOV (Battery Operated Vehicles)	3	65.17
14	Storm water drain & Culvert	74	89.44
	Total	2,154	1,445.24

Of the 2,154 projects approved, 1334 have been completed at a cost of Rs. 635.89 crore, 674 are being executed at a cost of Rs. 771.85 crore, and the rest of other works are in various phases of implementation.

9.7 Singara Chennai 2.0

With the goal of making Chennai City a more livable city, the Tamil Nadu Government have launched "Singara Chennai 2.0" programme in the year 2021. The Greater Chennai Corporation and Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) are implementing the projects approved under this new program to achieve the objectives of the scheme. Commencing from the financial year 2021-22, the Government provides Rs.500 crore annually.

An abstract of the projects approved in the FY 2021–22 to 2023–24 is provided below.

Table 9.10

(Rs. in crore)

Sl. No.	Name of the Sector	No.of works	Singara Chennai 2.0 Share
1	Roads – BRR	209	89.66
2	Roads – IRR	414	29.69
3	Animal Birth Control (ABC) Centres	5	20.53
4	Parks	138	63.31
5	Sponge Parks	57	7.67
6	Play fields	105	43.12

7	Beautification of Bridges	11	10.02
8	Storm water drain	22	566.68
9	Crematorium	53	52.56
10	Access pathway - Beach	2	2.13
11	School Furniture	1	4.15
12	School Buildings	75	168.40
13	Beautification of Victoria Hall	1	32.62
14	Rejuvenation of Water Bodies	37	25.63
15	Fish Market	1	1.35
16	Slaughter House	1	1.43
17	Water fountain	26	1.29
18	Dynamic Lighting	1	1.81
19	Sign Board	1	8.43
20	Community Hall	1	13.47
21	CMWSSB - Water Supply	6	174.91
22	CMWSSB - UGSS	11	173.64
	Total	1,178	1,492.50

Under this programme, 1,178 projects totalling to Rs. 1,492.50 crore have been approved for funding between FY 2021–2022 and FY 2023–2024. Of the 1,178 projects approved, 898 have been completed

at a cost of Rs.660.89 crore and 280 are being executed.

9.8 Nagarpura Salaigal Mempattu Thittam

Proper road infrastructure is critical for increasing economic activity in urban areas and improving people's living conditions. The execution of subsurface sewage and water supply projects has badly damaged roads in many Corporations and Municipalities. There are also earthen roads in a number of local bodies, which need to be upgraded to all-weather roads.

The Hon'ble Chief Minister declared on the floor of the Legislative Assembly under rule 110 that the Government will grant Rs.2,200 crore over the next four years (from FY 2022-23) to improve the damaged roads in the Urban Local Bodies.

Based on this, orders were issued to sanction Rs.2,200 crore for the implementation of the Nagarpura Salaigal Mempattu Thittam (NSMT) by the Government vide G.O.(D) No.423 Municipal

Administration and Water Supply Department, dated 19.11.2022 and guidelines for sanction of funds to urban local bodies were issued in G.O No.19, Municipal Administration and Water Supply Department dated 13.2.2023. During the financial year 2022-23, 8501 damaged roads were taken up at a cost of Rs. 655 crore. Out of these, 6,247 road works have been completed and 2,254 works are under execution. In the year 2023-24, 11,265 road works were taken up at a cost of Rs.871.88 crore, with 5,982 road works completed and 5303 road works are under execution.

9.9 Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) - Revolving Fund

TUFIDCO created a Revolving Fund under Urban Infrastructure Development Scheme for Small and Medium Towns to provide interest-free loans for qualified projects. 99 Urban Local Bodies have been approved interest-free loans to complete internal plumbing for urban water supply and underground sewage system projects, as shown in the table below.

Table 9.11

Sl. No.	Sector	No. of Municipalities / Corporations	Amount sanctioned from UIDSSMT Revolving fund (Rs. in crore)
1.	Water Supply	73	169.58
2.	UGSS	26	193.22
	Total	99	362.80

The projects are currently in various phases of execution.

9.10 State Urban Infrastructure Development Fund (SUIDF)

TUFIDCO has created a revolving fund to finance infrastructure projects sustainably, in accordance with the requirements of the erstwhile Government of India sponsored Mega City Programme. This fund was later renamed the Metropolitan Infrastructure Development Fund (MIDF). A total of Rs. 2,391.00 crore has been created thus far under the MIDF.

The "Metropolitan Infrastructure Development Fund" (MIDF) has been renamed as "State Urban Infrastructure Development Fund" (SUIDF) by administrative orders issued by the government. This has facilitated the Fund to provide financing in the form of soft loans to all the Urban Local Bodies to meet their infrastructure requirements.

Under State Urban Infrastructure Development Fund scheme, the following projects have been sanctioned.

Table 9.12

(Rs in crore)

Sl. No	Name of the Project	Approved Project Cost
1	Tiruchirappalli Bus Terminal	159.98
2	CMWSSB - Madipakkam UGSS	115.6
3	Conversion of Street lights to Energy efficient LED lights in 8 Municipal Corporations and 77 Municipalities	342.85
4	Providing New energy efficient LED lights in 11 Municipalities	8.00
5	Conversion of Street lights to Energy efficient LED lights in Town Panchayats (439 Town Panchayats)	155.56

6	AMRUT 2.0 water supply projects ULB share to 93 Town Panchayats	153.17
7	AMRUT 2.0 water supply projects ULB share to 18 Corporations/Municipalities	56.39
8	Chennai Kosasthalaiyar River - Integrated storm water drain	280
9	Provision of internal plumbing for UGSS and water supply HSCs in 8 ULBs for optimum utilization of the UGSS and water supply scheme	62.95
10	Conversion of Street lights to Energy efficient LED lights / Providing New LED energy efficient lights in 6 Corporations and 10 Municipalities	85.22
11	Water supply improvement scheme to extended areas of Coimbatore City Municipal Corporation – Pillur-III	410.61
12	Providing ULB Share to 17 Town Panchayats for water supply projects sanctioned under AMRUT 2.0	153.67
13	Provision made for final instalment of funds for AMRUT 2.0 sanctioned projects	216.00
14	Construction of New Bus Stand in Erode City Municipal Corporation	15.00
	Total	2,215.00

9.11 TUFIDCO Infrastructure Funding Scheme (TIFS)

The TUFIDCO Infrastructure Funding Scheme (TIFS) has been created to provide funding to urban local bodies, parastatal organizations, and agencies for the purpose of project execution. Shares, surpluses, and bank loans support TIFS loans. TIFS loan repayment terms are ten years.

All the projects funded under TIFS are in various stages of implementation.

10. New Tirupur Area Development Corporation Limited

Tirupur Exporters' Association (TEA) had represented from time to time with the Government of Tamil Nadu (GoTN) to provide the required infrastructure facility particularly to ensure regulated water supply which is an essential requirement for the industries. In order to address the long-awaited demand, the Government of Tamil Nadu mandated the erstwhile Tamil Nadu Corporation for Infrastructure Development (TACID) to formulate a Tirupur Area Development Program (TADP). Accordingly, TACID had formulated a TADP, which envisaged water supply to domestic and non-domestic users, sewage treatment etc. To implement this, a memorandum of understanding was entered between TACID, Tirupur Exporters Association (TEA) and IL&FS on 25.08.1994 agreeing to equal equity investment and various other general terms and conditions.

Finally, New Tirupur Area Development Corporation Limited (NTADCL) was promoted in 1995 by four members of Tirupur Exporters Association, two from IL&FS and one representing the Government of Tamil Nadu.

A Combined water supply project to implement a 185 MLD water supply (expandable upto 250 MLD) and 15 MLD sewage treatment plant (STP) (expandable upto 30 MLD) at a total project cost of Rs.1,023 crore was approved by GoTN. To implement this project, a Concession Agreement was signed on 11.02.2000 between the Government of Tamil Nadu, Tirupur municipality (now Municipal Corporation), and New Tirupur Area Development Corporation Limited. The approved project cost of Rs.1,023 crore was funded as Rs.613.80 crore senior debt by a consortium of 19 banks and financial institutions led by M/s IDBI, Rs.86.50 crore was funded by the promoters as a

subordinate loan and Rs.322.70 crore was funded by equity.

NTADCL's equity share capital of Rs.10 crore was initially funded by the Government of India (GoI) in 1997-98 through TACID. Rs.105 crore was funded jointly by GoTN (Rs.55 crore) and IL&FS (Rs.50 crore) through a special purpose company (SPC) called Tamil Nadu Water Investment Company Limited (TWIC) which was promoted jointly by IL&FS and GoTN in 54:46 ratio. IL&FS had brought a PE investor, M/s. AIDQUA Holdings Mauritius (Inc) for a 27.89% shareholding contributing Rs.90 crore investment. A Shareholders Agreement (SHA) dated 12.04.2001 was adopted by the NTADCL Board and signed by the proposed investors with special rights to AIDQUA. Subsequently, the terms of SHA was incorporated in the articles of association by replacing the original articles of association of the company. Apart from these investments,

company obtained equity participation from EPC consortium M/s Mahindra group – Rs.45 crore, public sector insurance companies – Rs.45 crore and Rs.32.70 crore from IL&FS directly.

The project construction commenced in the year 2002 and the water supply commenced in October 2006. The project has been supplying 38.957 MLD of drinking water to Tirupur Corporation and 18.26 MLD of drinking water to 8 village panchayats and about 600 wayside rural habitations in 5 panchayat unions. The project also caters to the water supply requirements of a number of hosiery and related dyeing and processing industries in and around Tirupur. A domestic sewerage system in major parts of Tirupur municipal corporation has also been completed and functioning with 15 MLD capacity, currently collecting up to 8 MLD of sewage from 15,246 sewer connections for treatment. Low-cost

sanitation facilities through 31 sanitary complexes have also been provided for the urban poor.

The Water Supply project envisaged on a cross-subsidization model where the commercial viability of the project was linked to the revenue generated out of the industrial water supply. Even though, industrial water supplies started slowly in the initial years marching towards improvement but the estimated demand of 115 MLD could not be achieved beyond 50 MLD level. The lower industrial water supply and the revenue coupled with a higher cost of capital, the cost overrun during project construction have resulted in the booking of heavy revenue losses in the initial period itself.

Over and above the heavy losses suffered, the Zero Liquid Discharge (ZLD) order passed by the Hon'ble Madras High Court dated 30.01.2011 had resulted in the closure of many dyeing and bleaching industries that severely impacted the company's water supply business and reduced the industrial

water supply to 9 MLD thus aggravated further financial crisis. The company wasn't able to service its debt, the entire net worth was almost wiped out.

The poor financial situation of NTADCL was addressed in 2011-12 through a Corporate Debt Restructuring (CDR) package. The lenders rescheduled the debt, reduced the interest rate from 11% to 9.5%, and converted 15% of the debt into equity under the CDR. While approving the CDR package, Government of Tamil Nadu has substantially infused to the tune of Rs.150 crore and enhanced price for additional water off-take up to 100 MLD to Tirupur municipal corporation and wayside villages vide G.O.(Ms) No.25, Municipal Administration and Water Supply Department dated 16.03.2012. Currently, 50 MLD of water is being supplied additionally to Tirupur Municipal Corporation and wayside villages at an enhanced rate of Rs.29.28/KL. The total value of GoTN contribution towards

additional water offtake amounts to Rs.1,042 crore.

The said CDR has been approved by the National Company Law Tribunal and subsequently upheld by the Hon'ble High Court of Madras. However, PE investor, M/s.AIDQUA had gone for an appeal against CDR package and the case is pending before Hon'ble Supreme Court.

With the additional infusion of funds and enhanced price support from GoTN, the financial performance of the company rapidly improved and the company started making profits from the Financial Year 2015-16 onwards. The company has already served all its financial debt with all lenders to the tune of Rs.385.21 crore towards principal repayment of debts together with an interest of Rs.1,028.87 crore ahead of schedule except IL&FS, wherein there is a dispute with regard to the short-disbursement of USAID loan amounting to Rs.41.23 crore.

By repaying the loan ahead of schedule, the management is also taking a demand assessment study for capacity expansion from 185 MLD to 250 MLD. The company has gained good experience and wants to expand the cross-subsidized model of water supply to domestic and Non-domestic in future.

Performance of FY 2022-23 (Unaudited)

The turnover of the company for the year ended 2022-23 has increased to Rs.245.37 crore as against Rs.198.09 crore in 2021-22 with an increased profit for the year 2022-23 of Rs.100.91 crore and cumulative loss of Rs.138.98 crore.

Corporate Social Responsibility:

NTADCL as a part of Corporate Social Responsibility has provided a contribution of Rs.1.65 crore to Tamil Nadu State Disaster Management Authority, Chennai for the financial year 2023-24 for supporting flood relief measures.

11. Tamil Nadu Water Investment Company Limited

Tamil Nadu Water Investment Company Limited (TWIC) was established in the year 2000, jointly by the Government of Tamil Nadu and Infrastructure Leasing and Financial Services Ltd., (IL&FS) as a special purpose vehicle under Companies Act, 1956. TWIC is an investment company and promoted New Tirupur Area Development Corporation Ltd., (NTADCL) which has implemented first public private partnership in water sector namely New Tiruppur Area Water Project with a capacity of 185 MLD and a cost of Rs.1,023 crore.

TWIC has been actively involved in developing and implementing projects across several sectors and has expertise in water and sewerage systems, recycling, desalination, river restoration, industrial effluent management and developing projects from concepts to

implementation through a model aimed at reducing life cycle costs with a sustainable framework.

TWIC provides advisory, project management consultancy (PMC) and operation and maintenance (O&M) services in the following fields:

1. Urban Water and sewerage systems with focus on water reuse.
2. Desalination.
3. Industrial effluent management and recycling including Zero Liquid Discharge (ZLD).
4. Lake and river pollution abatement.
5. Capacity building and training.

TWIC has expertise in preparation of Detailed Project Reports (DPR), bid management, project management and O&M of various facilities in water and sewerage sector.

11.1 Noteworthy projects completed

TWIC has been actively engaged in implementation/ execution of various projects across Tamil Nadu including the following :-

11.1.1 Urban Water, Used water & Reuse

TWIC works with various Municipal Corporations, Municipalities and Town Panchayats assisting them in establishing water supply network, Underground Sewerage Schemes (UGSS), Sewage Treatment Plants (STP), Tertiary Treatment & Reverse Osmosis (TTRO) etc.

The notable projects implemented by TWIC are as follows;

1. Advisory for comprehensive water supply schemes and district metered area (DMA): All Urban Local Bodies (ULBs) in Tamil Nadu under AMRUT and Smart Cities Mission.
2. Advisory for underground sewerage schemes (UGSS) and sewage treatment plant (STP): Thoothukudi and Visakhapatnam

Corporations, Pammal and Anakaputhur Municipalities.

3. Advisory for demand study and preparation of water reuse grid and Water Reuse Policy for the state of Tamil Nadu .
4. Project Management Agency (PMA) for water supply and UGSS under AMRUT / Smart Cities Mission: Thanjavur, Kumbakonam, Thoothukudi.
5. PMA for tertiary treated reverse osmosis (TTRO) project for used water reuse: 45 MLD capacity plant at Koyembedu & Kodungaiyur, Chennai.
6. PMC services for implementation of 28 MLD STP for Thoothukudi Corporation under Smart Cities Mission.
7. DPR for 5 MLD Effluent Treatment Plant (ETP) for Thermal Power Plant, TANGEDCO at Thoothukudi.

8. Consultancy assignment for preparation of DPR and Tender document for 20 MLD capacity Tertiary Treated Reverse Osmosis (TTRO) Plant in 2 phases (10 MLD each) for treating Kelavarapalli Dam water and to supplying it to SIPCOT, Hosur
9. Consultancy assignment for preparation of DPR for improvement of existing water supply distribution system and to provide water supply to the uncovered areas of Avadi Municipal Corporation
10. Consultancy assignment for preparation of DPR including design of Distribution system to 24x7 Water Supply system in Pilot water zones in Thoothukudi, Tirunelveli, Vellore and Dindigul Corporations
11. Consultancy assignment for preparation of DPR for underground sewerage system (UGSS) for the phase IV left out areas in Tiruchirappalli Municipal Corporation

12. Consultancy services for preparation of DPR for Establishment of 100 MLD sewage treatment plant at Tiruchirappalli Municipal Corporation
13. Consultancy assignment for preparation of DPR and Condition assessment for 400 KLD STP at TIDEL Park, Coimbatore
14. Feasibility study for identifying suitable systems for reuse of recycled water from the proposed grids / source to cater to the recycled water demand for proposed SIPCOT Industrial Park at Tindivanam, Manaparai, Panapakkam, Ranipet, Illupaikudi, Allikulam, E.Kumaralingapuram & Vembur
15. The R&D projects through grant from Indo-German Science and Technology Centre (IGSTC) "Smart and reliable water and used water infrastructure systems for the future cities of India and Germany (SMART and WISE).

11.1.2. Common Effluent Treatment Plants with Zero Liquid Discharge (ZLD)

1. PMA services for the development of 9 Textile CETPs with ZLD in Tiruppur with the capacity ranging from 3 MLD to 11 MLD at a cost of Rs. 540 crore.
2. PMA services for the upgradation of ZLD system in 8 CETPs through interest free loan from GoTN. On completion of the projects, TWIC is carried out O&M of these CETPs for about 15 years.
3. PMA services for five tannery CETPs, two at Ambur and one each at Vaniyambadi, Pallavaram and Melvisharam with a combined capacity of 11.55 MLD at cost of Rs. 143 Crore.
4. TWIC currently is an independent O&M operator for 3 Textile CETPs & 1 ETP in Tiruppur.

5. Advisory services for establishment of Water recovery system from 11 MLD used water at TNPL factory, Kagithapuram, Karur District, including Techno-commercial feasibility cum pilot demonstration for a ZLD system with a capacity of 1,20,000 Litre per day.
6. Advisory for preparation and submission of detailed project report (DPR) for implementation of 42 MLD ZLD CETP at Panipat.
7. Project Management Consultancy for Establishment of CETP at Textile Park Indrakaran, Sangareddy District, Telangana
8. Advisory for the consultancy services for development of "Framework for reuse, recycle and zero liquid discharge (ZLD) of wastewater in India" for CPCB with Adelphi consult GmbH, Germany, under the Indo German Development Cooperation

9. Consultancy services for feasibility study for establishment of combined effluent treatment plant in Konabari textile cluster in Bangladesh.

11.1.3. Sea Water Desalination

TWIC has extended Advisory Services for 17 sea water desalination plants with the capacity ranging from 0.5 MLD to 110 MLD (9 in Gujarat, 7 in Tamil Nadu and 1 in Odisha).

1. DPR and PMC for 100 MLD capacity plant at GIDC, Dahej, Gujarat.
2. DPR and PMC for 60 MLD capacity plant proposed by TWAD Board at Marakkanam in Villupuram district
3. DPR and PMC for 60 MLD capacity plant proposed by TWAD Board at Kuthiraimozhi in Ramanathapuram district
4. DPR and PMC for 20 MLD capacity plant proposed by SIPCOT at Cuddalore

5. Vetting of O&M Cost and proof checking of bid document for O&M of 110 MLD Desalination plant at Nemmeli
6. Access, verification and comparison of quality and quantity, chemical consumption, performance and costing & claims checking report work for operation and maintenance of the 110MLD SWRO (Sea Water Reverse Osmosis) desalination plant at Nemmeli
7. DPR for 10 MLD Capacity plant at Paradeep Port Trust, Odisha.

11.1.4. Restoration and Rejuvenation of Water Bodies

1. DPR for 60 water bodies in Greater Chennai Corporation area.
2. Feasibility Report and proof checking for Ooty lake.
3. PMC for Zamin Pallavaram Periya Eri and Keelkattalai Eri in Tambaram Corporation (formerly Pallavaram Municipality).

4. DPR and PMA for Mudasarlova lake catchment in Greater Visakhapatnam municipal corporation.
5. Advisory Services for preparation of DPRs for pollution abatement works for the selected river stretches in 9 municipalities and 18 town panchayats in Tamil Nadu (DPR Stage).
6. Detailed Feasibility Reports for Restoration of Cooum & Adyar Rivers & Buckingham Canal for Chennai Rivers Restoration Trust (CRRT).

11.2 Ongoing Schemes

In addition to the above works/ projects which have been successfully executed, TWIC is now engaged in implementation of following works:

- i. Ministry of Textile, Government of India has sanctioned 50% grant for PMC for CETP at NextGen Textile Park at Pali,

Rajasthan under Integrated Processing Development Scheme (IPDS)

- ii. PMC for the implementation of 79 water supply projects in various town panchayats under the Directorate of Town Panchayats (DTP) through AMRUT 2.0 Scheme
- iii. DPR for the work of construction of STP/ FSTP in 28 Municipalities under SBM 2.0

11.3 Major ongoing projects

1. PMC for 20 MLD CETP for Jajmau Tannery Cluster, Kanpur- funded by National Mission for Clean Ganga, Government of India.
2. Sea Water Desalination Projects:
 - i. PMC services to CMWSSB for 150 MLD capacity plant at Nemmeli.
 - ii. DPR and Transaction advisory (TA) for 60 MLD capacity plant proposed by SIPCOT, at Mullakadu in Thoothukudi district

under Hybrid Annuity Model (HAM)
(Tendering stage)

3. Consultancy for preparation of DPR and Transaction advisory (TA) for providing underground sewerage scheme (UGSS) for left out areas in Avadi Municipal Corporation (Tendering Stage).
4. Consultancy services for preparation of bid document, bid management and PMC services for upgradation of existing 400 KLD STP at TIDEL Park, Coimbatore.
5. PMC services for TTRO plant in two phases (10 MLD each) & Advisory for field survey at SIPCOT Phase III & IV area for additional conveyance pipeline and bid Process Management for TTRO Plant at Hosur
6. Conducting Technical audit, verification and confirmation of the condition assessment of the plant and witness Ultra Filtration (UF) Membrane Air integrity test & Reverse Osmosis

- (RO) membrane probe test and to assess the overall efficiency of TTRO plant at Kodungaiyur
7. Consultancy for preparation of DPR, bid documents and bid process Management for 3 MLD TTRO Plant along with the conveyance system for manufacturing project site of M/s TATA Electronics Pvt. Ltd at Hosur.
 8. PMC for Installation Common Caustic Recovery Plant at Bithuja, Rajasthan.
 9. Obtaining Environmental Clearance (EC) and Consent to Establish (CTE) from Odisha State Pollution Control Board (OSPCB), preparation of DPR and Transaction Advisory (TA), Financial closure, selection of Developer and Design, Interpretation support and Advisory for components like ZLD CETPs, Environmental planning (including solid/ liquid waste management) in Industrial clusters / Parks for Odisha Industrial Infrastructure Development Corporation (IDCO)

10. Consultancy for preparation of Detailed Project Report (DPR) and Estimates for Establishment of 2000 KLD Common Effluent Treatment Plant (CETP) for SIPCOT Perundurai, Erode
11. Consultancy for preparation of Detailed Project Report (DPR) and Transaction Advisory (TA) for Common Effluent Treatment Plant with Zero Liquid Discharge (ZLD) in Madras Export Processing Zone (MEPZ SEZ)
12. The R&D projects through a grant from Indo-German Science and Technology Centre (IGSTC) “Effect based monitoring demonstrates efficiency of electrically driven water treatment processes to remove salts and micropollutants from process water”.

11.4 Awards received

1. Global Water Intelligence (GWI) Award 2014 - The Industrial Water Project of the year.

2. Water Reuse Industrial Project for the Year 2014 by the Water Reuse Association, USA.
3. The 2030 WRG Corporate Water Stewardship Award for the year 2015 by GWI, UK.

11.5 Assignments for Government of India

TWIC is partnering with Government of India in various projects and schemes, such as

1. TWIC's technology for ZLD has been recognized by the Ministry of Textiles and has been evaluated and accepted by the Department of Science and Technology (DST).
2. TWIC is extending PMC services to the Ministry of Textiles for Integrated Processing Development Scheme for implementation of Textile based CETPs in India.
3. TWIC is a Consultant to National Mission for Clean Ganga (NMCG) for preparation of DPR

for setting up of CETPs for various industrial clusters in the State of Uttar Pradesh. TWIC is also a Project Engineer for setting up of the Jajmau Tannery CETP in Kanpur.

4. TWIC is joint venture partner of National Institute of Ocean Technology for providing consultancy services for implementation of sea water reverse osmosis desalination plants for ports.

11.6 Financials of the Company

The turnover of the Tamil Nadu Water Investment Company for the year 2022-2023 was Rs.25.71 crore as against Rs.27.60 crore in 2021-22.

12. Sustainable Development Goals

The Municipal Administration and Water Supply Department is giving high priority to achieve Sustainable Development Goals (SDGs) before 2030. Several schemes and programmes have been designed and are under implementation, which have direct bearing on the SDGs. The efforts being taken by the department, are summarized below:

(a) Good Health and Well Being (Goal 3) - Greater Chennai Corporation provides comprehensive health care services such as antenatal and postnatal care, child health care, basic diagnostics, and treatment for communicable and non-communicable diseases under one roof. As part of the National Urban Health Mission (NUHM) and World Bank-funded Chennai City Partnership Programme, the physical and human infrastructure in the health sector will be revamped and upgraded.

(b) Quality Education (Goal 4) - Classrooms are being transformed into Smart Classrooms by equipping them with electricity, network connectivity, a desktop computer, smartboard, tablets and furniture.

(c) Gender Equality (Goal 5) - The Greater Chennai Corporation (GCC) is implementing a slew of projects under the Nirbhaya scheme for the benefit of women, such as access to modern toilets, livelihoods, safety etc. A gender lab has been already established in GCC to look into gender issues and come up with solutions.

(d) Clean Water and Sanitation (Goal 6) – Steps have been taken to restore the water bodies, to raise the water table in the vicinity of water bodies and to beautify the surrounding area covered under Greater Chennai Corporation (GCC). Rainwater harvesting structures are erected in all newly laid stormwater drains. Many individual and community wells have been converted into

rainwater harvesting structures. Greater Chennai Corporation (GCC) is currently undertaking a modernisation drive for all the existing public and community toilets.

(e) Affordable and Clean Energy (Goal 7) - All existing streetlights in Chennai have been converted into energy-efficient LED lights. The Greater Chennai Corporation (GCC) is also encouraging a shift to non-motorised transport such as walking, cycling as well as E-bikes to promote the general well-being of citizens.

(f) Sustainable Cities and Communities (Goal 11) - Make cities and human settlements inclusive, safe, resilient and sustainable. The Greater Chennai Corporation (GCC) has taken up measures to reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal waste management

(g) Partnerships for Goals (Goal 17) - The Government of Tamil Nadu and the World Bank have proposed to engage in the Chennai City Partnership Programme for achieving various disbursement linked indicators covering multiple sustainable development goals.

13. Training and Capacity Building

Skill development training to the employees of various urban local bodies are being imparted through Anna Administrative Staff College and Tamil Nadu Institute of Urban Studies (TNIUS), Coimbatore.

The Municipal Administration and Water Supply department, under the German Development Bank (KfW) assisted Sustainable Municipal Infrastructure Financing–Tamil Nadu-Phase-II-Part-2 (SMIF-TN-II-2) program through Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL), have prepared a project report for providing capacity building and training programs covering 11 sectors with 52 courses and 8 workshops covering the following areas:

- Urban governance and management
- Urban water management
- Urban sanitation management
- Urban mobility and safe urban roads
- Urban planning – blue green infrastructure
- Finance

- Project management
- Procurement
- Environment and social management
- General administration

- Urban data management, technical software and application of Information and Communications Technology (ICT).

About 5,200 officials and staff of urban local bodies, Directorate of Municipal Administration, Directorate of Town Panchayats, Chennai Metropolitan Water Supply and Sewerage Board, Tamil Nadu Water Supply and Drainage Board, Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited, Chennai Rivers Restoration Trust and Tamil Nadu Urban Infrastructure Financial Services Limited and selected elected representatives will benefit from this capacity building programme. A total of 3,500 participants have been trained so far, and the remaining 1,700 participants would be trained by December 2024.

14. Way Forward

In adherence to the detailed vision statement, the Municipal Administration and Water Supply department will strive to provide a standard of living, maintain an environmentally sustainable setting, offer basic amenities, and foster lively community spaces for residents across all urban areas in the State. This will be achieved through a governance approach characterized by responsiveness, comprehensiveness, inclusivity, integration, transparency, and public participation in urban development.

Monitoring, feedback mechanisms, and evaluation processes are utilized to improve the effectiveness of service delivery and the outcomes of various programs, schemes, and projects.

Under the dynamic leadership of the Honorable Chief Minister, the Municipal Administration and Water Supply department will work earnestly to realize its vision, thus advancing the state as a model of optimism and ambition.

K.N.NEHRU

Minister for Municipal Administration



The Hon'ble Chief Minister of Tamil Nadu Thiru. M.K. Stalin inaugurated the 150 MLD Desalination Plant at Nemmeli at a cost of Rs.1516.82 Crores on 24.02.2024.



150 MLD Desalination Plant at Nemmeli



120 MLD (Zone – 2) Sewage treatment plant at Kodungaiyur.



The Hon'ble Chief Minister of Tamil Nadu Thiru. M. K Stalin inaugurated the newly constructed Rail over Bridge (ROB) at the cost of Rs. 61.98 Crore connecting Kolathur with Villivakkam on 13.05.2023.



The Hon'ble Chief Minister of Tamilnadu Thiru. M. K Stalin laid foundation stone on 30.08.2023 for 5 sponge parks at an estimated cost of Rs.1.09 Crore



The Chengai Sivam Bridge in Stephenson Road (Thiru vi ka Nagar zone), constructed at a cost of Rs.66.83 Crore was inaugurated by the Hon'ble Chief Minister of Tamilnadu Thiru. M. K Stalin on 1.07.2023.



The Hon'ble Minister of Youth Welfare and Sports Development Thiru. Udhayanidhi Stalin, inaugurated the newly constructed Urban Primary Health Centre under the National Urban Health Mission at a cost of Rs.3.20 Crore, at Muthiah Mudali Street, Ward 120, Triplicane, Teynampet Zone on 04.03.2024.



Water Supply Improvement Scheme to the expanded area of Coimbatore Corporation with River Bhavani as source Pillur-III in Coimbatore District at an estimated cost of Rs.779.86 Crore was inaugurated by Hon'ble Minister of Youth Welfare and Sports Development on 11.02.2024.



Water Supply Improvement Scheme to the expanded area of Coimbatore Corporation with River Bhavani as source Pillur-III in Coimbatore District at an estimate cost of Rs.779.86 Crore was inaugurated by Hon'ble Minister of Youth Welfare and Sports Development on 11.02.2024



The Hon'ble Minister for Municipal Administration and Water Supply, Thiru. K N Nehru inaugurated the name plaque of the Integrated Command and Control Centre named "Muthamizh Arignar Kalaigarnar M. Karunanidhi Maligai" at the Ripon Building complex on 14.03.2024.



The new Urban Primary Health Centre constructed at a cost of Rs.2.09 crore was inaugurated by the Hon'ble Minister for Municipal Administration, Urban Water Supply, Thiru.K.N Nehru on 30.09.2023 at the Perambur Kamarajar Nagar, Tondiarpet Zone.



Redevelopment of Tholkappia Poonga - Proposed Design (Work under progress)



Redevelopment of Tholkappia Poonga - Proposed Design (Work under progress)



Construction of Multi Level Car Parking in Tiruppur Corporation
Scheme: Smart City Mission, Project Cost: Rs. 12.87 Crore



Construction of Knowledge and Study centre in Nagercoil Corporation.
Scheme: Capital Grant Fund, Project Cost: Rs. 2.50 Crore



Redevelopment of Bus Stand in Tiruppur Corporation
Scheme: Smart City Mission, Project Cost: Rs. 30.60 Crore



Providing BT Road at Rajarajan Nagar in Komarapalayam Municipality
Scheme: Kalaingar Nagarpura Mempoattu Thittam, Project Cost: Rs.2.02 Crore.



Construction of Water Treatment Plant in Tiruppur Corporation under AMRUT,
Project Cost: Rs. 1120.57 crore



Provision of new park at Sathiyamoorthi road in Pudhukottai Municipality at an estimated cost of Rs.9.25 crore



Rejuvenation of Aayar Kulam Water Body in Desur Town Panchayat, Thiruvannamalai District.
Scheme: AMRUT 2.0, Estimate cost: Rs.39.25 Lakhs



Namakkal District - Mohanur Town Panchayat. Construction Of Modern LPG Crematorium, Toilet Block and Parking Shed in Town Panchayat Burial Ground under KNMT, Estimate Cost: Rs. 1.50 Crore.



Rejuvenation Of Alli kulam (Sannathi Street) at Thiruppanandal Town Panchayat in Thanjavur district under KNMT.



Construction of Bus Stand in Gingee Town Panchayat, Villupuram district,
Scheme Name: KNMT, Estimate Cost - Rs.6.74. Crore



Construction of BT Road and Retaining wall at Valliyampalayam road, Vellankattupalayam in Lakkampatti Town Panchayat, Erode District. Estimate Cost: 1.22 Crore



Improvement works to Childrens Park and Play Fields at
Indira Nagar Park in Lakkampatti Town Panchayat, Erode District.
Scheme Name: AMRUT 2.0, Estimate Cost Rs.26.50 Lakhs.



Improvement of Arasu Alavandhan Oorani in R.S.Mangalam Town Panchayat, Ramanathapuram District.
Scheme Name: AMRUT 2.0, Estimate Cost 1.46 Crore



Water Supply Improvement Scheme to expanded Coimbatore Corporation with River Bhavani as source, Pillur-III. Water Treatment Plant- Thandiperumalpuram.



CWSS to 756 rural habitations in K.Paramathi and Aravakurichi unions in Karur district,
Head works – Sevanthipalayam



CWSS to 759 rural habitations in Jolarpet, Kandhili, Tiruppathur and Natrampalli unions in Tiruppathur district - 6.15 Lakh liter Capacity Sump at Periyakammiyampattu



Underground Sewerage Scheme to Ambur Municipality in
Tirupattur District - Sewage Treatment Plant - 16.71 MLD capacity at Kasp.A - Ambur Municipality



UGSS to Tiruporur Town Panchayat, Chengalpattu District.
4.02 MLD capacity Sewerage Treatment Plant at Kalavakkam.



Augmentation of Water Supply Scheme to 708 habitations in Annur, Avinashi and Sulur unions in Coimbatore and Tiruppur Districts and to 165 habitations in Tiruppur union of Tiruppur District.
11.51 MLD Water Treatment Plant - Nariyampalli