INTRODUCTION

The lack of adequate sanitation poses one of the greatest barriers for Tamil Nadu achieving its full development potential and ensuring high standards of public health for its citizens. While sewerage and treatment plants in larger cities have received policy attention and investments, on-site sanitation systems that are the predominant household arrangement across with the State have received limited attention.

WHAT IS FSM?

The management of fecal sludge that is collected from pit latrines, septic tanks and or other on-site sanitation facilities is called Septage management or Fecal Sludge Management (FSM). FSM includes the storage, collection, transport, treatment and safe end-use or disposal of fecal sludge.

Many smaller urban settlements are grappling with the challenge of severe deficits along the full cycle of the sanitation value chain. In order to overcome these deficits, adequate attention needs to be paid to the comprehensive management of human excreta—septage or sewage, known as FSM.

Physical infrastructure for FSM is limited in most Urban Local Bodies (ULBs), as is awareness on the subject. In this scenario, the Government of Tamil Nadu (GoTN) prioritised the full cycle of sanitation and issued Operative Guidelines for Septage Management in 2014.

At the national level, the Ministry of Housing and Urban Affairs (previously known as the Ministry of Urban Development) has emphasised the importance of on-site sanitation systems through the National Urban Sanitation Policy, 2008, the Advisory on Septage Management, 2012 and the National Policy on Faecal Sludge and Septage Management, 2017.

However, the institutions, laws, and regulations that currently govern sanitation in the State are uncoordinated, resulting in administrative fragmentation and poor service delivery. Legal and institutional arrangements take a technocratic view of the challenges in the full cycle of sanitation, rather than a public health approach where the State is the ultimate custodian of ensuring environmental sanitation. In this context, a comprehensive legal and institutional review was carried out by TNUSSP to identify key areas of improvement, and recommend suggestions for the State to achieve 100% safe sanitation and improve public health outcomes.
INSTITUTIONAL ARRANGEMENTS
The institutional arrangements that govern various aspects of sanitation in Tamil Nadu include several implementation and financial agencies at the State and ULB level.

STATE-LEVEL ARRANGEMENTS
In Tamil Nadu, the Municipal Administration and Water Supply Department (MAWS) is the principal department responsible for planning, design and execution of urban sanitation initiatives. The various government agencies within MAWS include the following:

- The Commissionerate of Municipal Administration (CMA) supervises the functioning of water supply and sanitation inter alia for all the 124 Municipalities and 12 Municipal Corporations in the State (except the Corporation of Chennai).
- The Directorate of Town Panchayats is the governing body for all 528 towns in the State and caters to all service delivery at the Town Panchayat level.
- The Tamil Nadu Water Supply and Sewerage Board (TWAD) is the main engineering agency for implementing all water supply and sewerage schemes outside the Chennai Metropolitan Area.
- The Corporation of Chennai and Chennai Metro Water are separate entities whose jurisdiction of services is limited exclusively to the Chennai Metropolitan Area (Municipal Administration and Water Supply [MAWS], 2005).

INSTITUTIONAL ARRANGEMENTS FOR SANITATION IN TAMIL NADU

Source: Adapted from MAWS Handbook, 2005
Tamil Nadu Urban Finance and Infrastructure Development Corporation (TUFIDCO) is the financing institution that deals with provision of financial assistance and guidance to ULBs, corporations, boards, authorities and parastatal agencies for their development schemes. Apart from being a nodal agency to implement government programs/schemes in the State, TUFIDCO also extends financial assistance from its own source to the ULBs and parastatal agencies for various infrastructure development schemes. Similarly, Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL), a public limited company and fund manager, provides consultancy, financial and investment advisory services to the government. TNUIFSL and TUFIDCO both guide the ULBs in assessing the financial viability of projects and assist in the development of urban infrastructure.

In addition, there are a number of special purpose vehicles that carry out specific mandates with respect to urban infrastructure. These include vehicles that belong to the Chennai River Restoration Trust, the Tamil Nadu Water Investment Company Limited, the New Tiruppur Area Development Corporation Limited and so on.

**URBAN LOCAL BODY ARRANGEMENTS**

According to the 74th Constitutional Amendment, the State and the ULBs in particular are responsible for sanitation and other municipal services such as water supply, roads, solid waste management, sanitation, street lighting and so on. There are a total of 664 ULBs in Tamil Nadu that are classified into 12 Corporations, 124 Municipalities and 528 Town Panchayats. While the administrative head of the ULBs focuses on the managerial policies and administration of sanitation programmes in the cities, the Public Health Department and the Engineering Department have major roles in executing and monitoring these policies. In addition, the town planning authority is concerned with proper planning and construction as per laws and buildings rules. The municipal cadres assigned to various urban local bodies include public health, engineering, and municipal town planning each of which is governed by its respective service rules.

**LEGAL FRAMEWORK**

The onus of ensuring safe sanitation, and thereby achieving public health goals falls within the purview of the State and its institutions. Sanitation is a state subject and is recognised in the 74th Constitutional Amendment, 1992, which devolved 18 functions to the state and ULBs. Of these, the ULBs bearing influence on sanitation are:

- Water supply for domestic, industrial & commercial purposes
- Public health, sanitation conservancy and solid waste management
- Slum improvement and upgradation
- Public amenities including street lighting, parking lots, bus-stops & public conveniences

Apart from the Operative Guidelines for Septage Management issued in 2014, current state legislations, do not adequately address issues across the full cycle of sanitation. The lack of a comprehensive law, and dedicated institutions oriented towards public health and promoting safe sanitation, add to challenges in governance.
ACTS & RULES GOVERNING SANITATION

Tamil Nadu Town & Country Planning Act, 1971

Governs master planning for existing and new regional areas; provision of water supply, drainage, sewerage and sewage disposal facilities


Governs containment, emptying and transport of fecal sludge; prescribes rules and bye-laws for the construction, operation and maintenance of toilets, sewer systems and septic tanks

Tamil Nadu District Municipalities Building Rules, 1972

Prescribes standard number of sanitary facilities required for residential and commercial buildings

Environment (Protection) Act, 1986 & Water (Prevention & Control of Pollution) Act, 1974

Enforces treatment and safe disposal/ re-use of sewage/ septage

PUBLIC INVESTMENTS IN WATER AND SANITATION

Major sources of finance for the ULBs include the state budgets, grants from the State Finance Commission, state plans, Central Finance Commission, centrally sponsored schemes, own revenue, assigned revenue and loans from multilaterals.

STATE BUDGET FOR WATER SUPPLY & SANITATION IN TAMIL NADU

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Outlay (lakh)</th>
<th>Revenue Expenditure (lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-15</td>
<td>Rs. 1,65,414</td>
<td>Rs. 77,473</td>
</tr>
<tr>
<td>2015-16</td>
<td>Rs. 1,61,867</td>
<td>Rs. 61,446</td>
</tr>
</tbody>
</table>

CENTRAL & STATE FINANCE COMMISSION BUDGETS

- The Fourth State Finance Commission (SFC)
  - Rs. 3,926,000 lakh

- The Central Finance Commissions (CFC)
  - Rs. 6,586,000 lakh
  - Rs. 1,646,000 lakh

A few key programmes and centrally sponsored schemes that promote sanitation provisions in urban areas are listed below:

**Key Programmes and Schemes for Sanitation Finance**

<table>
<thead>
<tr>
<th>Programmes / Schemes</th>
<th>Details</th>
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<tbody>
<tr>
<td>Atal Mission for Rejuvenation and Urban Transformation (AMRUT)</td>
<td>This mission provides basic services (e.g. water supply, sewerage, urban transport) to households and builds amenities in cities to improve quality of life of all people. The scheme covers 27 urban areas in the State.</td>
</tr>
<tr>
<td>Swachh Bharat Mission-Urban (SBM-U)</td>
<td>This mission aims to improve the overall sanitation situation in the country through various initiatives such as building toilets, eliminating open defecation, managing solid waste and adopting healthy sanitary practices. At present, SBM-U is being implemented in all ULBs in the State.</td>
</tr>
<tr>
<td>Integrated Urban Development Mission (IUDM)</td>
<td>This mission was launched by the Tamil Nadu State government in 2011 to provide basic infrastructure in all corporations (except Chennai), municipalities and town panchayats.</td>
</tr>
<tr>
<td>Heritage City Development and Augmentation Yojana (HRIDAY)</td>
<td>This scheme was inaugurated to improve Indian Heritage cities with efficient infrastructural facilities such as water supply, sanitation and roads, and basic amenities like toilets, signage and street lights. Kancheepuram and Velankanni are the two cities in Tamil Nadu selected under HRIDAY.</td>
</tr>
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</table>

**KEY FINDINGS AND RECOMMENDATIONS**

On the basis of the sanitation policies and programs enacted in the State, the statement of intent and political commitment of the GoTN to prioritise and address urban sanitation are commendable. However, there are some drawbacks along the full cycle of sanitation that prevent successful implementation. In order to achieve 100% sanitation and improve public health outcomes in urban Tamil Nadu, legal, regulatory and institutional reforms across the sanitation value chain are needed. Key findings and recommendations are discussed below:

1. Multiple laws and actors govern the provision of sanitation in Tamil Nadu – this impedes the achievement of goals set out in the TN Sanitation Mission, SBM and initiatives such as Namma Toilets. The State must become the custodian of sanitation by revising laws to ensure all aspects of the sanitation value chain are addressed. Service delivery institutions must be strengthened by improving the financial and human resource capacities of ULBs to undertake FSM activities.

2. Devolution of sanitation service delivery to ULBs remains unfulfilled due to the lack of funds and functionaries. Service provision still rests with parastatal agencies such as the TWAD Board, and efforts to build ULB capacity, staffing and financial allocation to implement FSM are inadequate. In addition to solid waste management, human excreta management must be accorded primacy within ULBs’ responsibility.
3. Communities make their own arrangements for FSM because of the fragmented approach in sanitation service delivery. They do this through the construction of improper on-site sanitation systems and rely on private operators to de-sludge septic tanks and dispose of fecal sludge. Although these operators are a viable option, they are often unregistered and are not governed by sufficient regulations. Such unregulated practices must be controlled by the government through the registration of private de-sludging operators and ensuring that they have appropriate licenses. In addition, de-sludging operators should be provided with personal protective equipment (PPE) to safeguard themselves while handling fecal matter. Setting up a call centre system that operates on request-based de-sludging may be beneficial to customers who can avail themselves of economical rates as well as ensure regular emptying that will prevent overflow and seepage into the environment.

4. In order to ensure safe containment structures, training should be provided to masons who construct on-site sanitation systems that follow the standards prescribed by CPHEEO. For effective implementation of legislations, FSM by-laws must be formulated to ensure that households adhere to standards for safe construction, maintenance of toilets, and on-site containment structures. In order to control violations, a separate sanitary task force should be created to monitor violations, and penalties should be increased for such violators.

5. Encouraging communities to take ownership of FSM by imparting information and knowledge geared towards changing behaviour should be another area of intervention by the State.

6. The performance of existing treatment plants can be improved by adopting three approaches namely:

(i) phased regional approach
(ii) phased all-out approach
(iii) phased equitable approach

(i) The phased regional approach recommends region-wise refurbishment and augmentation of existing treatment plants, with corresponding regulation.

(ii) The phased all-out approach follows a two-term augmentation plan in which existing plants are refurbished to their full capacity in the first term, and proposals for new plants are developed in the second term.

(iii) In the phased equitable approach, customised options based on local environmental conditions are suggested to treat fecal sludge/sewage. As an alternative to co-treatment of fecal sludge with sewage, stand-alone fecal sludge treatment plants (FSTPs) should be set up on a pilot basis. Such initiatives must be replicated and scaled up across the State.

7. In order to overcome the deficits in treatments plants, land should be allocated for setting up new plants and decanting stations within a city’s vicinity. This would encourage safe disposal by reducing the distance travelled by de-sludging operators.

8. Involvement of private players as stakeholders for construction and maintenance of treatment plants and operation of de-sludging trucks must be encouraged. The state must create an enabling environment for the private sector to undertake innovations in treatment, and create a market for new technologies.
**Phase 1: Immediate Actions Up to 1 Year**
- Identifying issues: open defecation eradication, on-site systems improvements, regulation of FS emptying, identifying new treatment technologies
- Incentivising pilot actions and mobilising community groups

**Phase 2: Medium Term Within 3 Years**
- Implementing works: sewer connections, improved on-site systems, treatment plants and co-treatment facilities
- Enforcing scheduled emptying and safe disposal
- Policy Reforms

**Phase 3: Scaling Within 5 Years**
- Setting up monitoring and evaluation systems, increasing involvement of private sector, strengthening community structures, meeting effluents standards, setting up new treatment plants and integrating with other environmental services to achieve and sustain public health benefits

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**References:**

This document is to be cited as TNUSSP, 2017, TNUSSP Practice Brief #1, Legal and Institutional Arrangements for Sanitation in Tamil Nadu, TNUSSP, Chennai.

This practice brief is based on the report titled ‘Legal and Institutional Review’. This brief has been produced as part of the TNUSSP knowledge product series. All practice briefs and the full reports are available in the resources section of the TNUSSP website.