

CHAPTER III

IMPLEMENTATION AND MONITORING

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Though the SPVs were created, the paid-up capital was kept at ₹10.00 lakh to avoid statutory provision as provided in the Companies Act, 2013. Further, a full-time Chief Executive Officer was not appointed in the sampled cities. SPVs were restricted to initial project sanction (based on ULBs proposal) and fund disbursement. The revenue realised on account of deposit, lease-rent, parking/user charges amounting to ₹57.72 crore though received by ULBs was not transferred to SPVs.

Out of the initial 243 projects planned, the total projects taken up for implementation was 414 (due to splitting of projects into packages). Out of these, 387 projects have been completed as of March 2024. Though initially 37 projects involving Pan-city initiatives valuing ₹1,488.59 crore were proposed, 69 projects involving an expenditure of ₹780.77 crore were implemented. Out of these, 22 projects involving ₹209.24 crore are eligible as per the Pan-city definition as given in the guidelines.

Deficiencies were also noticed in the execution of core infrastructure projects envisaged in the SCPs viz., water supply, solid waste management, electrical works, public transport, e-governance, social-infrastructure etc. Further, 93 projects which require clearances/approvals in accordance with various governmental regulations viz., Pollution control Board, Public Works Department were commenced without obtaining such clearances.

City Level Advisory Forum though formed in all the sampled cities was convened after a delay of two years and meetings for collaborating with various stakeholders were not conducted periodically.

IMPLEMENTATION

3.1 Deficiencies noticed in adhering to SCM Guidelines

3.1.1 Incorporation of Special Purpose Vehicles

The implementation of the Mission at the City level is required to be done by a Special Purpose Vehicle (SPV) as provided in Clause 10 of the SCM guidelines. The SPV should be a limited company incorporated under the Companies Act, 2013 at the city-level, in which the State/Union Territory and the Urban Local Body were to be the promoters having 50:50 equity shareholding. The role of SPV in respect of implementation of SCM is given in **Exhibit 3.1**.

Exhibit 3.1: Role of SPV



In Tamil Nadu, 11 SPVs were formed (between July 2016 and June 2018) at the city level to implement the projects under Smart City Mission.

Audit noticed the following deficiencies in the role of the SPV in the project Implementation.

3.1.2 Non-contribution of minimum Paid-up Capital

As per Clause 10.4 of SCM guidelines, the paid-up capital of the SPV should be ₹200 crore (₹100 crore of GoI contribution and ₹100 crore of State share). Audit observed that none of the sampled SPVs had maintained the minimum requirement as per SCM guidelines and the actual paid-up capital of each Smart City stood only at ₹10.00 lakh as detailed in the **Table 3.1**.

Table 3.1: Paid-up capital details of sampled SPVs

Name of the Smart City	Round of Selection	Date of incorporation	Size of the Project (₹ in crore)	Authorised Share Capital (₹ in crore)	Paid up Capital (₹ in crore)
Chennai	Round 1	15-07-2016	1,366.25	10.00	0.10
Coimbatore	Round 1	15-07-2016	1,570.28	10.00	0.10
Madurai	Round 2	02-02-2017	1,342.00	0.10	0.10
Salem	Round 2	01-02-2017	1,740.00	0.10	0.10
Tirunelveli	Round 3	22-12-2017	1,217.80	0.10	0.10
Tiruppur	Round 3	21-12-2017	1,255.73	0.10	0.10
Erode	Round 4	01-06-2018	1,543.52	0.10	0.10

(Source: Details furnished by sampled smart cities)

The Independent Auditor's Report of Chennai city had consistently reported (Emphasis of Matter of the Report) the non-maintenance of the prescribed minimum paid-up capital since 2016-17. Thus, though the SPVs were created, these were not in accordance with Clause 10.4 of SCM Guidelines and with a mere paid-up capital of ₹10 lakh against ₹200 crore, the SPVs were allowed to avoid the statutory requirement as provided in the Companies Act, 2013 like

(i) Creation of key managerial posts; (ii) Formation of Audit Committee; (iii) Inclusion of infrastructure created in the books of accounts. Audit further observed that there were no dedicated CEOs except for Chennai, the books of accounts of the respective SPVs did not reflect the assets created etc. Thus, the role of SPVs were restricted merely to a funding agency with certain limitations as discussed in the subsequent paragraphs.

The Government replied (May 2025) that this uniform capital structure was deliberately designed to provide a consistent financial foundation across all Smart City SPVs in Tamil Nadu thereby ensuring comparability, transparency, and ease of compliance while aligning with the administrative and fiscal requirements.

The reply is not tenable as fixing of share capital at ₹10 lakh was in violation of the mission guidelines.

Recommendation 4: The Government should ensure that it contributes the paid-up capital in the SPV as per the limit prescribed in the SCM guidelines. It should also address the ULBs to contribute its shareholding in the SPVs to strengthen SPVs equity base not only for its sustainability but also to mobilise resources from the market/financial institution for implementing future projects and to cover the O&M cost.

3.1.3 Non-appointment of Chief Executive Officer

As per Clause 10.1 of SCM Guidelines, every Smart City should have a SPV and the SPV should have a full time Chief Executive Officer (CEO). Paragraph 3 to Annexure 5 of the SCM guidelines provides that the CEO shall be a member of the Board of the SPV who is appointed with the approval of the MoHUA for a fixed term of three years and can be removed only with their prior approval. The appointment of CEO was emphasised in the Advisory number 14 dated 03 October 2018 of MoHUA as it was observed that across organisations, having a full time CEO facilitates quick decision making and better results in terms of frequent board meetings and faster rate of project implementation in general.

However, none of the SPV except Chennai had appointed a full time CEO. In the absence of a regular CEO and the activities of the SPV is being done by the respective Municipal Corporation Commissioner, the areas viz., quick decision making, faster implementation, as mentioned in the Advisory stated above could not be accomplished with the result that many projects were not completed within the due dates. Thus, discharging the duties of two posts viz., Commissioner of the ULB and CEO/Managing Director of the SPV is difficult particularly when there is a conflict of interest in discharging his duties between the SPV and the ULB.

The Government replied (May 2025) stated that the SCLs are serving as a funding and coordinating agency and as the projects are being implemented by the respective Municipal Corporations, the Boards of the respective SCL

approved the Commissioner of the Corporation to be appointed as CEO. It was further stated that it helped seamless coordination, streamlined decision making, optimised resource allocation and improved inter-departmental synergy.

The reply is not tenable since the said objectives could not be achieved since there was delay in completion of projects and many projects which are to be executed by the Corporations out of their own fund were executed through SCL funds.

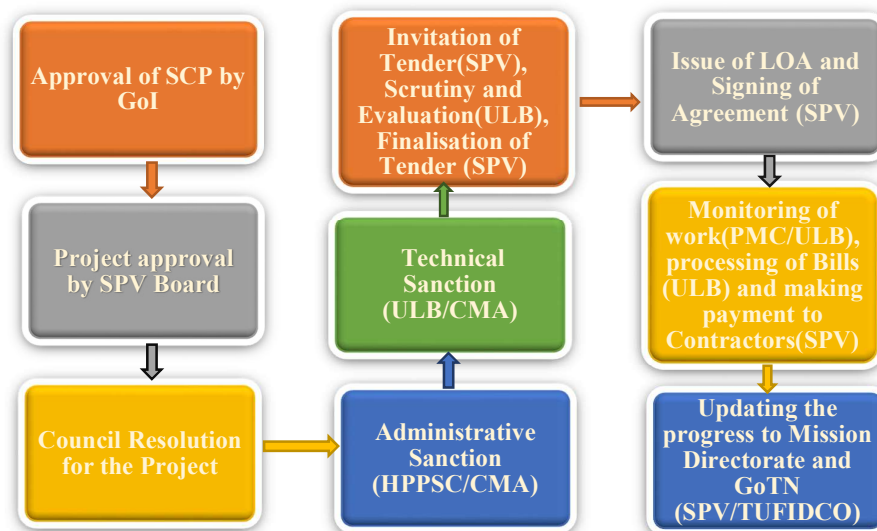
Recommendation 5: The Government should appoint full time CEOs in the SPV to manage the affairs of the SPVs so that it can function as head of implementing agency for effective and timely completion of the projects.

3.1.4 Lack of Operational Independence

Paragraph 4 of Annexure 5 of SCM guidelines specifies that the primary reason for creation of an SPV for SCM was to ensure operational independence and autonomy in decision making and mission implementation. To enable the same, SCM guidelines encourages the State Government and the ULBs to delegate (i) rights and obligations of the municipal council with respect to the Smart City project to the SPV (ii) the decision-making powers available to the ULB to the Chief Executive Officer of the SPV (iii) the approval or decision making powers available to the Municipal Administration department to the Board of Directors of the SPV and (iv) the matters that require the approval of the State Government to the State Level High Powered Steering Committee (HPSC) for Smart Cities.

In contravention to the above guidelines, the Mission implementation followed in the State is described in the following **Exhibit 3.2**.

Exhibit 3.2: Mission implementation followed in the State



The deviations noticed in the implementation of the Mission is given below:

The projects proposed to be implemented were originated by the ULBs only and included in the SCPs. The role of SPV Board was restricted to initial project sanction (based on ULBs proposal) and fund disbursement and the SPV board did not have the envisaged operational independence and autonomy in decision making and mission implementation. Further, the projects approved by SPV were again sent to CMA for approval, evaluation of the projects were done by the staff of ULBs and the day-to-day work was done through the staff of ULBs. The purpose of creating a separate SPV for implementation of the Mission has been defeated since majority of the activities envisaged in the Guidelines have been carried out by the ULBs.

The Government in its reply (May 2025) though highlighted the role of HPSC in decision making, is silent about the lack of operational independence to the SPVs. The fact, however, remains that the SPVs were not given full autonomy as the Commissioner of the ULB was acting as CEO as discussed in Paragraph 3.1.3.

Recommendation 6: The Government should empower the SPVs to follow the best practice with operational freedom to deliver the functions as envisaged in the mission guidelines.

3.1.5 Non-accrual of Revenue

Clause 10.1 of SCM Guidelines specifies that the States/ULBs shall ensure that a dedicated and substantial revenue stream is made available to the SPV to make itself sustainable and could evolve its own credit worthiness for raising additional resources from the market. The SCPs included the financial plan for the complete life cycle of the Projects which included the capital expenditure, operation and maintenance cost and the Revenue from the Smart City projects. The user charges and other revenue inflows were to be used to manage the Operation and Maintenance Cost.

The projects implemented under the SCM viz., Multi-level Car Parking (MLCP), commercial shops, etc. generate revenue which could be used for the sustainability of the SPVs.

However, Audit observed that revenue received on account of deposit, lease rent, parking charges/user charges etc., amounting to ₹57.72 crore¹ was received by the ULBs. Further, ULBs had not provided any other contribution as a grant to ensure financial sustainability. The sampled Smart Cities were entirely dependent on the Grant funds under SCM for its operations. In the Smart City review meeting it was instructed to work out a mechanism for the sustainability of the Smart City SPVs and feasibility of SPVs managing the commercial assets of the respective smart cities. However, the day-to-day expenditure was met out from the A&OE for State/ULB component of the grant.

The Government in its reply (May 2025) highlighted the source of revenue that are expected out of the projects implemented. Further, it was replied that the

¹ Chennai - ₹0.29 crore, Coimbatore - ₹19.78 crore, Erode - ₹2.18 crore, Madurai - ₹8.93 crore, Salem - ₹1.90 crore, Tirunelveli - ₹5.33 crore and Tiruppur - ₹19.31 crore.

Boards have decided that all revenue generated from these auctioned projects will be retained with the respective Municipal Corporations for its financial stability. However, it is silent about the actual transfer of such revenue generated to SCLs which would pave the way for future funding of projects which has been curtailed thereby restricting its credit worthiness and future sustainability. Further non-sharing of revenue is in contravention of SCM Guidelines.

Thus, from the above (**Paragraphs 3.1.1 to 3.1.5**) it is evident that the creation of SPVs was only a mere formality and its operational freedom was largely, if not totally restricted to the extent that the independence of selection of projects, its implementation and the asset created out of such execution was not in the hands of the SPVs. Further, the revenue generated from such assets created was also not earned/shared to the SPVs for its sustainability. Finally, even the head of the SPV, viz., its CEO was also the head of the Corporation which is a ULB and as such there is a conflict of interest in discharging the functions of the SPVs.

Recommendation 7: The Government should formulate a revenue sharing mechanism between the ULB and SPV for the financial sustainability of the SPV.

3.2 Deficiencies noticed in the implementation of projects

3.2.1 Pan-city Projects

Clause 5.1.4 of the Mission Guidelines provides that the Pan-city development envisages application of selected Smart Solutions to the existing city-wide infrastructure. Application of Smart Solutions in the transport sector including intelligent traffic management system and water management including wastewater recycling and use of smart meters would involve the use of technology, information and data to make infrastructure and services better. Accordingly, the SCPs had included the Pan-city initiatives in conformity to the Guidelines.

Audit scrutiny revealed that though 37 projects involving ₹1,488.59 crore were initially proposed, 69 projects costing ₹780.77 crore were taken up for implementation under Pan-city initiative by sampled smart cities. Some of the important projects that were not taken up are detailed below:

Chennai	:	Street Light Monitoring System - ₹248.00 crore and Intelligent Traffic Management System - ₹100.00 crore.
Coimbatore	:	CCTV Cameras, Poles, Servers, Junction Switch - ₹80.00 crore.
Erode	:	e-Health - ₹250.00 crore.
Tirunelveli	:	ITMS - ₹74.90 crore.
Tiruppur	:	Fibre Optics network and City Communications Backbone - ₹34.15 crore; Intelligent Transit System - ₹17.04 crore; Common City Payment and Services Processing Platform - ₹13.27 crore.

Out of 69 projects, only 22 projects amounting to ₹209.24 crore (including PPP Projects²) would fall under the Pan-city initiative based on the definition given in the Guidelines.

The five sampled cities³ had taken up 47 projects costing ₹571.53 crore as Pan-city initiatives under SCM viz., creation of new infrastructure like Micro Compost Centres (MCC), incineration plants, purchase of vehicles for SWM activities, establishment of solar power plants, works relating to UGSS etc., (Appendix 3.1) which were normally to be provided by the ULBs in their regular course of governance.

Audit scrutiny revealed that the work involved only creation of infrastructure and there was no application of smart solution involved. Creation of infrastructure without any IT initiative was in contravention to the Pan-city initiatives defined in the Mission guidelines.

The Government in its reply (May 2025) while highlighting the benefits of Pan-city projects, had not furnished the reply for projects that are ineligible under the ambit of PAN city definition.

3.2.2 Non-obtaining of prior approval/permission from concerned authorities

The SCLs themselves or the Project Management Consultant (PMC) appointed by the SCLs should identify all necessary approvals and permissions that would be required during the implementation of the contracts in accordance with various Government regulations. This has been spelt out in the Technical Sanction also. For project implementation, following approvals (i) Building Permission from CMDA/DTCP⁴ for construction; (ii) Work Permission from PWD⁵ for projects alongside Rivers/Lakes and (iii) TNPCB⁶ Consent were required.

On an audit query, the respective Smart Cities replied that statutory approvals from DTCP/CMDA/PWD was pending in respect of 81 projects involving ₹1,430.83 crore and from TNPCB for 12 projects valuing ₹175.27 crore.

Audit observed that though Clearance/Consent of Competent Authority were mandatory for certain projects viz., SWM works, construction of infrastructures, restoration of lakes etc., the reasons for stating them as not obtained/required were not furnished by the Smart Cities.

For example, in one case in Salem SCL, incinerator plant though completed in January 2021, was not put to use (June 2024) due to non-obtaining of “Consent

² Chennai and Coimbatore two projects each.

³ Coimbatore, Erode, Madurai, Salem and Tiruppur.

⁴ CMDA- Chennai Metropolitan Development Authority and DTCP – Directorate of Town and Country Planning (excluding jurisdiction of (CMDA) for construction - Authorities who plan, develop, manage, and improve urban and rural areas).

⁵ PWD – Public Works Department.

⁶ Tamil Nadu Pollution Control Board - Infrastructure development projects including community hall, Kalyana Mandapam etc., (having waste water generation > 100 Kilo litres per day) has been categorised under red category – Authority which provides Consent to Operate (valid for 5 years).

to operate” from TNPCB which has been discussed in **Paragraph 3.3.3 (ii)**. Sample cases of such projects are detailed in **Appendix 3.2**. Further, during Smart City Review meeting conducted it was instructed to get DTCP planning permission for all smart city projects wherever necessary. However, the statutory approvals were not obtained for the projects of Smart Cities wherever necessary.

The Government replied (May 2025) that obtaining approval from the competent authorities for the projects executed are under progress and approval for six projects of Tiruppur and 12 projects of Tirunelveli have already been obtained. It further stated that in respect of projects implemented in Chennai viz., Bio gas plant and Modernisation of Crematorium do not require clearance from DTCP, PWD or TNPCB.

The reply is not tenable since the approval for such kind of projects is mandatory from the competent authorities.

Recommendation 8: The Government should direct the SCLs to obtain necessary statutory approvals from the concerned authorities before commencement of projects in future so as to complete the project in time and ensure its usage as it have a direct impact on the environment.

3.3 Deficiencies noticed in the implementation of projects under Core Infrastructure

As per Para 2.3 of SCM guidelines, the objective is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of Smart Solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas. The implementation of project under core infrastructure as per SCM guidelines and the observations noticed are detailed below.

3.3.1 Water Supply

Adequate water supply was one of the important essential feature envisaged in the Smart City guidelines for inclusion in the SCPs. The smart city should have 24x7 treated water supply which follows national and global standards and also available in sufficient quantity and affordable across all sections of the society. Some of the water supply projects envisaged in the proposals (12 numbers) were (i) 24x7 water supply, (ii) Smart water metering, (iii) Water supply distribution, (iv) House service connections, etc.

The projects implemented (21 numbers) under Water supply included Water Meter, Water supply augmentation and distribution, overhead tanks, Supervisory Control and Data Acquisition (SCADA), etc. Out of the 21 projects, 18 were completed which included five projects completed in time and 13 projects were completed with a delay ranging from three to 28 months. The reasons for the delay was attributed to changes as per site conditions, COVID-19 pandemic, litigation and material supply etc.

Further three projects viz., Improvement in water supply distribution schemes and internal plumbing for water supply system are yet to be completed though their date of completion was between November 2020 and August 2022. The city-wise details of number of projects are detailed in **Appendix 3.3 (a)**. The Audit observations on the projects completed as well as those ongoing are detailed below:

(i) Water Meter

The Coimbatore SCL awarded (December 2017) for ₹1.02 crore to provide Automated Meter Reading (AMR) system to enable automation for water consumption bills for each consumer as per the billing cycle. The work involved fixing of 1,131 AMR Meters with a requirement for recording the readings and maintenance of both hardware and software of whole system for a five year period. An amount of ₹0.96 crore was made to the contractor in June 2018. Scrutiny of records revealed that only 896 AMR units had been installed as of October 2020 and updation of readings were carried out only up to 30 September 2019. Further, 197 AMR units were stated as non-functional in August 2022.

The Government in its reply (May 2025) stated that based on audit observation, decisive action was initiated against the contractor for recovery of the disputed amount and all the 1,131 meters have been supplied and installed. Further due to technical challenges, efforts to rectify the defective meters has experienced some delays. However, the fact remains that the objective of installation of water meter has not been fully achieved even after a lapse of five years.

In Tirunelveli SCL, Smart Water Metering project and Water quality sensors project (11,500 House Holds and 1,000 commercial) as specified in the SCP at a cost of ₹24.50 crore were not taken up. Instead, it had implemented unplanned SCADA system (Supervisory Control and Data Acquisition System) for Head works and Service Reservoirs in all four zones (4 projects) in Tirunelveli city at an estimated cost of ₹46.67 crore by splitting the overall project cost in order to avoid the approval of HPPSC. Out of the above four projects, one project (Phase IV) was completed in December 2022 and the other three were completed in July 2023 with the overall expenditure of ₹43.38 crore.

Audit analysed the water supply data and noticed discrepancies in two days (6 and 7 August 2023) during the test check period (1 to 7 August 2023) and it was observed that it showed negative figures viz., distribution to OHT was higher than what was received including water available. Further, during JPV (June 2024) of the SCADA on some water head works revealed the following:

- Out of four, one energy meter affected in floods was not working since December 2023 in Thirumalaikolundupuram water head works in Palayamkottai Zone.
- Though Flow meter and sensors were provided in OHT at Murugankurichi of Thatchanallur Zone, Remote Terminal Units which acts as crucial data collection and control points was not provided for monitoring the flow of water.

The above deficiencies defeated the very objective of installation of the SCADA system besides the original proposal of installation of smart metering.

The Government in its reply (May 2025) stated that based on Audit Observation, contractor have been communicated to rectify the issues and all necessary corrections and system enhancements would be fully implemented before July 2025. However, the fact remains that the objective has not been achieved even after two years of completion of the project.

(ii) Improvement of Water Supply Distribution System

Salem SCL invested ₹74.88 crore (January 2020) towards Optimising and Revamping of Existing Network with SCADA system - Water supply System 24x7 against original proposal of ₹16 crore with the objective to increase the per-capita water supply of 135 LPCD from two days to daily basis with the duration to complete the project by August 2022.

It was observed during JPV that work is still in progress (as of July 2024) in respect of distribution main, feeder main, house service connections, construction of 1 MLD, 1.5 MLD and 2.5 MLD overhead tanks. In reply (July 2024) it was stated that the work got delayed due to various issues such as COVID-19 pandemic, delay in obtaining clearance/permission from other Departments like Highways/Railways, Local Body elections, hard rock removal at foundation level, etc. It was also replied that 86 *per cent* of work had been completed and the work would be completed before 31 December 2024. The reply is not tenable, since the permission/clearance from other departments should have been obtained at the planning stage itself and soil testings should have been completed before the work is taken-up.

The Government in its reply (May 2025) stated that as on date, 90 *per cent* of the work has been completed and the remaining works would be completed by June 2025. However, due to non-completion of the work, even after three years from the original due date for completion the intended benefit of increase in the water supply has not been achieved.

Madurai SCL had taken up (May 2019) a project *viz.*, “Improvement of Water Supply Distribution System” at a cost of ₹79.93 crore with a projected completion date of November 2020. However, even after a lapse of 42 months, the project is still (June 2024) under progress. To an Audit enquiry regarding the delay in completion, the reasons stated by the SCL were COVID-19 and consequent manpower shortage, monsoon rains and shortage of materials. However, in view of the fact that more than three years had elapsed post COVID-19 and the availability of manpower and material should have been ensured during these years, the reply is not acceptable. Further, though the contract agreement had stipulated liquidated damages for delay in completion of specified milestones, Madurai SCL had not initiated any action in this regard.

The Government in its reply (May 2025) stated that as on date, 90 *per cent* of the work has been completed. However, the fact remains that the intended objective has not been achieved even after five years.

3.3.2 Electrical Works

Smart City guidelines envisaged to have assured electricity supply with at least 10 *per cent* of the city's energy requirement coming from solar. It was also envisaged that 24x7 electricity supply in all parts of the ABD area including underground cabling with smart metering linked to online platform for monitoring, billing and transparency. Some of the electrical works envisaged in the proposals (26 numbers) were (i) Power generation by solar energy, (ii) Underground ducting, (iii) LED street lights, (iv) Smart energy metering, etc.

The projects implemented (44 numbers) under Electrical works included installation of smart meters, Solar rooftops, conversion to LED lights, bio-gas plants, etc. Out of the 44 projects, 43 were completed which included 18 projects completed on time and 25 projects were completed with a delay ranging from two to 44 months. The reasons for the delay was attributed to encroachment, court case, COVID-19 pandemic, etc.

One project in Salem viz., “Grid connected Ground Mounted Solar Power Plants of 2.5 MW and 3.0 MW at Chettichavadi” is under progress and its proposed date of completion was August 2024. The city-wise details of number of projects are detailed in **Appendix 3.3 (b)**. The Audit Observations on the projects completed as well as the ongoing project are detailed below:

(i) Solar Power

The Erode SCL proposed to execute projects for Energy Security at a cost of ₹44.50 crore to strengthen the Power Distribution system (PDS) (₹29.50 crore) to reduce the outages from 5.6 *per cent* to less than 0.5 *per cent* and installation of Solar Roof top panels in Government buildings for generation of solar power at a cost of ₹15 crore to increase the share of clean energy through Ministry of New and Renewable Energy (MNRE) solar program from less than 1.0 MW to more than 5.0 MW. Audit observed that Erode SCL executed only installation of solar roof top panels projects at a cost of ₹2.72 crore in 12 locations with total capacity of 2,560 units of power/day and did not execute any work for strengthening the PDS. Thus, the SCL failed to consider the implementation of Energy security project for reducing outages which was also one of their objective. In reply, Erode SCL stated (December 2023) that the PDS was executed by TNEB under various Central and State Government fund. The reply is not acceptable since the project should have been considered under convergence and other important projects should have been included in the proposal for approval of the same. Further, out of the solar roof top panels installed, panels in 10 locations were connected to the power grid and were functioning. The remaining solar panels at two locations have not been connected to the Grid so far (July 2024), thus rendering the expenditure in these locations remained unfruitful.

The Government in its reply (May 2025) accepted the Audit Observation and stated that due diligence will be exercised in all future renewable energy projects to ensure timely application for eligible subsidies and grants under

MNRE or other relevant schemes and necessary institutional mechanisms are being put in place to prevent the recurrence of such oversights.

The Salem SCL invested ₹5.40 crore (Phase I - ₹2.97 crore and Phase II - ₹2.43 crore) for the project of 'Installation of roof top Solar Panels' on 17 buildings of Salem Corporation and ₹30.55 crore for 'Grid connected Ground Mounted Solar Power Plants of 2.5 MW and 3.0 MW at Chettichavadi'. Additional project cost of ₹1.80 crore was also invested for the wheeling and transmission works from the solar power plants at Chettichavadi to Gorimedu EB Sub-station (Grid connection work). It was noticed during JPV (July 2024) that the roof top solar panel projects were completed and functional. However, in respect of solar power plants of 2.5 MW and 3.0 MW, though panels were erected at a cost of ₹26.24 crore, the plants could not be made operational due to non-completion of grid connection work. During JPV (July 2024), the Pole erection for the transmission was in progress and as of July 2024, 20 *per cent* of work has only been completed. Improper maintenance of the solar panels and the plant site was also noticed. In reply, Salem SCL (July 2024) stated that annual maintenance contract for maintaining the solar power plants would be taken up after completion of the wheeling arrangement. Cleaning of solar panels would also be carried out.

The Government in its reply (May 2025) accepted the Audit Observation and stated that all major wheeling and on-grid arrangements have been completed, with only the final cabling and wiring works remaining and the work is expected to be completed by 20 June 2025.

However, the fact remains that due to non-completion of the work, the intended objective of generation of electricity through solar energy has not been fully achieved yet even after three years from the date in which it should have become operational.

(ii) LED lights

Tirunelveli SCL implemented four projects (unplanned) *viz.*, conversion of existing sodium vapour lamps into LED streetlights and additional new LED streetlights with an expenditure of ₹45.75 crore. It was observed that Tirunelveli SCL has not availed the benefit under LED Street Lighting National Programme (SLNP) sponsored by MoP, GoI through implementing agency of Energy Efficiency Services Limited (EESL) for replacement/new streetlights programme with no upfront capital cost.

The Government in its reply (May 2025) stated that necessary action will be taken in the future in similar kind of projects.

The reply, however, is not addressing the issue of diverting the SCM fund for procurement of LED lights and also explore the possibility of getting the expenditure reimbursed from EESL.

3.3.3 Sanitation including Solid Waste Management

The main objective behind this infrastructure is that the smart city reduces landfill caused by waste so that it is minimal. All the solid waste generated is segregated at source and sent for recycling. Organic waste is sent for

composting to be used for gardening in the city. Energy creation through waste is considered and sanitation facilities are available to the entire population. Some of the sanitation including SWM projects envisaged in the proposals (35 numbers) were (i) Storm water and rainwater harvesting, (ii) UGSS, (iii) Solid waste segregation, (iv) Tertiary treatment plant for water reuse, etc.

The projects implemented (87 numbers) under Sanitation included SWM included Storm Water Drains, UGSS, Micro Composting Centres, Bio-mining Works, Purchase of BOVs, etc. Out of the 87 projects, 80 were completed which included 29 projects completed on time and 51 projects were completed with a delay ranging from one to 41 months. The reasons for the delay was attributed to COVID-19 pandemic, encroachment, delay in bio-capping work, etc.

Further seven projects viz., Improvement in Mambalam Canals, UGSS works, Incinerator Plant are yet to be completed though their date of completion was between May 2022 and June 2024. The city-wise details of number of projects are detailed in **Appendix 3.3 (c)**. The Audit Observations on the projects completed as well as those ongoing are detailed below:

(i) Micro Composting Centres

Micro Composting Centre (MCC) is a decentralised waste processing facility where solid waste collected from a particular ward or housing colony through the primary collection is scientifically processed. Audit observed the following deficiencies in the construction of 70 MCCs in four sampled smart cities are detailed in **Table 3.2**.

Table 3.2: Deficiencies noticed in construction of MCCs

City	Project details	Status of project	Audit Observation
Coimbatore	36 MCCs constructed with a capacity of 153 MT at a cost of ₹21.22 crore.	Out of 36 MCCs completed, five were being converted into Material Recovery Facility, one being utilised as charging station for BOV and one was not functioning on account of legal proceeding	No specific reasons were furnished to Audit for conversion of MCCs.
Madurai	16 MCCs constructed at a cost of ₹ 12.33 crore.	Originally it was planned to construct 18 MCCs. Construction of two MCCs were dropped due to site dispute. 12 MCCs out of 16 were not working due to non-functioning of shredder/conveyor belts.	No action was taken to bring the MCCs into utilisation.
Tiruppur	Construction of 13 MCCs at an estimated cost of ₹10.37 crore.	Out of 13 MCCs, two were not put into use since its construction due to public agitation. During JPV (June 2024), Audit noticed that two MCCs were not functioning due to repair of Shredder machine conveyor belt.	No action was taken to repair the shredder machines and make the MCCs functional.
Salem	Five MCCs constructed at a cost of ₹4.67 crore.	It was proposed to construct six MCCs. Five were constructed and the remaining one was not constructed due to public objection. Excess payment of ₹54 lakh was paid to contractor.	In reply (July 2024) it was stated that some additional works were executed. Reply is not acceptable as the additional works cost was ₹5.72 lakh only i.e. an excess of ₹48.00 lakh was to be recovered from contractor.

Out of 70 MCCs constructed in four sampled smart cities, 23 MCCs were not functioning thereby non-achievement of the intended objectives fully.

The Government replied (May 2025) that (i) in Coimbatore, the MCCs were converted to address the management of dry waste, (ii) in Madurai, necessary rectification works will be undertaken in respect of two MCCs, (iii) in Tiruppur, the two MCC pointed out in Audit are fully operational and actively functioning as on date and (iv) in Salem the work slip incorporating the revised measurements and associated cost implications has been forwarded to the Chief Engineer for approval, based on which, the final cost cutting and recovery details will be compiled.

However, the reply is silent about the latest with regard to the legal position of the MCC in Coimbatore and in respect of the remaining 10 MCCs in Madurai.

(ii) Incinerator Plants

Audit noticed the following deficiencies in the establishment of Incinerator plants in two SCLs which are detailed in **Table 3.3**.

Table 3.3: Deficiencies noticed in installation of Incinerator Plant

City	Project Details	Status of project	Audit Observation
Erode	Installation of Incinerator Plant Phase I at an estimated cost of ₹1.67 crore.	The plant was completed and functional. However, the validity of 'Consent to operate' permission from TNPCB had expired on 31-03-2023.	The renewal has not been obtained from TNPCB (July 2024). However the plant was operated without mandatory clearance.
	Installation of Incinerator Plant Phase II at an estimated cost of ₹1.78 crore.	Works such as Fire bar fixing, Motor fixing, Quencher, conveyor etc., were yet to be executed (July 2024).	Due to this delay in Phase II, the intended objective of disposal of non-biodegradable waste was not fully achieved.
Salem	Installation of Incinerator Plant (25 TPD) at an estimated cost of ₹3.19 crore.	Though the work was completed in January 2021, the plant was not put into use (July 2024) due to non-obtaining of 'Consent to Operate' permission from TNPCB.	The provision of 'Heat Energy Recovery System' and obtaining 'Consent to Operate' permission from TNPCB was in the scope of the contractor and the contractor failed to execute the same. Though notices were issued to the contractor had not turned up.

After this was pointed out, the Government replied (May 2025) (i) in respect of Erode, the 'consent to operate' is yet to be obtained in respect of Phase I, but has been obtained for Phase II from TNPCB during March 2025 and the plant is currently functioning, (ii) in respect of Salem, other qualified technical agencies with expertise in incinerator installation and waste heat recovery systems to execute the pending work have been approached to execute the pending work and all further developments will be furnished to Audit. However, the fact remains that mandatory clearance though to be obtained before the functioning of the plant was not obtained and the Incinerator Plant (Salem) is lying idle for more than four years resulting in the intended objective not fully achieved.

(iii) Battery Operated Vehicles

Audit noticed the following deficiencies in the functioning of Battery Operated Vehicles (BOVs) in two SCLs are detailed in **Table 3.4**.

Table 3.4: Deficiencies noticed in functioning of BOVs

City	Project Details	Audit Observation	SCL Reply
Salem	179 BOVs procured during August 2018/ February 2019 at a cost of ₹3.01 crore	During JPV (July 2024), Audit noticed that 173 BOVs were non-functional of which 44 BOVs were in repairable condition and the remaining 129 BOVs were beyond repair	In reply (July 2024), it was stated that in respect of 129 BOVs, ₹1.25 lakh per BOV was required due to which repairing of these BOVs was not attempted. In respect of 44 BOVs, ₹80,000 per BOV was required and would be made functional using General Fund.
Madurai	259 BOVs procured during October 2019 at a cost of ₹4.49 crore	Out of 259 BOVs, 82 BOVs were not functioning due to battery fault since November 2022.	The status of utilisation and action taken to put the above BOVs into use were not furnished to Audit (July 2024).

The Government in its reply (May 2025) reiterated the reply given earlier by Salem SCL and further stated that Corporation has proactively engaged with multiple technical agencies specialising in electric mobility and battery refurbishment to economically viable alternatives for repairing or retrofitting the BOVs. For Madurai, it was replied that due to non-response from the supplier for 42 BOVs which are within the warranty period, the withheld amount of ₹31 lakh will be deducted and for the remaining 40 BOVs (beyond warranty period), repairs would be carried out using the General Fund of the Madurai Corporation.

Thus, Audit observed that due to absence of timely maintenance, 129 BOVs (Salem) became beyond repairable condition within four to five years rendering the vehicles non-usable for the intended purpose and due to absence of timely maintenance, the services of 82 BOVs (Madurai) could not be utilised for more than three years.

(iv) Improvement works in Mambalam Canal

Improvement works in Mambalam Canal, Chennai viz., construction of flood protection retaining wall including canal lining, shared pathway, cycle track, formation of park and green packets, was taken up (February 2021) under SCM at a cost of ₹59.42 crore. Due to occurrence of inundation during the monsoon, GoTN appointed Advisory Committee⁷ which recommended (May 2022) to redesign the Mambalam Canal project and accordingly changes were made in the original design. Due to this, the components of shared pathway, cycle track, park and green packets which were included in the original design were dropped due to the reason that free flow of water will be affected and carrying out the desilting work smoothly. The work had recommenced in August 2022.

⁷ Advisory Committee on Mitigation and Management of flood in Chennai Metro constituted by GoTN.

Though extension of time up to 31 March 2024 was accorded (February 2024) with instructions to levy penalty in case of non-completion, Audit noticed during JPV that works had not been completed (June 2024) (**Exhibit 3.3**). Reasons for the delay in completion and details of penalty levied were not furnished to Audit. The delay in completion of improvement works poses risk of flooding in the ABD area during monsoon season despite incurring an expenditure of ₹48.19 crore as of March 2024.



The Government replied (May 2025) that the improvement works at the Mambalam Canal junction near Sir Thyagaraya Road are ongoing. A formal note seeking the Commissioner's approval for the extension of time until 31 August 2024 for the completion of the flood protection retaining wall (Reach 5) will be submitted shortly.

However, the fact remains that the reply is silent about the approval of extension of time and the actual completion of the work as on date.

3.3.4 Efficient Urban Mobility, Public Transport (Pedestrian Friendly Pathways and Non-Motorised Transport - Intelligent Traffic Management System)

One of the features of comprehensive development in Smart Cities envisaged in SCM guidelines was promotion of variety of transport options and creation or refurbishment of road network not only for vehicles and public transport, but also for pedestrians and cyclists. Some of the Urban mobility and public transport projects envisaged in the proposals (51 numbers) were (i) Parking management system, (ii) Non-motorised roads for Cycling and walking, (iii) Intelligent Traffic Management System, (iv) Smart bus shelter, (v) Traffic signages etc.

The projects implemented (98 numbers) under efficient urban mobility included Multi Level Car Parking, Non-Motorised Transport (NMT) Corridor, Pedestrian Plaza, Redevelopment of Old bus stand, etc. Out of the 98 projects, 97 were completed which included 26 projects completed on time and 71 projects were completed with a delay ranging from one to 48 months. The reasons for the delay was attributed to COVID-19 pandemic, due to delay in completion of UGSS works, delay in obtaining other department approvals, etc.

Further, one project in Madurai viz., 'Development of Periyar Bus stand and complex' is yet to be completed though its date of completion was June 2020. The city-wise details of number of projects are detailed in **Appendix 3.3 (d)**. The Audit observations on the projects completed as well as those ongoing are detailed below:

(i) Parking facilities

Audit noticed the following deficiencies in the creation of parking facilities in two SCLs are detailed in **Table 3.5**.

Table 3.5: Deficiencies noticed in creation of parking facilities

City with Project Details	Status of project	Remarks	Government Reply dated May 2025
Coimbatore: Construction of MLCP with 373 numbers of car park at DB road at a cost of ₹41.56 crore.	The project was completed and brought to use from August 2022. Due to non-arrangement for maintenance of the automation facility the automated car facility was not functional from January 2024.	JPV (July 2024) revealed that parking was available only in the ground floor and in the open premises outside the building defeating the intended objective of the project. Further, though only 100 KVA is sufficient for full occupancy of the MLCP, 300 KVA demand has been obtained. Though a proposal was initiated (January 2023) to request TANGEDCO for reducing the current demand no action has been finalised yet (July 2024) in this regard.	The Government in its reply (May 2025) stated that action has been initiated to resolve all technical and tender issues in order to make MLCP operational fully with revenue generation and the demand for electricity charges would be reduced.
Erode: Construction of Commercial Complex with parking facilities at Erode Bus Terminal at a cost of ₹13.44 crore.	The lift work, painting works, plumbing works etc., were yet to be completed. As per the technically sanctioned estimate, lift was not part of this project and the work of installation of lift in the Complex was without any approval.	Considering the requirement of lift, it was decided at a later stage to install the same in the Complex and approval for lift would be obtained from Chief Engineer, CMA, Chennai by taking it as supplemental item of work before completion. This indicates the absence of proper planning while conceiving the project. Thus, it could not be put to use due to non-completion of the lift installation and other works depriving the public of the intended benefits.	The construction work has been fully completed and 20 out of 54 shops has been leased out and the process of obtaining approval for installing lift was in progress.
Erode: Construction of additional parking facilities and Minibus-shelter in Erode Bus Terminal at a cost of ₹5.76 crore.	Audit noticed that minibus shelter with 14 bus bays sanctioned initially was not constructed. Instead, pathway for buses was made and put to use.	The basement parking facility has been completed but not yet put to use (August 2024) due to non-completion of entry and exit point, approach road connectivity to the ramp of the basement parking. Thus, due to non-completion of another project, the parking facility could not be made open to the public for their use.	The work of entry-exit points will be completed by 15 July 2025.
Salem: Four MLCPs constructed at a cost of ₹44.08 crore.	Building planning approval was not obtained for all the MLCPs. Though four MLCPs were completed during 2021 and 2023, only one MLCP at Central Bus stand had been put into use after auctioning of the asset.	Due to poor response by bidders, the remaining MLCPs had not been auctioned yet (July 2024). In reply (July 2024), it was stated that DTCP approval would be obtained at the earliest. It was also stated that re-auction was in progress for the remaining three MLCPs.	The process of obtaining approval of DTCP was under progress and in two out of three MLCPs, the collection was being done by the Corporation officials and the same is earning a daily revenue ranging between ₹500 and ₹700. In the remaining MLCP which include a Multi-purpose hall, auction has been completed with an annual revenue of ₹1.05 crore.
Tiruppur: Construction of MLCP (180 cars – Ground + four floors) at Kumaran Road near Convention Centre at a cost of ₹11.08 crore.	Though MLCP (180 cars – Ground + four floors) was completed in March 2022, the same has not been put into use (June 2024) due to delay in completion of the construction of Convention Centre as both are located in the same premises.	Due to heavy traffic congestion at Kumaran Road, SCL decided to go with one entry and exit point for MLCP and the Convention Centre.	The Convention Centre has since been completed and inaugurated on 11 February 2024 and efforts are being taken to lease the property through public auction.

Thus, due to non-completion of supplemental items of work, the MLCPs created at four SCLs could not be put to use from the targeted time and as such the intended objective of parking facility and revenue generation from the assets created could not be fully achieved.

(ii) Modernisation of Bus Terminal

Audit noticed the following deficiencies in the modernisation of Bus Terminal in three SCLs are detailed in **Table 3.6**.

Table 3.6: Deficiencies noticed in modernisation of Bus Terminal

City with Project Details	Status of project	Remarks	Government Reply dated May 2025
Erode: Modernisation of Bus stand at an estimated cost of ₹41.26 crore.	The project was divided into four projects each costing less than ₹15 crore to avoid scrutiny of HPPSC. Out of four projects, one work viz., Improvement works around the bus terminal with a cost of ₹9.30 crore was in the initial stage only and was in progress (June 2024).	The reason/justification of non-approval by HPPSC for the original project was not available in file. Thus, the modernisation though conceptualised in the proposal and action initiated in 2020 itself, the same has not been completed even after five years and consequent non-achievement of intended objective.	The Government justified the splitting up of projects. However, the latest position with regard to the completion of said four projects has not been furnished.
Salem: Redevelopment of Old Bus stand (four sub projects) at a cost of ₹104.53 crore.	Though the project was completed and put into use, only 39 shops out of 202 shops have only been let out so far (July 2024).	During JPV (July 2024), it was noticed that except one shop was functioning and 'To let' board was seen in other shops indicating subletting of the already let out shops implying lack of monitoring. Further, CCTV cameras, escalator were not functioning and the premises was kept in a very unclean manner.	The Government stated that 44 shops have been successfully let out and in respect of basement parking facility, an amount of ₹150 to ₹220 is being earned daily. Further, it was replied that action is being taken to let out the remaining commercial space at old bus stand and four shops of new bus stand.
Salem: Redevelopment of New Bus stand at a cost of ₹6.82 crore.	Though the shops were completed during February 2020, the same have not been put into use yet even after four years (July 2024). It was also noticed that the entire shop area was full of waste and dust showing its improper maintenance.	Salem SCL had auctioned three times earlier for letting out the shop space and there were no takers. Due to non-usage of shops, the intended objective was not achieved besides revenue loss.	

City with Project Details	Status of project	Remarks	Government Reply dated May 2025
Tiruppur: Upgradation of new bus stand at a cost of ₹30.60 crore.	The work was completed (March 2023) and put into use.	It was noticed during JPV (June 2024) that one staircase and one escalator each on both sides of foot over-bridge was not opened to public and kept locked. 54 shops, two restaurant spaces and two rooms have not been leased out. The bus bays on the south side of the bus stand were found to be totally empty. The buses towards Erode, Salem etc., were stated to be plying from another bus stand viz., Kovilvali. Due to this, major part of the new bus stand was deserted without much people movement.	The Government replied that escalators have since been fully operational and action is being taken for allotting shops through auction. Further, it replied that sanitary workers have been deployed to maintain cleanliness and hygiene at the bus stand.
Tiruppur: Redevelopment of old bus stand at a cost of ₹39.35 crore.	The work was completed (March 2022) and put into use.	It was noticed during JPV (June 2024) that, four escalators at the entry-exit points were not put to use since inception. Eleven shops were not leased out. Some of the additional facilities like Mother Care room, Multipurpose Hall, Dormitory, recreation room and space for two restaurants were not utilised and as such were in unhygienic manner. Thus, the intended objectives of these facilities were not achieved. Further, the revenue generation envisaged from the shops/rooms/halls could not be completely achieved.	The reply, however, is silent about the utilisation of the additional facilities created in the bus stands.

Thus the intended purposes for which the above assets created were largely unachieved between two to five years.

(iii) Smart Urban Mobility Theme

(a) Tirunelveli SCL has not taken up e-vehicle projects of ₹8.25 crore like e-rickshaws and e-buses etc., through PPP mode as envisaged under SCP as of March 2024. Instead, Tirunelveli SCL diverted the funds and procured Street sweeping machine, jet rodding machine, Hydraulic mounted machine and BOVs for Solid Waste Management for a value of ₹16.50 crore which do not come under the definition of e-vehicle for Smart urban mobility and should have been incurred from Corporation funds. Hence, this resulted in non-achievement of objectives besides diversion of SCP funds of ₹16.50 crore to Tirunelveli Corporation from Tirunelveli SCL.

(b) Tirunelveli SCL has not implemented 1.5 km of Zero Emission Zone (ZEZ) at a cost of ₹2.50 crore near temple precinct, an intermediate transport option in the form of e-vehicle to provide connectivity to sky walk which was envisaged under SCP. Thus, the objective of ZEZ has not been

achieved. In reply (December 2023), it was stated that due to paucity of funds, the same was not implemented. The reply is not acceptable since this project was already included under SCP for which allotment was made.

The Government replied (May 2025) that since the e-vehicles was already procured by the Tourism Department, the same was not implemented in order to avoid duplication. Further, it replied that in order to fulfil the citizen needs and urban priorities, works beyond ABD area and within the SCM guidelines was taken up by dropping the zero emission project.

Chennai SCL had taken up and completed projects relating to construction of MLCP, redevelopment of roads, creation of pedestrian plazas etc., in ABD area valued at ₹204.82 crore. JPV (June 2024) revealed that despite the works carried out to improve the mobility, encroachments and parking of two wheeler vehicles in the pedestrian way was noticed (**Exhibits 3.4 and 3.5**) defeating the purpose of improvement works.

Exhibit 3.4: Encroachment at Venkatnarayana Road, T.Nagar



Exhibit 3.5: Unauthorised parking at Burkit Road, T.Nagar



(Source: Joint Physical Verification)

Further, during JPV of the redeveloped roads, a sample check of one of the facilities installed viz., LED light fixtures, revealed variations in the quantity of various fixtures⁸ estimated, certified to be installed and the numbers actually installed. Further, no reasons were provided for the variations in the actual number of installations as compared to quantities certified to have been installed, though the variations had financial implications resulting in additional expenditure.

The Government's reply (May 2025) though detailed about the benefits of LED light fixture, was silent about the variation in the quantity installed.

3.3.5 Social Infrastructure - Health and Education

Health and Education are having a significant impact on overall sustainability of states and hence on cities as well. So, for a sustainable smart city and generation of human and social capital, focus on health and education is most desirable. Some of the Social infrastructure projects envisaged in the proposals (15 numbers) were (i) Smart class rooms, (ii) Digital library, (iii) e-Health systems, etc.

⁸ Single/Twin Arm Castore design pole with LED lights, 3.5 m pole with LED fixture.

The projects implemented (28 numbers) under social infrastructure included smart class, health care, etc. Out of the 28 projects, 27 were completed which included eight projects completed on time and 19 projects were completed with a delay ranging from one to 23 months. The reasons for the delay was attributed to COVID-19 pandemic, due to heavy rainfall in Tirunelveli, etc.

Further, one project viz., ‘Development of Kids play zone and Stadium’ is yet to be completed though its date of completion was November 2021. The city-wise details of number of projects are detailed in **Appendix 3.3 (e)**. The Audit Observations on the projects completed as well as those ongoing are detailed below:

(i) Smart Schools/Class

In Coimbatore SCL, an amount of ₹20 crore was allocated under ‘Education’ in the SCP. Coimbatore SCL had engaged (March 2017) an external firm for preparation of Detailed Project Report for providing Smart schools in ABD area and an amount of ₹0.19 crore was paid (November 2017) on submission of reports. GoTN on scrutiny of the submitted DPR, communicated (May 2018) their adverse comments on the quality of the DPRs and required the issue to be discussed in the Board Meeting of Coimbatore SCL along with initiation of disciplinary action on officials concerned for the failure to scrutinise the estimates submitted. Coimbatore SCL, however, deferred the project (December 2018) without any further discussion. Consequently, ₹0.19 crore paid to the external firm resulted as wasteful expenditure.

The Government replied (May 2025) that formal communication will be issued to the consultant firm to recover the payment made for the preparation of the DPR.

(ii) Health Care

Erode SCL proposed to execute projects of Health Care and Primary Health Centres through e-Health System at a cost of ₹120 crore to strengthen the health infrastructure and to develop Integrated Healthcare Information Platform (IHIP) which includes services like online health portals that are widely used to disseminate health information to promote healthy behaviours in patients and consumers. The Technical knowhow is envisaged by Centre for Health Informatics, NIHFW, Ministry of Health and Family Welfare, GoI. This was proposed to be implemented through convergence with funding under National Urban Health Mission (NUHM), SCM and allied GoTN/GoI Schemes. However, Erode SCL did not execute this sub-theme and the intended benefit was not derived by the citizens. In reply (December 2023), Erode SCL stated that since 20 Urban Wellness Centres and two Community Health Labs had been constructed under NUHM scheme and as such this project was not done under SCM.

The Government in its reply (May 2025) stated that given the extensive infrastructure and services already provided under State initiatives and the NUHM scheme, the healthcare needs of the urban population in Erode were substantially met. It further replied that dedicated healthcare projects under the Smart Cities Mission were not required, allowing the Smart City funds to be

strategically redirected towards other critical urban sectors such as mobility, sanitation, and public infrastructure.

The reply is not tenable since it denotes lack of planning at the initial stage itself and the projects now taken up should be done with citizen charter and their prioritisation.

(iii) Kids play zone and stadium

The development of Kids Play Zone and Stadium was taken up by Tirunelveli SCL on 11 November 2020 and was to be completed by November 2021. But even after a lapse of one and a half years from the scheduled date of completion, the work has not been completed by the contractor. On scrutiny of records, Audit found that the type of foundation for the creation of infrastructures was changed from Raft foundation to Pile foundation due to the soil condition. During JPV (June 2024) of the site, though Auditorium, indoor stadium, food court and administrative blocks have been constructed, construction of other works like swimming pool, basketball, tennis court, cricket practice net, etc. are still in progress resulting in non-achievement of the desired objective even after more than 37 months from the scheduled date of completion.

The Government in its reply (May 2025) stated that the project has been completed and necessary action was being taken to auction the asset. The fact however remains that due to non-auctioning, the asset was not put to use even after more than three years thereby defeating the intended objective.

3.3.6 e-Governance

A smart city enables easy interaction (including through online and telephone services) by its citizens eliminating delays and frustrations in interactions with Government. This infrastructure comprises a complex network of sensors, devices, data centres, communication systems and software applications that enable the collection, analysis and dissemination of vast amounts of data. Some of the e-Governance projects envisaged in the proposals (10 numbers) were (i) Integrated Command and Control Centre (ICCC), (ii) Creation of mobile Apps for Administrative services, (iii) Digitisation of land records, (iv) CCTV surveillance etc.

The projects implemented (17 numbers) under e-Governance included ICCC, Digitisation of Property tax system, Building permission management system etc. Out of the 17 projects, 14 were completed which included six projects completed on time and eight projects were completed with a delay ranging from one to 29 months. The reasons for the delay was attributed to COVID-19 pandemic, encroachment, delay in bio-capping work, etc.

Further, three projects viz., 'ICCC projects' and 'Digitisation of Property tax' are yet to be completed though their date of completion was November 2017 and December 2021 respectively. The city-wise details of number of projects are detailed in **Appendix 3.3 (f)**. The Audit observations on the projects completed as well as those ongoing are detailed below:

(i) **Integrated Command and Control Centre**

Cities need to establish governance processes which use technology to manage, monitor and secure all the city assets. A real-time monitoring of various infrastructure such as parking, transport and street lights that enable citizens to travel freely and make informed decisions help in long way the city to not only manage the existing infrastructure but also help in planning for the future. All this could be achieved by setting up an Integrated Control and Command Centre (ICCC).

Audit noticed the following deficiencies in the establishment of ICCC in two SCLs are detailed in **Table 3.7**.

Table 3.7: Deficiencies noticed in the establishment of ICCCs

City with Project Details	Status of project	Remarks	Government Reply dated May 2025
Madurai: Implementation of System Integrated command and Control Centre (ICCC) at an estimated cost of ₹12.31 crore (₹2.45 crore of SCM funds; ₹9.86 crore - General fund of Corporation).	The objective of ICCC was to have an integrated view of all the smart city initiatives namely Governance portal, Utility system, data centre, Smart light management Public Address System, Emergency Call Box, Smart Sensors, City Surveillance System at designated locations in Madurai City. The work of physical construction was completed during January 2022.	However, Audit observed that as of June 2024, only two modules viz., Grievance redressal and vehicle tracking system had been integrated with the ICCC. Further, an expenditure of ₹2.93 crore (₹2.45 crore from Smart city general fund + ₹0.48 crore from A&OE funds) has been incurred. The expenditure was incurred from SCM funds and the ULB share was not received. The reasons for non-receipt of ULB share was stated (December 2023) as paucity of funds in the Corporation. Despite incurring ₹2.93 crore, objective of integrating departments such as Solid Waste Management, fire, police etc., was yet to be achieved.	The Government replied that the Corporation plans to progressively integrate all municipal functions into the ICCC platform in subsequent phases, thereby enhancing urban governance, service delivery and overall city management. However, the reply is silent about the non-receipt of ULB share.
Tirunelveli: Integrated Command and Control Centre at a cost of ₹12.50 crore.	The project being an unplanned one was under progress as of March 2024. The work was to be completed by November 2021. The National Institute of Technology (NIT) which was the monitoring agency of this project intimated that out of 93 items to be provided, the contractor had supplied only 14 items with an expenditure of ₹2.12 crore.	The preliminary infrastructure including surveillance camera were not provided. A penalty of ₹50,000 was levied on the contractor for the delay in completion of work. This amount was also not recovered.	The Government replied that despite formal notice, there was no response from the contractor and due to this the TSCL has decided to proceed with completing the project with the assistance of NIT, ensuring completion within the available ICCC funds.

However, despite incurring huge expenditure and delay in completion of work even after a lapse of more than three years, the envisaged objective of establishing an ICCC has not been achieved.

(ii) Building Permission Management System

In Coimbatore SCL, upgradation of an existing system of automation of Building Plan Approval to facilitate the citizens to apply online building plans permission besides tracking the status of process was taken up under SCM (January 2020) for an amount of ₹1.49 crore. An amount of ₹0.30 crore was paid (December 2020) to the contractor as part payment for the initial work done. However, the work was subsequently cancelled (September 2021) on account of instructions received from the Commissionerate of Municipal Administration for switching over to Urban Tree Software (common e-Governance software for ULBs). Thus, failure of Coimbatore SCL to take into account the existing components of e-Governance software while finalising the project of Building Permission Management System resulted in a wasteful expenditure of ₹0.30 crore. Coimbatore SCL agreed (August 2024) to the incurring of the above expenditure under SCM without any useful result.

The Government in its reply (May 2025) reiterated the above reason.

(iii) Digitisation of Property Tax Assessment

Digitisation of Property Tax of all five zones of Coimbatore Corporation was taken up under SCM and entrusted to two firms at a cost of ₹2.61 crore. Based on reports submitted by the firms, expenditure of ₹1.98 crore was incurred (November 2017) for digitisation of 3,23,489 properties (against 4,81,200).

Though the project was stated to have been completed in February 2018 and put into use from April 2018, the physical progress of the project as of March 2024 indicated only 67 *per cent* completion (Audit reply termed as 76 *per cent*). Status of the digitisation furnished by Assistant Commissioner (Revenue), Coimbatore Corporation in August 2022 revealed that out of the 3,23,489 properties, only 2,19,235 properties were measured, of which only 1,30,545 property assessments were stated to have been measured correctly. Audit, however, noticed that this status was not taken into account while approving the Completion Report of the project in March 2024 wherein execution status indicates digitisation of 3,23,489 properties.

On being pointed out, Coimbatore SCL replied (August 2024) that the contracted firms had failed to complete the project and suitable action/recovery proceedings were proposed against them. It was further stated that it was difficult to determine the exact increase in property tax on account of digitisation as (i) a drone survey exercise had been piloted by the Coimbatore Corporation for identifying un-assessed or under assessed properties and (ii) on account of revised tariffs from assessment year 2022-23.

The Government replied (May 2025) that the demand for 4.81 lakh assessments, which stood at ₹154.91 crore, increased to ₹409.42 crore in 2023-24 due to

improved systems and processes thereby strengthening the financial base of the Corporation.

However, the reply is silent about the extent to which the digitisation has been implemented.

(iv) Tourism

Madurai SCL proposed to provide Tourist Plaza, Passenger Information System (PIS), web app, Wi-Fi, Surveillance and Crowd control and other IT facilities at a SCP cost of ₹130 crore. Against this, Madurai SCL constructed tourism plaza at Periyar Bus Terminal (Location 2) with information centre, Dormitory halls, restaurants, cloak rooms and toilets at a cost of ₹2.62 crore. Though the work was completed in September 2020, Audit noticed during JPV (June 2024) that the tourism plaza was not opened to public since completion and kept idle for more than three years without maintenance of the constructed facility. The specific reasons for the same was not furnished.

The Government replied (May 2025) that out of 128 commercial shops, 61 shops have been auctioned as on date and auction for the remaining shops was in progress. However, due to non-usage of the remaining 67 shops, the intended objective of earning revenue from the tourist plaza could not be achieved.

3.3.7 Sustainable Environment

A smart sustainable city is an innovative city that uses ICTs and other means to improve quality of life, efficiency of urban operation and services, and competitiveness while ensuring that it meets the needs of present and future generations with respect to economic, social, environmental as well as cultural aspects besides maintaining air quality at international safety standards. Some of the Sustainable Environment projects envisaged in the proposals (31 numbers) were (a) Restoration of lakes, (b) River-front development, etc.

The projects implemented (48 numbers) under Sustainable Environment Restoration of water bodies, Green cover facilities, etc. Out of the 48 projects, 42 were completed which included eight projects completed in time and 34 projects were completed with a delay ranging from three to 51 months. The reasons for the delay was attributed to COVID-19 pandemic, heavy rainfall in Tirunelveli, Encroachments, etc.

Further, six projects viz., all relating to development of water bodies are yet to be completed though their date of completion ranged between September 2021 and June 2023. The city-wise details of number of projects are detailed in **Appendix 3.3 (g)**. The Audit Observations on the projects completed as well as those ongoing are detailed below:

(i) Eco-restoration of lakes

Coimbatore SCL took up eco-restoration of lakes with an aim not only to clean up the lakes and address environmental and ecological issues, but also to create a new public realm around the lakes for public to visit and enjoy. Accordingly,

the rejuvenation and restoration of following lakes were taken up and completed in various phases as detailed in **Table 3.8**.

Table 3.8: Rejuvenation and restoration of lakes taken up under Coimbatore SCL

Sl. No.	Project Name	Project completion date	Expenditure incurred (₹ in crore)
1	Lake Rejuvenation and Renovation – Valankulam Lake	31-12-2023	114.05
2	Lake Rejuvenation and Renovation – Periyakulam Lake	31-12-2023	100.34
3	Lake Rejuvenation and Renovation – Kurichi Lake	31-12-2023	42.62
4	Lake Rejuvenation and Renovation – Selvachinthamani Lake	25-05-2022	30.52
5 & 6	Lake Rejuvenation and Renovation – Selvampathy & Kumarasamy Lakes	01-05-2023	31.03
7	Lake Rejuvenation and Renovation – Krishanampathy Lake	01-05-2023	19.32
Total			337.88

(Source: Details furnished by Coimbatore SCL)

In this regard, the following observations are made based on scrutiny of files and JPV (July 2024) undertaken by Audit:

One of the conditions specified by HPPSC, while approving the above projects, was establishment of tertiary treatment plant with sufficient capacity with an aim to ensure non-degradation of stored water. Further, it was also instructed that Coimbatore City Municipal Corporation should provide details of water channel connected in each lake/condition of such channel/details of flow of water into all such channels leading in the lake/outflow of water in lakes on the downstream/detailed network of drains etc.

Audit observed that Waste Water Treatment Plants (WWTP) were not established in four⁹ out of the seven lakes taken up for restoration. During JPV (July 2024), it was noticed that the WWTP established in Selvachintamani lake was non-functional (**Exhibit 3.6**). Further, untreated water flowed into the lakes viz., Kurichi lake, Selvachinthamani lake and Kumarasamy lake etc., (**Exhibits 3.7 and 3.8**).

Exhibit 3.6: WWTP at Selvachinthamani lake not functional

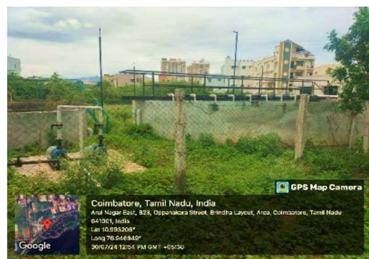
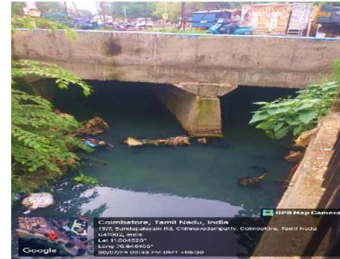


Exhibit 3.7: Raw sewage flowing into the Kurichi lake without any treatment



Exhibit 3.8: Untreated water flowing into Kumarasamy lake



(Source: Joint Physical Verification)

⁹ Kurichi Lake, Selvampathy & Kumarasamy Lakes and Krishanampathi Lake.

The Government in its reply (May 2025) stated that all the WWTPs in the lakes were since constructed and functional and plays a vital role in maintaining water quality and eco system.

Further, removal of water hyacinths in eight lakes was taken up and executed as a separate project at a cost of ₹4.43 crore. However, Audit noticed that this item of work was also included as a separate item in execution of the restoration works of lakes. However, during JPV it was noticed that water hyacinths had proliferated (**Exhibits 3.9 and 3.10**) over the lake surfaces in large parcels resulting in blocking of weirs and leading to degradation of aquatic eco-system due to depletion of dissolved oxygen.

Exhibit 3.9: Kumaraswamy lake filled with water hyacinth



Exhibit 3.10: Selvachinthamani lake filled with water hyacinth



(Source: Joint Physical Verification)

After this was pointed out, the Government replied (May 2025) that amphibian machinery has been procured and deployed to effectively weed out water hyacinth, ensuring cleaner and more sustainable water bodies.

Exhibit 3.11: Shops at Selvachinthamani lake



Exhibit 3.12: Food Plazas at Valankulam Lake



Exhibit 3.13: Food court at Periyakulam lake

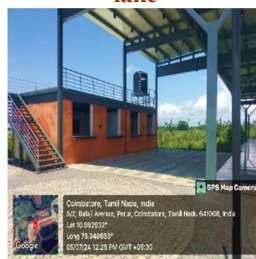


Exhibit 3.14: Craft Bazaar at Periyakulam lake



(Source: Joint Physical Verification)

Also, the works relating to rejuvenation and restoration of lakes were stated to have been completed and put into use during May 2022 to December 2023. However, during JPV, it was noticed that facilities created (food plazas, craft bazaar, shops etc.) (**Exhibits 3.11 to 3.14**) were not put into use as on date (July 2024) and floating fountains installed in Kumarasamy lake at a cost of ₹0.60 crore was found to be non-functioning.

Further, the provision to include the cost of Operation and Maintenance (O&M) for five years in the estimate as directed by TUFIDCO was not done in the contract agreement. This had resulted in lack of maintenance of the restored

spaces around the lakes (**Exhibits 3.15** and **3.16**) rendering the walkways and cycling tracks covered by overgrown weeds creating an unpleasant atmosphere.

**Exhibit 3.15: Poor maintenance of
Selvachinthamani lake**



**Exhibit 3.16: Poor maintenance of
connecting bund of Selvampathi lake and
Kumarasamy lake**



(Source: Joint Physical Verification)

Coimbatore SCL replied (August 2024) that the O&M contract integrating O&M and leasing of commercial placed on revenue sharing basis have been finalised (February 2024) and the projects are being taken over in phased manner. The delay in finalising the O&M and leasing contracts had resulted in the infrastructure created being in state of disuse leading to lack of maintenance and loss of potential revenue.

The Government in reply (May 2025) while highlighting about the appointment of a dedicated contractor for operation and maintenance is silent about the utilisation of the facilities created.

Tirunelveli SCL had not executed the Restoration of Nainar lake project which involved de-silting & dredging, stone pitching of banks and storm water re-use at a cost of ₹36 crore through PPP mode (₹20 crore) but implemented the Nainar Lake front development project at a cost of ₹25.78 crore out of grants without the approval of PWD. Audit further noticed that Tirunelveli SCL had not availed the benefit of ₹18.04 crore under National Lake Conservation Plan (NLCP), a Centrally Sponsored Scheme implemented by MoEF&CC which exclusively aimed at restoring the water quality and ecology of the lakes.

Further, due to non-implementation of De-centralised water treatment plant of one MLD at ₹2 crore as per SCP, the untreated water had been channelised to Nainar lake which affects the environmental flow.

The Government replied (May 2025) that PWD clearance has since been obtained and is actively pursuing financial support and subsidies under the NLCP. The Government further stated that all untreated water are diverted to nearby STPs and only clean rainwater runoff are allowed to enter the lakes.

The reply is however silent about the non-implementation of decentralised water treatment plant.

It was also noticed that Tirunelveli SCL has not implemented the project of Restoration and development of Thamirabarani river channel by strengthening bunds, green open space along the river canal, water walkway and commercial kiosks etc., at a cost of ₹116 crore through Grant, Convergence and PPP mode

(Ratio of ₹61 crore: ₹15 crore: ₹40 crore) as per SCP. Instead, it had implemented the project of Beautification of Thamirabarani River from SCM grants with an expenditure of ₹10.02 crore as of March 2024. During JPV (June 2024) it was found that the river land was not only encroached by way of raising concrete structure for the provision of parking vehicle and foot over bridge but also the course of the river was blocked contrary to the conditions put forth by the Public Works Department while granting permission. This affected the environmental conditions of the flow of river. Thus the delay in completion of work resulted in non-fulfilment of the objective of creating an efficient and durable infrastructure for the beautification of the river Thamirabarani.

The Government in its reply (May 2025) stated that all the necessary clearances and approvals from the PWD for the construction of foot over bridge has been obtained and further stated that the environmental assessments were strictly adhered to, ensuring the river ecology and hydrology not getting affected.

(ii) Green Cover facilities like footpath, Cycle Tracks and Landscaping with Greenery (Arterial Roads and other roads)

Erode SCL proposed to execute the project of Integrating Road Network Re-design by incorporating standards for footpaths/cycle tracks, greenery and landscaping, utility ducting and storm water drain integration with requisite gradients in line with the area's topography at a cost of ₹50 crore for Arterial Road and ₹33.75 crore for other roads as per SCP. Against this, Erode SCL executed projects worth ₹25.67 crore towards green space development in Arterial Roads and ₹2.40 crore in other roads though footpath and cycle tracks were totally ignored.

The Government in its reply (May 2025) stated that footpaths have been constructed along with landscaping initiative in three roads to enhance urban aesthetics and provide shade and greenery for pedestrians. Further, it stated that utility ducting system have been integrated to facilitate safe pedestrian movement. It was also replied earlier (December 2023) by the Erode SCL, there were no space for cycle tracks. The reply indicates that there was no planning even while taking an alternative projects and it is also silent about the developments in the other roads.

3.3.8 Other Projects

The city-wise details of number of projects proposed (26 numbers) and implemented (71 numbers) are detailed in **Appendix 3.3 (h)**. The other projects implemented included Construction of markets, shopping hubs, improvements to stadium/convention centre and tourism development works, etc. Out of the 71 projects, 66 were completed which included 24 projects completed on time and 42 projects were completed with a delay ranging from one to 42 months. The reasons for the delay was attributed to COVID-19 pandemic, heavy rainfall in Tirunelveli, etc.

Out of these five projects viz., ‘construction of markets including providing amenities in three cities’ are yet to be completed though their date of completion ranged between July 2022 and September 2024. The Audit Observations on the projects completed as well as those ongoing are detailed below:

(i) Market Construction/Improvements

Audit noticed the following deficiencies in the market construction/improvements in four SCLs are detailed in **Table 3.9**.

Table 3.9: Deficiencies noticed in the market construction/improvements

City with Project Details	Status of project	Remarks	Government Reply dated May 2025
Erode: Construction of Vegetable Market at a cost of ₹14.48 crore.	The work was completed in February 2023. However, the market was not put to use for the benefit of the public (July 2024).	During JPV (July 2024), it was noticed that (i) EB connection was not provided, (ii) Gates were not installed at entry and exit points, (iii) Open drainage was provided posing health hazard to public and (iv) Being a vegetable market, the accumulation of vegetable waste will be huge, but bins were not provided both inside and outside.	The Government replied (May 2025) that electricity connection has been obtained and all other amenities pointed out by Audit are currently being executed using general fund of the Corporation. However, the reply is silent about the funds earmarked for this purpose from the SCM funds and the reasons for executing these amenities from the Corporation funds.
Erode: Additional works in the vegetable market such as Installation of Solar Panel, cold storage and Generator at a cost of ₹0.72 crore.	Cold storage and generator only were available and no solar panel was installed. Further, the cold storage and the generator were also kept idle since the date of installation (April 2023) due to non-functioning of the vegetable market.	Erode SCL stated that the solar panel planned for this project was very small (Two KW) and considering the energy requirement of the building, it is under proposal for enhancement to higher capacity. After obtaining approval, the solar panel of higher capacity would be installed. The reply indicates absence of proper planning in selecting the suitable solar panel for the market.	The Government reply (May 2025) did not have any specific reply in this regard.
Erode: Construction of Textile market (₹55.60 crore) and shopping hub (₹16.52 crore).	The market was put to use during May 2022.	Out of the 509 shops constructed, 279 numbers have only been auctioned (July 2024) and the remaining 230 numbers of shops are kept closed. Also, the shopping hub has not been put to use (July 2024) due to non-auctioning of the shops.	The Government replied (May 2025) that 293 shops have been auctioned and actively functioning and for the remaining 216 shops auction is in progress. Thus, benefit of realisation of revenue due to non-auction has not been accrued for more than three years.

City with Project Details	Status of project	Remarks	Government Reply dated May 2025
Salem: Construction of VOC market at a cost of ₹15.79 crore.	The market was completed in January 2023 has been utilised only partially (July 2024) since only 251 numbers of shops in Flower Market has been auctioned for ₹9.08 crore and 33 numbers in Meat market has not been auctioned (July 2024).	During JPV (July 2024), it was noticed that the shops in the second floor that had been auctioned for flower market was not utilised by the lessee. The vacant meat market space on the ground floor was not properly maintained and was kept in a very un-hygienic manner. In reply, it was stated that as per Revenue Section Report, the entire flower market shops had been auctioned (Ground, First and Second floor). Shops in the meat market would be put to use by auctioning the same at the earliest. Cleaning of meat market area would be carried out through Health Section of Salem Corporation.	The Government in its reply (May 2025) stated the efforts are being taken to auction the meat shops. Thus, benefit of realisation of revenue due to non-auction has not been accrued for more than two years.
Tirunelveli: Market Improvements (four projects) at an estimated cost of ₹56.56 crore.	Out of four projects only two projects ¹⁰ were completed (February/August 2023) at a cost of ₹26.25 crore and were not put into use.	The other two projects were under progress as of March 2024.	The Government replied (May 2025) that the auctioning of shops in the completed markets is in progress. However, the reply is silent about the remaining two markets.
Tiruppur: Construction of daily market at a cost of ₹29.29 crore.	The work was to be completed by December 2020 is yet to be completed (June 2024).	Due to non-completion of construction of daily market depriving the public of the intended benefits.	The Government replied (May 2025) that the project has since been completed and process of auctioning the commercial spaces would be undertaken after completion of additional works based on the request of the previous shop owners (prior to redevelopment). Thus, due to non-completion and non-auctioning the intended objective could not be achieved for more than four years.

¹⁰ Wholesale market and Bose market.

(ii) Improvement works to Stadium/Convention Centre

An amount of ₹2.25 crore was invested by Coimbatore SCL for creation of infrastructure facilities¹¹ in Nehru Stadium, Coimbatore with partnership between a Trust¹² on a revenue sharing basis. As per the Memorandum of Understanding (MoU), the revenue sharing pattern included an anticipated direct cash benefit¹³ of ₹2.26 crore. Further, as per the MoU, the Trust was to compensate to the extent of balance of investment not repaid to Coimbatore SCL in the five-year period ending March 2023. However, the Trust had remitted only an amount of ₹0.70 lakh (for the year 2018-19) and no further revenue was shared though reminders were issued for the same. Coimbatore SCL stated (August 2024) that the legal department of Coimbatore Corporation has initiated legal action against the Trust for recovery of amounts due.

The Government replied (May 2025) that a formal communication has been sent to Sports Development Authority of Tamil Nadu requesting appropriate action for the reimbursement of the expenses incurred under this project, given the non-utilisation and non-compliance issues from CCFC.

(a) Salem SCL decided to Redevelop 'Uncluttered Bose Maidan' (Ground) into a Creative Recreation Place like Children Play area, Open Garden Gym, Joggers rack etc., at ₹21 crore. However, as per DPR and Administrative Sanction, the project consisted of 'Re-development of the Bose Maidan into an open theatre cum exhibition centre', 'Construction of one Dias (Stage with rooms)', 'Compound Wall' and a 'Shopping Complex'. Salem SCL executed this project at a cost of ₹10.58 crore and the project was completed in April 2024. During JPV (July 2024), Audit noticed that only one shop in the ground floor of the Shopping Complex was open and the remaining shops in the three floors were found vacant. Dias has also not been put to use yet. In reply (July 2024), Salem SCL stated that the newly constructed Dias and the Maidan would be used for Government Exhibitions. Out of 76 shops in the Shopping Complex, 10 shops have already been auctioned. Action is being taken to let out the remaining shops as well.

The Government replied (May 2025) that a revenue of ₹48.26 lakh have been generated and auction for remaining 66 shops are in progress. However, the benefit of realisation of revenue due to non-auction has not been accrued for more than one year.

¹¹ Provision of two new high mast flood lights with 98 fittings and replacement of 29 fittings in existing four masts.

¹² Chennai City Football Club (CCFC) Foundation – Organisation entrusted by Sports Development Authority of Tamil Nadu to carryout development works at Nehru Stadium, Coimbatore.

¹³ Share in gate collections and fee collection from proposed Football Academy during 2018-23.

(b) Further, in Salem SCL, Re-development work of Nehru Kalaiaragam was taken up and the work has not been completed yet (July 2024). The work was to be completed by May 2021. Though an expenditure of ₹35.23 crore (March 2024) was incurred, only civil work had been completed and the electrical work was in progress (July 2024).

The Government replied (May 2025) that all the works have been completed and a revenue of ₹2.97 lakh has since been collected as rent from the beneficiaries. Further, it was also replied that for continued efficient management, auction process for leasing these assets have been initiated. Thus, the intended objective was not achieved completely even after three years from the original date of completion and benefit of revenue could not be realised due to non-auctioning of asset.

In Tiruppur SCL, an unplanned project namely ‘Construction of convention centre’ was executed at a cost of ₹53.46 crore with the objective of providing a permanent exhibition cum community hall for the benefit of business community and common public. However, though work order was issued during January 2019, the construction was started only in September 2020 due to delay occurred in handing over the site and COVID-19 pandemic. As per the agreement, the work was to be completed in 24 months, i.e. by September 2022. Though, extension of time was granted till March 2023, the work was not completed and was still in progress (June 2024) even after a lapse of 14 months from the final extension of time granted. Further, against ₹42 lakh leviable as liquidated damages for the period of delay in completion only an amount of ₹16 lakh was levied and recovered.

The Government replied (May 2025) that an amount of ₹26 lakh was levied as penalty for slow progress. Collection particulars are awaited from the Government. However, due to non-completion of the work, the intended objective could not be achieved for more than two years.

(iii) Tourism improvements

Madurai SCL executed (October 2020/April 2022) Heritage Precinct Improvement projects worth ₹18.91 crore, viz., Arrival Plaza & Heritage Bazaar building at ₹2.44 crore, revitalisation of four Chithirai Street & Meenakshi Park at ₹9.06 crore and relocation of Pudumandapam shops to Kunnathur Chathiram at ₹7.41 crore. During JPV (June 2024), Audit observed that two out of the 10 shops in Heritage Bazaar were not functioning and the unutilised shops were used as a ward sanitary section and tax collection centre. Further, the Arrival plaza completed in April 2022 was not functioning till date (July 2024). No reasons were furnished for the non-utilisation of the assets created.

The Government replied (May 2025) that 9 out of 13 commercial shops in Arrival plaza and Heritage Bazaar have been successfully auctioned.

However, the reply is silent about the auctioning of shops at other locations.

Tirunelveli SCL approved the proposal of ₹105.50 crore for development of natural, cultural, recreational, indigenous Heritage Hub having number of monuments near Nellaiappar temple with creation of new tourism attractions along with development of allied infrastructure facilities including public amenities, Smart Sky Walk, information kiosks, water vending machines etc. Against this proposal, it was observed that Tirunelveli SCL implemented projects worth ₹25.70 crore as of March 2024 viz., three Traffic Signage projects and one Rejuvenating Tourism Attraction Iconic Places. But it did not take up other projects worth ₹79.80 crore viz., Smart Sky Walk Project, Tourist Information and commercial kiosks, water ATMs, public art, street furniture, monuments and sculptures, Landscaping, as envisaged in the SCP vision. Hence, the envisaged objective of Revitalisation of urban heritage, transformation of the heritage precincts & development of tourism potential remained unachieved. In reply (December 2023) it was stated that due to dense population and public opposition, the projects could not be implemented. The reply is not acceptable since the citizen consultation should have been done at the proposal stage itself and the projects should have been finalised after due planning.

(iv) Commercial Tower Development

Salem SCL executed nine projects¹⁴ at a cost of ₹57.80 crore out of grants without building plan approval and TNPCB clearance. Audit noticed that in respect of four projects¹⁵, the commercial space/shops created were not let out fully. Due to non-auctioning of the commercial space/shops, Salem SCL could not generate the intended revenue from these projects. In reply, it was stated that re-auction of the shops would be done and in respect of Commercial Complex and Fitness Centre at Kottai, all the shops were auctioned and are functioning.

The Government replied (May 2025) that (i) In commercial complex at Thirumani Nalangadi area out of 36 shops, 24 have been auctioned, (ii) Science park operates as a public education facility and is not intended as a revenue generating venture, (iii) Krishna Rajendra Chatram is currently functioning as Suramanagalam Zonal office and (iv) in Periyar Complex, two out of seven floors have been successfully auctioned with monthly rental income of ₹4.07 lakh.

¹⁴ Commercial Complexes at Thirumani Nalangadi and Kottai Old market road, Redevelopment of Multi-purpose Halls at Hanging Garden and Kottai, Science park, Redevelopment of Anna Park, Redevelopment of Krishnarajendra Chatram, Indoor stadium at Kottai, Redevelopment of Periyar Complex.

¹⁵ Commercial Complexes at Thirumani Nalangadi, Science Park, Redevelopment of Krishnarajendra Chatram and Redevelopment of Periyar Complex.

The reply is not tenable, since operating zonal office of a Corporation in a project completed out of SCM funds without realising any revenue is violation of the SCM guidelines and revenue generation was one of the objective in the creation of the science park.

(v) Air Quality Monitoring

In Coimbatore SCL, Solar Powered Ambient Environment Monitoring System (Sensors) were installed in 30 locations at a cost of ₹0.11 crore to monitor Air quality. The work was completed during July 2017 and as per the tender condition the sensors were under AMC for a period of two years after one year of warranty period. Scrutiny revealed that, none of the 30 installed sensors were functioning since December 2021 as no records providing information on any reports generated using these sensors nor regarding any analysis carried out regarding the air quality was furnished to Audit. To an Audit query on the functional status of the sensors, Coimbatore SCL replied (August 2024) that as the sensors installed had outlived the useful lifecycle, AMC was not continued and the sensors were non-functional.

The Government replied (May 2025) that the Corporation has proposed to undertake necessary repair and rectification work, in collaboration with technical institutions and innovative startups, leveraging their expertise to ensure sustained functionality and technical advancement of the monitoring systems. Thus, even after eight years, the intended objective of installation of sensors could not be achieved fully.

(vi) Construction of Truck Terminal

In Tirunelveli SCL, Truck Terminal completed during December 2019 at a cost of ₹15.22 crore was not put into use even after a lapse of five years.

No specific reply regarding the usage or otherwise of the truck terminal has been furnished by the Government (May 2025).

Recommendation 9: The Government should direct the SCLs to follow the time frame stringently so as to complete the ongoing projects at the earliest and to utilise effectively the assets created.

3.4 Other Points of Interest

3.4.1 Tendering and Contract Management

Instances of non-adherence to the Tamil Nadu Transparency in Tenders Act, 1998 (TNTTA) and Rules, 2000 (TNTTR) noticed in the projects executed under SCM are detailed below:

Coimbatore: Coimbatore SCL had entrusted (February 2019) the work of ‘Restoration and Rejuvenation of Periyakulam Lake’ to a Contractor, through tendering for a contract value of ₹51.43 crore. Scrutiny of records revealed that a component of work viz., establishment of ‘Selfie park’ was sanctioned (March 2023) by the Commissioner of Coimbatore Corporation citing Section 15 of the Coimbatore City Municipal Corporation Act. The estimated cost of above work was ₹0.60 crore and was a supplementary item over and above the agreed Bill of Quantities (BoQ) of the restoration works. The work was executed (May 2023) at a cost of ₹0.63 crore through a different Contractor selected through limited tendering, citing provisions of Section 16(a) of TNTTA. The work value, however, was included in the contract bill of the Contractor entrusted with the overall project.

Similarly, the project of ‘Restoration and Rejuvenation of Selvampathy & Kumaraswamy lake’ was entrusted (October 2019/May 2020) to a Contractor through tendering process for a contract value of ₹24.43 crore for Civil works and ₹7.22 crore for ‘Horticulture, Irrigation & Electrical works’. Additional works over and above the agreed BoQ were sanctioned (April 2023) for execution of one work, viz., installation of 15 numbers of floating fountains was estimated at ₹0.51 crore. The work was executed through a different contractor selected through limited tendering process at a cost of ₹0.60 crore. The work value was, however, included in the contract bill of the Contractor entrusted with the overall project.

In this regard, Audit observed that:

- the quoted provisions of TNTTA and Coimbatore Municipal Corporation Act pertain to procurement during calamities and emergencies declared by Government. However, the execution of the above mentioned works cannot be categorised under ‘emergent situations’.
- Moreover, though the estimated amount for execution of the above works exceeded ₹25 lakh, the works were awarded based on quotations received through limited tender process which was in violation of provisions of TNTTA.
- Further, the payment for the above stated works were not given to the contractor selected through limited tender but was paid to the respective contractors of the project in its entirety. The reasons for the same were not available in the records produced to Audit.

The Government replied (May 2025) that due tender process was followed and the lowest bid was selected to ensure cost efficiency and the responsibility for completing this component was entrusted to the original contractor.

The circumstances explained for non-adherence of TNTTA provisions was not acceptable since there is no contractual obligation with original contractor and many facilities taken up under the above projects were yet to be put into use.

Recommendation 10: The Government should ensure that the provisions of the TNTTA are followed scrupulously in future.

3.4.2 Non-availment of scrutiny by High-Powered Project Sanctioning Committee

Paragraph 4.1.4 of Annexure 5 to the SCM guidelines envisaged delegation of matters that require the approval of the State Government to the State level High Powered Steering Committee (HPSC) for Smart Cities. However, as discussed in **Paragraph 3.1.4** the decision-making powers for Smart City projects continued to be with the ULBs/Municipal Administration department and GoTN ordered (April 2017/June 2018) the financial powers for sanction of projects as detailed in **Table 3.10**.

Table 3.10: Financial Powers

Sl. No.	Project approving authority	Administrative sanction limit as of April 2017	Revised Administrative sanction limit (w.e.f. June 2018)
		(₹ in crore)	
1	Council of GCC	10.00	25.00
2	Other Corporations	1.35	3.00
3	CMA	6.50	15.00

(Source: GoTN orders)

While specifying the above financial powers, GoTN instructed for the constitution of a High-Powered Project Sanctioning Committee¹⁶ (HPPSC) to consider the appraisal report, finalise the means of finance including the quantum of loans and grants and accord Administrative Sanction for the proposals costing more than the financial limit mentioned above.

During the period 2016-2023, 14 meetings were conducted by HPPSC in which 86 proposals involving a money value (cost of projects) of ₹6,037.80 crore was submitted by all 11 smart cities. The HPPSC after examination, approved 70 projects amounting to ₹3,877.50 crore (proposed cost - ₹4,888.28 crore) with reduction in cost to the extent of ₹1,010.78 crore and five projects with an additional cost of ₹9.95 crore.

Further, Audit observed that the cities had split proposals into number of projects and/or separate packages in order to keep the estimated cost of the work within the financial limit prescribed for the sanction by the lower level (SCL/Council/CMA). Further, in 12 projects involving ₹590.58 crore, though the individual project cost exceeds prescribed sanctioned limit were not submitted to HPPSC for approval. Instead, they were taken up with the approval of the respective SCLs/ULBs. The city-wise details of projects that were split

¹⁶ Constituted with Additional Chief Secretary to Government, Finance Department as Chairman, Principal Secretary to Government, MA&WS Department as Member and Managing Director, Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited (TUFIDCO) as Member Secretary.

up and consequently not submitted for sanction of HPPSC is given in **Table 3.11** and **Appendix 3.4**.

Table 3.11: Projects not submitted to HPPSC

(₹ in crore)

City	Individual Projects		Group of Similar Projects		
	Numbers	Value	Numbers	Projects	Value
Coimbatore	4	277.48	1	2	23.61
Erode	3	84.41	1	2	21.87
Madurai	0	0	1	2	30.25
Salem	0	0	5	23	206.42
Tirunelveli	1	28.90	11	29	302.06
Tiruppur	4	199.79	1	2	41.52
Grand Total	12	590.58	20	60	625.73

(Source: Details furnished by sampled smart cities)

Thus, by splitting similar works to keep the project cost within the sanction limit, lost the opportunity of expert vetting/opinion of HPPSC and probable cost savings.

The Government replied (May 2025) that the decision to divide large-scale projects into smaller, manageable packages was driven by practical, technical, and administrative considerations aimed at enhancing the efficiency and effectiveness of project execution.

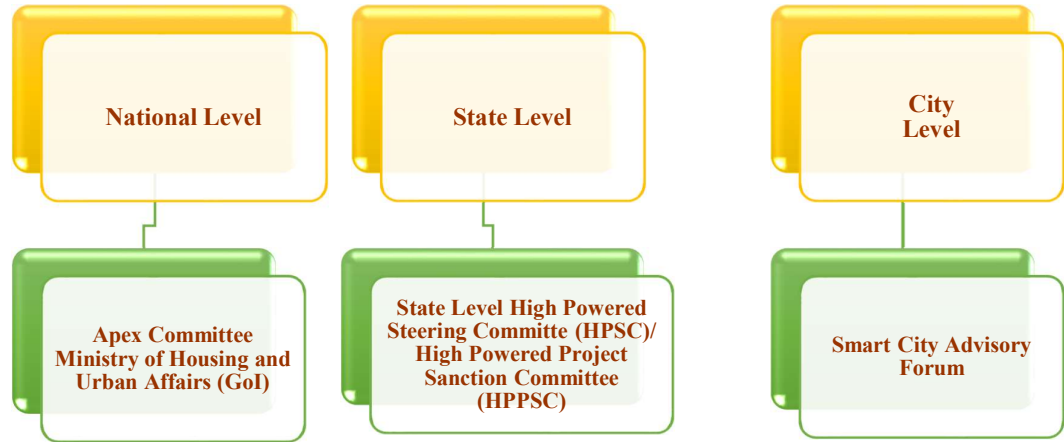
The reply is not tenable since there were delay in completion of the projects even after such split up defeating the objective of this exercise.

3.5 Monitoring

3.5.1 Monitoring Mechanism

Monitoring is a continuous process of assessing the progress of a project towards identified objectives and goals. It involves identification of relevant indicators and their data sources, data collection and real-time processing of information for reviewing the implementation of the project. Clause 13 of the Smart City Guidelines envisages monitoring at three levels as shown in the picture. The three level of monitoring mechanism (**Exhibit 3.17**) is discussed in the succeeding paragraphs.

Exhibit 3.17: Monitoring Mechanism



3.5.2 National and State Level Monitoring

The Apex Committee (AC), headed by the Secretary, MoUD and comprising the representatives of related Ministries/organisations would approve the Proposals for Smart Cities Mission, monitor their progress and release funds. Further, the AC would provide overall guidance and play an advisory role to the Mission and Coordinate across Centre, States, ULBs and external stakeholders as provided in Clause 13.1 of the Guidelines. There shall be a State level High Powered Steering Committee (HPSC) chaired by the Chief Secretary (Clause 13.2), which would steer the Mission Programme in its entirety. The HPSC will have representatives of State Government departments. The Mayor and Municipal Commissioner of the ULB relating to the Smart City would be represented in the HPSC. There would also be a State Mission Director who will be an officer not below the rank of Secretary to the State Government, nominated by the State Government. The State Mission Director will function as the Member-Secretary of the State HPSC.

Audit observed that the mission guidelines is silent about the monitoring aspect of both HPSC as well as the Mission Director. Scrutiny of records revealed that a Smart City Mission Review meeting was conducted wherein instructions on (i) to prepare a common SoP for leasing out of the commercial projects implemented under Smart Cities Mission (ii) to get the DTCP planning permission for all Smart City Projects wherever necessary (iii) for sustainability of the Smart City SPVs, feasibility of SPVs managing the commercial assets of the respective cities. However, no action in this regard were carried out by the smart cities as discussed in Paragraphs 3.1.5 and 3.2.2.

3.5.3 City Level Monitoring

A Smart City Advisory Forum will be established at the city level for each Smart City to advise and enable collaboration among various stakeholders and the CEO of the SPV will be its convener as provided in Clause 13.3 of the Guidelines. GoTN *vide* G.O. No. 112 dated 31 July 2015 directed that as per the guidelines, a City Level Advisory Forum will be established with District Collector/Commissioner in respect of Chennai as the Chairman to advise and enable collaboration among various stakeholders. The guidelines or the G.O. did not provide any periodicity for conduct of meeting.

Audit observed that though the SPVs in respect of seven cities were formed between July 2016 and June 2018, first City Level Advisory Forum (CLAF) meeting was convened only between October 2018 and September 2020. The details of CLAF meeting held in the sampled seven cities are detailed in **Table 3.12**.

Table 3.12: Details of CLAF meetings

Name of the City	Date of incorporation	Number of Meetings	Dates of Meetings
Chennai	15-07-2016	4	13-01-2020; 17-02-2020; 10-03-2020 and 07-04-2022
Coimbatore	15-07-2016	1	28-09-2021
Erode	01-06-2018	7	15-10-2018; 16-10-2019; 27-02-2020; 20-03-2020; 29-05-2020; 31-08-2020 and 30-12-2021
Madurai	02-02-2017	1	17-09-2021
Salem	01-02-2017	2	19-06-2020 and 13-09-2020
Tirunelveli	22-12-2017	6	08-06-2020; 28-08-2020; 27-11-2020; 27-10-2021; 08-12-2021 and 11-03-2022
Tiruppur	21-12-2017	7	23-10-2018; 06-03-2020; 18-03-2020; 24-07-2020; 14-10-2020; 29-08-2022 and 24-03-2023

(Source: Details furnished by smart cities)

From the above table, it could be noticed that the meetings were conducted only after three years from the date of the G.O. and in four cities it was conducted after five years. It is pertinent to mention that the original timeline for completion of the SCM was five years from the date of incorporation. In view of this, the role of CLAF in implementation has been negligible as the cities could not benefit from their advice on projects taken up for implementation as meetings were conducted at the advanced stage of implementation. Thus, the objective of interaction among the stakeholders could not be achieved. Further, the meetings as seen from the table were also conducted randomly and not periodically.

Some of the illustrative suggestions emanated from the CLAF meetings and its status are detailed below:

- (i) **Chennai:** In the fourth meeting held on 07 April 2022, it was instructed to ensure the non-functioning bio gas plant, which was completed during November 2020, to be made operational. However, action taken to put the above infrastructure into use and the details of power generation was not made available to Audit.
- (ii) **Erode:** Though installation of CCTV cameras in Parks was suggested in the second CLAF meeting (October 2019), the installation was restricted to roads and junctions and CCTV cameras were not installed in Parks. It is pertinent to mention that out of the total project cost proposed for ₹17.25 crore, only ₹1 crore was spent.

Thus, as the first meeting of the CLAF by the respective smart cities was conducted belatedly and further, the instructions/suggestions given during the CLAF were not complied, the objective of the main monitoring arm of SCM could not be achieved. It could not also be ensured whether the Review meetings conducted at the Government level discussed the recommendations given during the CLAF meetings of the respective cities.

The Government in its reply (May 2025) stated that (i) The power generated from the system is currently undergoing comprehensive testing and evaluation to ensure its efficiency, reliability and safety and the operational impacts will be compiled and documented accordingly, (ii) In respect of CCTV in parks at Erode, the same was installed under *Namakku Naame Thittam*. However, the reply is silent about the details of CLAF meetings subsequently held and the compliance of suggestions given during such meetings.

Recommendation 11: The Government should instruct the SCLs to conduct CLAF meetings at frequent intervals to ensure adequate citizens participation and also ensure implementation of the suggestions given in those meetings.



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Chennai
The 14 January 2026

Countersigned



(K. SANJAY MURTHY)
Comptroller and Auditor General of India

New Delhi
The 27 January 2026