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**EQUITABLE AND SUSTAINABLE WASH SERVICES:
FUTURE CHALLENGES IN A RAPIDLY CHANGING WORLD**

**Sustainable and equitable de-sludging services:
a Tamil Nadu case study**

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Introduction

With 70 per cent of urban households relying on onsite sanitation systems for managing sanitation in Tamil Nadu, it is important that de-sludging services are safe, accessible and affordable to all households. Without adequately located disposal facilities, de-sludging operators often resort to unsafe disposal of fecal sludge and septage into waterbodies or on agricultural land, that leads to environmental pollution and endangers public health. De-sludging services in Tamil Nadu entail a large number of partly regulated private de-sludging operators providing an on-demand service to a majority of households and establishments, supplemented in some areas by a state-run subsidised service. The Government of Tamil Nadu (GoTN) seeks to address these challenges through a regulated de-sludging model that is market-based with provisions for the urban poor. The model focuses on strengthening and regulating the existing on-demand services as opposed to introducing a new system of scheduled services. Its aim is to ensure safe sanitation along with enhanced accessibility and sustainability of services. The model is part of a larger Fecal Sludge Management (FSM) model under implementation by the GoTN. It includes setting up fecal sludge treatment plants, enabling co-treatment at existing treatment facilities, increasing access to treatment facilities using cluster approach, relying on public and private sector to deliver FSM services.

Background

In Tamil Nadu, households with on-site sanitation systems rely on an established market of over 9,000 private de-sludging operators for emptying of septic tanks. These operators are often small, family-run enterprises.

The existing de-sludging service model in place is characterised by on-demand de-sludging services that is partly regulated. Studies have shown that de-sludging frequency differs from customer to customer due to a large variance in the range of containment sizes in the state. It was also found that while de-sludging charges are mostly reasonable, in areas with difficult terrain they tend to be high due to the absence of a competitive market. Discussions conducted with de-sludging operators revealed that in the existing model of service provision, operators practice unsafe disposal due to lack of treatment facilities at reasonable distances. They cited that the high transportation cost from covering long distances to the existing treatment facilities is not viable for their businesses.

The urban poor are unable to access de-sludging services due to a variety of reasons which include issues of affordability, availability of desludging services at short notice and physical accessibility. While the ULB-run services are provided at subsidised rates, it requires time to avail these services. The de-sludging vehicles face physical constraints due to lack of space to reach households and inability to access pits and septic tanks.

Regulated de-sludging model

A regulated de-sludging model has been adopted by Tamil Nadu with the following objectives:

1. To ensure and enable proper de-sludging practices by providing more treatment facilities.
2. To reduce financial barriers to safe disposal.

3. To ensure minimal disruption to existing de-sludging businesses and protection of livelihoods.
4. To ensure worker health, safety and welfare.
5. To ensure inclusive services.

To achieve the above, a number of steps were taken. To assure provision of treatment facilities, the regulated de-sludging model leverages the State Investment Plan based on a cluster approach. After securing budgetary allocation for scaling treatment facilities, the Urban Local Bodies (ULBs) were clustered around treatment facilities within a 10 km radius (average travel distance of de-sludging operators determined through discussions with operators).

To operationalise the cluster approach, the GoTN adopted a Memorandum of Understanding (MoU) between ULB clusters to govern the process of sharing treatment facilities. It also mandated ULBs to ensure that all desludging operators within their jurisdiction are licenced and follow proper disposal of fecal sludge.

With this aim, the GoTN instituted a state-wide Standard Licence Agreement (SLA) to streamline the collection and conveyance process. Through the SLA, a de-sludging operator is mandated to obtain licence and utilise treatment facilities for disposal at nominal licence fees (USD 14 per vehicle per year) and tipping fees (USD 2 per load). This also ensures that livelihood of operators is guarded as there is no price intervention. In addition, the SLA requires operators to undertake periodic health checkup and safety training for employees. ULBs are in charge of tracking safe disposal of fecal sludge using approved GPS devices fitted in de-sludging vehicles. Additionally, an App-based approach is being developed to track fecal sludge from source to disposal, and to provide the government with a dashboard view of utilisation trends at disposal / treatment facilities across the state.

To enlarge the scope of existing de-sludging services and make it more economically accessible, there are plans to explore models for informal settlements (ULB-run/contracted or private on-demand service at subsidised rates) and CT/PTs (ULB-run/contracted on-demand/scheduled service at subsidised rates).

Learnings

The regulated de-sludging model for Tamil Nadu is in nascent stages of implementation and has the potential to be a safe and sustainable alternative to scheduled de-sludging services. For instance, the cluster approach not only encourages safe disposal, but also enables operators to expand their business from one ULB to the entire cluster. In addition, the SLA reduces financial barriers to safe disposal through nominal tipping fees. It reduces untreated fecal sludge let out to the environment. The light touch of regulation with no price intervention ensures that livelihoods of the de-sludging businesses face no disruption. The model gives precedence to sanitation workers health and welfare requirements. The model also focuses on improving equitable service provision as it explores the urban poor service delivery models that has potential to make existing services more inclusive.

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