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Learning from collective-led sanitation enterprises in two cities of Tamil Nadu

The Government of Tamil Nadu has undertaken several efforts to improve access to sanitation, especially for low-income populations, and to empower communities to meet urban sanitation goals. This has entailed efforts around waste collection, emptying, transportation, processing, treatment, and reuse or disposal by the Department of Municipal Administration and Water Supply; formation and training of women's self-help groups on entrepreneurial skills, including sanitation, under the Mahalir Thittam initiative; and empowering urban collectives across the sanitation value chain and in the operation and maintenance of sanitation facilities under the Tamil Nadu Urban Sanitation Support Program, among other initiatives.

The Swachh Bharat Mission – Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (SBM – DAY-NULM) convergence

guidelines provide urban local bodies (ULBs) with a roadmap to create livelihoods by collectivizing marginalized populations and engaging them in income generation activities. Several states have taken strides in working with various types of collectives to operate and maintain sanitation enterprises.

To understand how these initiatives are performing and draw lessons from their experiences, the International Initiative for Impact Evaluation (3ie), with support from the Bill & Melinda Gates Foundation, conducted a learning study in three states: Odisha, Tamil Nadu, and Telangana. In this brief, we document the process and learning gained from the experiences of urban collectives involved in sanitation work in two cities: Tiruchirappalli and Coimbatore in Tamil Nadu.

Key findings

- An improvement in service delivery and user uptake of sanitation facilities was reported, resulting from the involvement of community-led initiatives such as Sanitation Hygiene and Education (SHE) teams. These teams were coalesced under an all-women forum, the Women's Action for Village Empowerment (WAVE) Federation, to ensure sustained handholding support. Further, community volunteers were mobilized into committees under the Association of Water Sanitation and Hygiene to engage communities and provide monitoring support.
- Trainings were provided by technical support units and resource organizations to urban collectives on maintenance of sanitation facilities, and menstrual hygiene management.
- The federation offered a grievance-redressal mechanism during its monthly meetings. At least one member from the SHE team attended the meeting to share issues related to maintenance of sanitation facilities, following which a letter was submitted to the ULB with details of issues faced by collective members, for redressal.
- In Tiruchirappalli, pay-per-use toilet model was prevalent. However, most urban collective members reported difficulty in collecting fee from users, especially men. In Coimbatore, community-toilet usage was free, and cleaners received daily salaries from the ULB.
- Community members and families of urban-collective members acknowledged and supported the collective's engagement with sanitation work. Collective members who managed sanitation facilities reported an increase in self-confidence, efficacy, and social capital due to their association with the collectives and their resulting income.

Key recommendations

- Strengthen community engagement to create demand for and ownership of sanitation services. There is also a need to focus on improving "use" behaviors for continued usage of sanitation facilities.
- Engage influential people from the cities as ambassadors for demand creation and grievance redressal.
- Make improvements to existing infrastructure, such as adding bathing rooms in community toilets, to increase demand and revenue.
- Provide the caretaker with a separate, well-ventilated caretaker box that offers a safe space for seating and a baby-care facility.
- Orient members, through the federation, on relevant government schemes and social benefits to strengthen service-provider well-being.
- Provide training to old and new members so that they can use bank loans for building and sustaining different kinds of supplementary income-generation entrepreneurial models.
- Provide orientation to banks to make the process of opening bank accounts and accessing loans seamless for collective members.



Background

Key initiatives of Tamil Nadu in strengthening sanitation and livelihoods opportunities for its urban population

- **Department of Municipal Administration and Water Supply:** Collection, emptying, transportation, processing, treatment, and reuse or disposal of human excreta.
- **Tamil Nadu Corporation for Development of Women (Mahalir Thittam) (2012):** Formation and training of women's self-help groups on entrepreneurial skills, including sanitation.
- **Department of Sanitation, Swachh Bharat Mission (2014):** Improve coverage of sanitation.
- **Tamil Nadu Urban Sanitation Support Program (2015):** Empower urban collectives to handle fecal sludge management and operations, and maintenance of sanitation facilities. SHE teams are formed and affiliated with a city-level federation known as WAVE.
- **National Urban Livelihoods Mission and the Swachh Bharat Mission (Urban) (2018):** Convergence framework aims to empower urban collectives (groups of women, transgender people, disabled people, and vulnerable communities) through employment opportunities in sanitation enterprises.



Background

The sanitation-livelihoods ecosystem in the two cities of Coimbatore and Tiruchirappalli comprises various stakeholders, as presented in Figure 1.

In Tiruchirappalli and Coimbatore, urban collectives comprise groups of women, transgender people, and people with disabilities, aged 18–60 years, who belong to a mixed caste group – with a majority representing scheduled castes, scheduled tribes, and backward classes. However, owing to migration from different parts of the state, it is often difficult to maintain caste distinction. Two thirds of members have other sources of income such as shops, jewelry-making, domestic help services, and small businesses.

As per the SBM–NULM convergence framework, a memorandum of understanding for managing sanitation facilities is signed by urban collectives and the ULB. However, there are various models of sanitation service-provision in both cities, as summarized in Table 1. While the federation acts as an anchor for urban collectives, SHE groups expressed a need to strengthen their role in accessing resources for the enterprises. A monthly schedule for managing facilities is created to ensure all members share the workload and have an equal opportunity to earn.

Figure 1: Sanitation livelihoods ecosystem

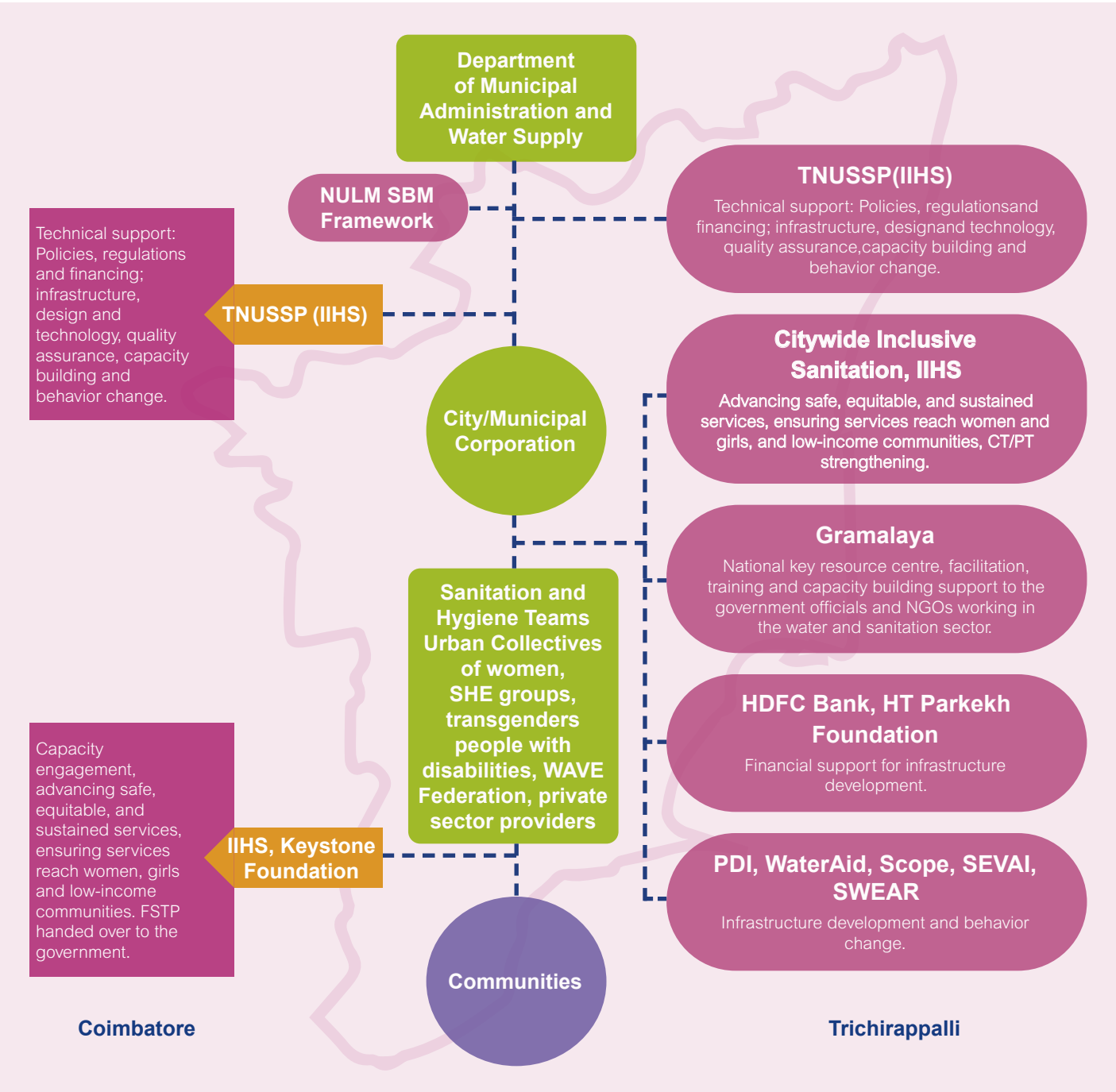


Table 1: Sanitation enterprise models

Tiruchirappalli						
Management type	ULB- managed	Urban collective is managed under the guidance of CBO/NGO	Managed through informal agreements	Private	Individuals involved in sanitation work as part of urban collective	Individual sanitation workers
Operation and maintenance	ULB-employed sanitary worker is responsible for cleaning	Urban collective members rotate to act as managers and appoint a cleaner	Functions identical to urban collective model, with oversight from elected representatives and social leaders	Caretaker and cleaner deployed by contractor	On-demand services, toilet maintenance, cleaning, desludging	On-demand services, toilet maintenance, cleaning, desludging
Usage fee	Free use	Mostly pay per use	Mostly pay per use	Pay per use	Pay per service/ monthly payment	Pay per service
Coimbatore						
Management type	Town <i>panchayat</i> - (TP, council) managed NULM group	Fecal sludge treatment plant managed by town <i>panchayat</i>	Town panchayat sanitation works	Private		Individual sanitation workers
Operation and maintenance	TP-employed non-permanent sanitation workers; group manages 11 community/ public toilets	TP-employed sanitation workers manage the operations	Regular services related to garbage collection, disposal, and cleanliness	NA	NA	Daily wage paid by the ULB
Usage fee	Free use		Free service			Free service



Our study

We used qualitative research methods including in-depth interviews, focus group discussions, and unstructured observations to understand the fidelity, feasibility, acceptability, and sustainability of collective-led sanitation enterprises. Data was collected between

November 2021 and March 2022. We collected information from two cities – Coimbatore and Tiruchirappalli – where we conducted the following:

- **Forty-six** in-depth interviews with members of urban collectives (and their families); resource organizations, and government officials;
- **Twelve** focus group discussions with urban collectives; and
- **Six** unstructured observations of sanitation facilities.

Detailed findings

In this section, we discuss the findings of urban collective-led sanitation enterprises by exploring the key themes presented in Figure 2.

Appropriateness and feasibility

Contracting

In Tiruchirappalli, a memorandum of understanding was signed by the Tiruchirappalli City Corporation and the WAVE Federation to engage in sanitation livelihoods work. The memorandum specifies the roles and conditions of engagement, including:

- Having an account in a nationalized bank;
- Maintaining records of group income and expenses;
- Maintaining sanitation facilities and ensuring cleanliness up to 500 meters surrounding the community/public toilet.
- Creating public awareness; and
- Proper maintenance of toilets so that the city corporation does not receive complaints

The memorandum specifies that the facility is owned by the Tiruchirappalli City Corporation, and the group should not claim ownership over the facility. In addition, it mentions that if maintenance is unsatisfactory, the city corporation would reserve the right to replace them one week after notification.

In Coimbatore, approximately 60 sanitation workers are paid a monthly salary by the town panchayat. A group of non-permanent sanitation workers was formed under the SBM–NULM framework; however, there is no formal contract between the urban collective and the town panchayat.

Training

Training is robust due to the active presence of organizations such as Gramalaya and People's Development Initiatives in Tiruchirappalli, and Keystone in Coimbatore in the past several years. Collective members are trained on the upkeep of sanitation facilities, menstrual hygiene management, bookkeeping, and bank-related work. Through the involvement of the Indian Institute for Human Settlements, new training modules were developed on sanitation, and workers engaged in sanitation enterprises were trained in bookkeeping, statutory audits, facility maintenance, institution building, and progress monitoring.

During the COVID-19 lockdown, collectives were trained in hygiene maintenance, the use of personal

protective equipment, desludging methods, and social norms. The Indian Institute for Human Settlements continued to provide needs-based training in smaller groups. Workers were trained on the job in various aspects of sanitation and hygiene (e.g., the importance of handwashing and cleaning toilets). A team of women from existing groups, with an aptitude for capacity development, are trained to be “community trainers” who in turn educate their community members. In Tiruchirappalli, training on menstrual hygiene management is important. This includes the usage of incinerators, proper disposal or reuse of cloth-based napkins, and management of sanitary napkins to reduce blockages in toilets.

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Fidelity

Income and revenue

Measures were taken to ensure community uptake of sanitation facilities. This was done by trying to ensure that both user fees and facility timings were convenient for users. In Tiruchirappalli, community toilets follow a pay-per-use model. Payment is decided in consonance with the residents, ward counsellor, and resource partners, and is later displayed on the sanitation facility noticeboard.

Local politicians and community leaders also wield influence in deciding user fees. It was reported that obtaining fees from users is a challenge for sanitation workers and caretakers, despite this consultation process. User fees varied across sanitation facilities from Rs. 1–5, and were often lower for residents compared to visitors and passersby. On average, each member could earn up to Rs. 2,000–4,000 a month. It was stated that the actual cost of managing sanitation enterprises differs from the monthly revenue earned (Table 2). Cleaning and maintenance costs varied according to usage, and due to vandalism and theft, frequent repairs were needed.

In Coimbatore, non-permanent sanitation workers were paid daily wages (approximately Rs. 400 per day). They were not entitled to paid leave.

They earned an average of Rs. 10,000 per month and were also entitled to a provident fund in addition to their salary.

An amount of Rs. 50–3,000 was paid as a monthly group subscription for WAVE federation membership, depending on the income of the SHE team. However, skepticism was expressed by some members about the role of the federation, as they did not see any apparent benefit from affiliation.

Most of the SHE teams also operate as regular self-help groups. They reported contributing Rs. 100–250 in monthly savings per member. Group members were also eligible to access group interloaning facilities and bank loans.

Operation and maintenance

The urban collective-led toilet facilities were operational between 4 AM and 10 PM, and managed by collective members on a rotational basis. It was decided to open the toilets as early as 4 AM based on demand from community members, especially women. Women usually visit the toilets early morning, and the change in timings increased their uptake of the facilities.

Urban collectives engaged in sanitation work did not specify plans for extending their work or expanding the scope of sanitation enterprise. However, they expressed a perceived difficulty in accessing bank loans due to the application process, lack of ideas or business models for sanitation enterprise work, fear of debt, the need to repay an existing personal loan to avail the next loan, and a lack of guarantors to secure the loan.

In addition, persistent structural challenges were observed, including insufficient space to construct a private toilet, paucity of funds for refurbishing previously built community toilets, and increased demand for toilet use. An increase in demand for toilet facilities was reported during the COVID-19 lockdown, as large numbers of people were compelled to stay at home. However, the lockdown also led to a loss of income for these communities, which had implications on their livelihoods and well-being. This often led to nonpayment of fees to community toilet caretakers, and temporary closure of toilets in many communities due to non-availability of caretakers and cleaners.

Detailed findings

Figure 2: Key themes of learning study

Appropriateness and feasibility	The extent to which an intervention can be successfully carried out within a given context
Fidelity	The degree to which the implementation of the intervention is in line with its design and intent. This includes identifying the barriers and facilitators that inhibit or enable participation in an intervention, or gains to be achieved from such participation
Acceptability and adoption	The perception among stakeholders that an intervention is satisfactory and the intention to take up the intervention
Sustainability	The extent to which an intervention can continue to be implemented over a period for long-term impact and the potential for scale-up

Table 2: Revenue and income from sanitation enterprises

Revenue	Expenditure on cleaning**	Maintenance and repairs	WAVE federation subscription	Savings per member
Rs.2,000–4,000 *7 days of work per month in shifts	Rs.150–200 per day (**products and cleaner)	< Rs.5,000 covered by urban collectives (such as maintaining leaking taps, faulty roofs, damaged doors, electricity) > Rs.5,000 covered by city corporation	Minimum Rs.50 per group/ month*** ***Fee varies as per SHE team's income	Rs.200 per month

Acceptability and adoption

Community engagement

Most members expressed a sense of ownership and responsibility towards their community as the most compelling reason for undertaking sanitation enterprise work. Members also reported support and cooperation from their family members, including spouses.

In Tiruchirappalli, a concerted effort was made to garner community support through the formation of the erstwhile Association of Water Sanitation and Hygiene committees, now known as WASHMAN committees. These were initially introduced in rural sanitation programs and later scaled to urban sanitation programs. To date, 1,000 volunteers (250 in each of the four zones of Tiruchirappalli) have been trained to advocate for the uptake of sanitation facilities, with ten men and ten women in each committee.

Acceptance by community and family

In Tiruchirappalli, many women reported a sense of validation from the larger community and confidence resulting from their work in sanitation collectives. However, challenges in the workplace persisted: women members often faced harassment during collection of user fees, and miscreants and men under the effect of alcohol frequently misbehaved with women caretakers inside the sanitation facilities. Women's household responsibilities apparently remained the same as before. In some groups, male family members supported collective members in depositing money in the bank and coordinating repair work with the ULB.

Income was reported to be significant and sufficient for managing household expenses, including children's education and acquiring items of sustenance. For members covered under existing government pension and social benefit schemes, this income acted as a "top-up"

benefit. There was also an observed positive shift in people's perceptions around engaging in sanitation work, and women reported a superior sense of agency and collective efficacy. However, this occupation is not viewed as an aspiration for their children.

Sustainability

While the Indian government's SBM program has dramatically improved toilet construction and use, there is a need for continued efforts to sustain these gains. Collective members managing the sanitation facilities believed that improving existing infrastructure (e.g., adding bathing rooms to community toilets) will improve demand and help them to generate increased revenue. Also, there is a need to focus on improving "user" behavior for continued usage of sanitation facilities. Towards this, there is a need to identify and address the various determinants of sanitation behaviors among users and the larger community.

Recommendations

- A group of influential community members can be appointed by the ULB as brand ambassadors of collective-managed sanitation facilities. They can act as a bridge between the public, the ULB and the collectives to raise and discuss issues and grievances across stakeholders. They can also help in creating awareness and facilitating buy-in from the public for collective-run sanitation facilities, while also conducting social audits for improved facility monitoring.
- Providing a security box, with proper ventilation and a baby care facility, can be helpful for women as it provides a safe space and can be an incentive to monitor the facility for longer hours. Also, most cleaners and caretakers reiterated the need for mandatory sick and maternity leave; the ULB can include these provisions in contract guidelines.
- Providing orientation to banks is required to make the process of opening bank accounts and accessing loans seamless.
- With adequate marketing and branding, products sold by the collectives in Tiruchirappalli such as phenyl, soaps, and sanitary pads have the potential to be financially viable. Products produced by collectives can be sold near community toilets for revenue generation. Where additional space is available, community toilets can also sublet the area for businesses and lease wall space for advertisements.

About this learning summary

This brief summarizes findings from the learning study conducted in Tiruchirappalli and Coimbatore to understand the experiences of urban collectives engaged in sanitation-linked livelihoods. The study was conducted by 3ie with support from the Indian Institute of Human Settlement and funding from the Bill &

Melinda Gates Foundation. For more information, please visit <https://www.3ieimpact.org/our-work/sanitation-linked-livelihoods-program>

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