India: Tamil Nadu Urban Flagship Investment Program

Project Name: Tamil Nadu Urban Flagship Investment Program
Project Number: 49107-003
Country: India
Project Status: Active
Project Type / Modality of Assistance: Grant
Source of Funding / Amount: Grant: Solar Powered Sewage Treatment Plant in Coimbatore, India

US$ 500.00 million

Project Rationale and Linkage

Tamil Nadu ranks first in urbanization amongst large states in India (48.5% of its population lives in cities, which is projected to increase to 67% in 2030) and is the second largest contributor to the country’s gross domestic product. Despite being a leader in many areas of manufacturing and information technology enabled services, managing rapid urbanization will be vital to sustaining its economic growth, alleviating poverty, and maintaining urban livability. Key challenges include: (i) acute infrastructure deficits with increasing demands from rapid urbanization; (ii) expanding slum populations; (iii) pollution of waterways; (iv) weak institutional capacity to plan and implement projects; and (v) mixed performance in key governance indicators, including local revenue generation, financial management, and municipal administration. Water related disasters such as recurring droughts (once in every 2.5 years) and catastrophic urban floods linked to climate change are aggravated by high water losses in older distribution networks and inadequate drainage systems not adapted to heavier monsoon rains. Addressing these complex challenges requires significant investments and deeper institutional support.

In Tamil Nadu, urban service levels remain low. As of 2017: (i) 48% of households are served by piped water; (ii) 80% of cities receive less than 80 liters of water per capita per day versus the national standard of 135 liters per capita per day; (iii) nonrevenue water (NRW) is 30% 50%; (iv) 42% of households are covered by a sewerage network; (v) wastewater treatment capacity is 43% of sewage generation; and (vi) urban drainage coverage is 50%. Low service levels are primarily the result of inadequate local finances to invest in capital expenditures and a shortage of trained staff. The program will directly support improvement in these areas.

To address the challenges of rapid urbanization, the state aims to (i) provide universal access to water and sanitation, (ii) develop _world-class_ cities, (iii) establish high-performing industrial corridors, and (iv) promote climate-resilient urban development. Tamil Nadu’s strategic documents outline programs that support capacity building; enable access to infrastructure development funds; and employ green technologies, such as solar power, to achieve sector goals. Vision Tamil Nadu 2023 estimated an urban investment requirement of $42.7 billion, including $7.5 billion for water supply and sanitation, prioritizing continuous and full coverage of services. The State Annual Action Plan, 2017–2020 identified 136 projects in 27 cities covering water supply, sewerage, and drainage infrastructure.

The Municipal Administration and Water Supply Department (MAWS) is the focal state-level department for urban development in Tamil Nadu and established the Commissionerate of Municipal Administration (CMA) to (i) support urban local bodies (ULBs) (municipalities) plan infrastructure to meet national service-level standards, and (ii) advance urban reforms set forth by India’s 74th Constitutional Amendment Act, 1992 focusing on the devolution of services delivery and revenue generation functions to ULBs. While Tamil Nadu performed well in past national reforms programs, the state wishes to improve the financial and governance performance of ULBs. To achieve this, the state recognizes the need to strengthen the CMA’s capacity to fulfill its mandate to support ULBs and monitor urban reforms, particularly in the areas of revenue generation, financial management, operation and maintenance (O&M), and the introduction of innovative approaches in the sector.

To help finance the large-scale investments in Tamil Nadu, the state will take advantage of funds from the three national flagship programs under the Ministry of Housing and Urban Affairs: (i) the Swachh Bharat (Clean India) Mission for Urban Areas, (ii) the Atal Mission for Rejuvenation and Urban Transformation, and (iii) the Smart Cities Mission. The three programs are complementary, and each highlights the need to strengthen urban institutions and governance. Nevertheless, these funding sources are not sufficient for the large funding requirements of Tamil Nadu, and the state requested help from ADB to finance water supply, sewage and drainage infrastructure in at least 10 cities within strategic industrial corridors, as well as programs to develop institutional capacity, public awareness, and urban governance.

Strategic Agendas

- Environmentally sustainable growth
- Inclusive economic growth

Drivers of Change

- Governance and capacity development
- Knowledge solutions
- Partnerships

Sector / Subsector

- Water and other urban infrastructure and services
- Water and other urban infrastructure and services

Gender Equity and Mainstreaming

- Effective gender mainstreaming

Description

The program will develop priority water supply, sewerage, and drainage infrastructure in at least 10 cities located within strategic industrial corridors of Tamil Nadu. It will support innovative pilots, including India’s first solar-powered sewage treatment plant (STP) to offset greenhouse gas emissions and enhance operational efficiency; strengthen urban governance; and build capacity of state and local institutions to enhance urban service delivery, environmental sustainability, and climate resilience.

The program will aim to develop priority water supply, sewerage, and drainage infrastructure in at least 10 cities located within strategic industrial corridors of Tamil Nadu. It will support innovative pilots, including India’s first solar-powered sewage treatment plant (STP) to offset greenhouse gas emissions and enhance operational efficiency; strengthen urban governance; and build capacity of state and local institutions to enhance urban service delivery, environmental sustainability, and climate resilience.

Impact

(i) Universal access to basic water and sanitation services achieved (Tamil Nadu Vision 2023); (ii) “World-class” cities and industrial corridors across the state developed (Tamil Nadu Vision 2023); and (iii) Water security, reduced vulnerability to climate change in urban areas, and enhanced share of renewable energy achieved (Tamil Nadu Sustainable Water Security Mission, State Action Plan on Climate Change).

Project Outcome

Description of Outcome

Livability and climate resilience in at least 10 cities in priority industrial corridors enhanced.

Progress Toward Outcome

Implementation Progress
Climate-resilient sewage collection and treatment, and drainage systems developed in at least eight cities.

Water supply systems in at least five cities improved with smart features.

Institutional capacity, public awareness, and urban governance strengthened.

### Description of Project Outputs

- Climate-resilient sewage collection and treatment, and drainage systems developed in at least eight cities.
- Water supply systems in at least five cities improved with smart features.
- Institutional capacity, public awareness, and urban governance strengthened.

### Status of Implementation Progress (Outputs, Activities, and Issues)

**Geographical Location**

Ambur, Chennai, Coimbatore, Cuddalore, Rajapalaiyam, Thoothukkudi, Tiruchirappalli, Tirunelveli, Tiruppur, Vellore

### Summary of Environmental and Social Aspects

**Environmental Aspects**

Initial environmental examinations (IEEs) were prepared for all Tranche 1 subprojects and show no significant environmental impacts. Anticipated impacts are temporary and will be adequately avoided/minimized through proven mitigation measures and sound engineering-construction practices outlined in environmental management plans.

**Involuntary Resettlement**

Resettlement Plans were prepared for all subprojects to fully assess and adequately address the following impacts: (i) potential temporary loss of income for street vendors on proposed pipe alignments, and (ii) permanent impacts in the Vellore sewerage subproject including 100% structure loss leading to relocation of 90 vulnerable affected persons (22 households). No private land acquisition is anticipated in Tranche 1.

**Indigenous Peoples**

There are no indigenous people communities present at or around the subproject sites.

### Stakeholder Communication, Participation, and Consultation

**During Project Design**

The design features include pro-poor, socially inclusive and gender responsive elements. All project ULBs endorse pro poor connection and tariff policies, though the same may vary from one ULB to the other. The project provides for individual house service connection (HSC) as part of financing.

Community participation is envisaged through information, education and communication (IEC) campaigns focusing on educating the poor and disadvantaged populations about project benefits. Capacities of community members, with special focus on women, will be strengthened in solid waste management, water conservation and other aspects related to health, sanitation and women’s safety. Water and sanitation committees will be constituted in slums with equal representation of female members. Project staff will be sensitized on socially inclusive and gender responsive urban governance and management.

**During Project Implementation**

A community awareness and participation plan (CAPP) was developed to ensure an inclusive and participatory approach to project planning, implementation and monitoring. The activities, key messages and methodology was planned with the objective to actively and effectively involve key stakeholders. Stakeholder mapping and baseline socio-economic survey was carried out to be able to identify various stakeholders and plan relevant information and communication strategies. Outreach activities involving school students, community groups and self-help groups (SHGs), etc. are also part of the CAPP activity.

### Business Opportunities

**Consulting Services**

All consultants will be recruited according to ADB’s Guidelines on the Use of Consultants (2013, as amended from time to time). There will be one Construction Management and Supervision Consultant (CMSC) for each implementing agency (except for municipalities to be assisted by TWAD) to assist it in all aspects of the TNUFIP. One agency will be recruited to support CMA for capacity building and urban reforms, participation and awareness consultant will support implementation of incentivized (IC) and capacity building and participation activities.

Each CMSC will require an estimated 2878 person-months national experts and will be responsible for the contract management and construction supervision, data collection and assessment, assisting ULBs to evaluate bids, supervising construction, monitoring and reporting to PMU on progress and compliance, assisting in the disbursement of funds and ensuring safeguard compliance in line with ADB requirements.

A governance improvement and awareness consultant (GIAC) will be recruited to assist the CMA (which is the implementing agency for governance and capacity building component and has administrative control over the ULBs) to support in implementing community participation, gender and social inclusion action plan, public awareness campaigns and incentivized governance improvement component.

The consultants will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality: cost ratio of 90:10. Individual consultants will be recruited using a bio-data technical proposal.

**Procurement**

Procurement of civil works and goods including consulting services will follow ADB’s Procurement Guidelines (2015, as amended from time to time). The procurement of consultants will follow ADB’s Guidelines on the use of Consultants (2013, as amended from time to time). A procurement capacity assessment concluded the overall procurement risk for the project is moderate. The TNUFIPSL has extensive experience in development partner-supported procurement of large works and will provide advisory support to ULBs and the CMA.

### Responsible ADB Officer

Slangen, Ron H.

### Responsible ADB Department

South Asia Department

### Responsible ADB Division

Urban Development and Water Division, SARD

### Executing Agencies

- Ministry of Housing and Urban Affairs
- Nirman Bhawan, Maulana Azad Road
- New Delhi 110 011
- India
- Municipal Administration and Water Supply Dept
- Government of Tamil Nadu Fort St. George Chennai - 600-009
- Tamil Nadu Urban Infrastructure Financial Services Ltd.
- #19, T.P Scheme Road, Raja Annamalai Puram Chennai - 600028, India

### Timetable

- **Concept Clearance**: 11 Dec 2015
- **Fact Finding**: 23 Oct 2017 to 08 Nov 2017
- **MRM**: 29 May 2018
- **Approval**: 25 Sep 2018
- **Last Review Mission**: -
- **Last PDS Update**: 25 Sep 2018

### Financing Plan

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### Loan Utilization

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### MFF Facility Concept 0105-IND

ADB

### Net Percentage

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### Cumulative Disbursements

- 766.40

### Cumulative Contract Awards

- 1,266.40
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