



Learning from collective-led sanitation enterprises in two cities of Telangana

Urban sanitation is a key development challenge to quality of life, particularly among urban poor households. With increased growth in the urban population, the demand for improved sanitation is continuously rising. The Indian government has, over the years, launched several initiatives to enhance urban sanitation access.

The Swachh Bharat Mission and the Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (SBM – DAY-NULM) convergence guidelines, launched in 2018, provide urban local bodies (ULBs) with a roadmap to create livelihoods by collectivizing vulnerable groups and engaging them in sanitation enterprises. Several states have taken strides in working with various types of collectives to operate and maintain sanitation enterprises and to provide sanitation service delivery.

To understand how this initiative works, and draw lessons from the government's efforts, 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.

The Telangana government is pioneering the engagement of collectives¹ comprising women, transgender people, and people with disabilities in the sanitation value chain, specifically in managing community and public toilets (CT/PTs) in urban areas. This brief summarizes learning from two cities – Nizamabad and Warangal – while providing key takeaways that can provide insight into Telangana's experience with collective-led CT/PTs.

Key findings

- Sanitation enterprises provided a stable source of income for collective members, even during the COVID-19 lockdown.
- Traditionally, sanitation work has been performed by people from marginalized communities. Despite better working conditions, some caste-based perceptions have been reinforced. In Nizamabad, facilities are staffed by the Mehtar (scheduled caste) community, which is traditionally associated with sanitation work. In Warangal, facility cleaning is outsourced to members of scheduled castes.
- Collectives comprising transgender people and people with disabilities view the work as relatively aspirational compared to women's collectives.
- The contracting process followed by ULBs is not uniform. Contracts are influenced by factors such as credit management ability, proximity of the collective to a facility, and acquaintance with the ULB. The former two factors were visible in Warangal, while the latter was seen in Nizamabad.
- A separate caretaker box provides a seating space to rest during long shifts. Several CT/PT caretakers in Warangal viewed this as a job incentive.
- Payment delays occur due to complex bureaucratic procedures in ULBs.
- Cleaning and repair costs are increasing due to improper usage, recurring incidents of damage caused by users, and an increase in the price of cleaning materials.

Key recommendations

- Update contracting guidelines to include a clause on prioritizing and promoting collectives of the most marginalized groups, including transgender people and people with disabilities.
- Develop a criteria checklist for collectives that ULBs can use to ensure fair and transparent contracting. Train collectives, caretakers, and cleaners of facilities to understand and follow the criteria.
- Promote the presence of the technical support unit (TSU) across cities for handholding and capacity building of collectives, particularly during the initial months.
- Install a security box for the caretaker, such as the one in Warangal, across other cities. This can incentivize sanitation workers to stay longer hours to manage and monitor the facility.
- Focus on creating systems for timely payments by integrating a separate window for CT/PT caretakers to upload bills and invoices in the Pattana Pragathi Toilet Monitoring System (PPTMS) app.
- Conduct information-awareness interventions with active community involvement for improved user behavior.



Background

Key initiatives of Telangana government to promote the urban collective-led sanitation enterprise model

■ **Mission for Elimination of Poverty in Municipal Areas (MEMPA) (2007):** Envisions poverty alleviation and empowerment of urban poor through formation and training of collectives on entrepreneurial skills including sanitation. MEMPA is part of the Department of Municipal Administration and Urban Development.

■ **Swachh Bharat Mission (SBM) (October 2014):** Launched by the Indian government to achieve an open-defecation-free India with a five-year timeline to provide universal access to toilets.

■ **Swachh Bharat Mission (Urban) and Deendayal**

Antyodaya Yojana-National Urban Livelihoods Mission (SBM – DAY-NULM) convergence guidelines (March 2018): Aims to empower urban collectives (women, marginalized communities including transgender people, people with disabilities) through employment opportunities in sanitation and waste management value chain, including solid and fecal sludge.

■ **Telangana State Fecal Sludge and Septage Management policy (September 2018):** The Government of Telangana released its own state policy in line with the national policy (February

2017) to adopt and strengthen an integrated approach for addressing sanitation issues.

■ **Pattana Pragathi (urban development program) (February 2020):** Infrastructure development and urban beautification initiatives, including construction and maintenance of public toilets and municipal solid-waste-management processing plants.

■ **Telangana state guidelines (July 2020):** Engages collectives in operation and maintenance of CT/PTs and follow-up capacity building of ULB officials.



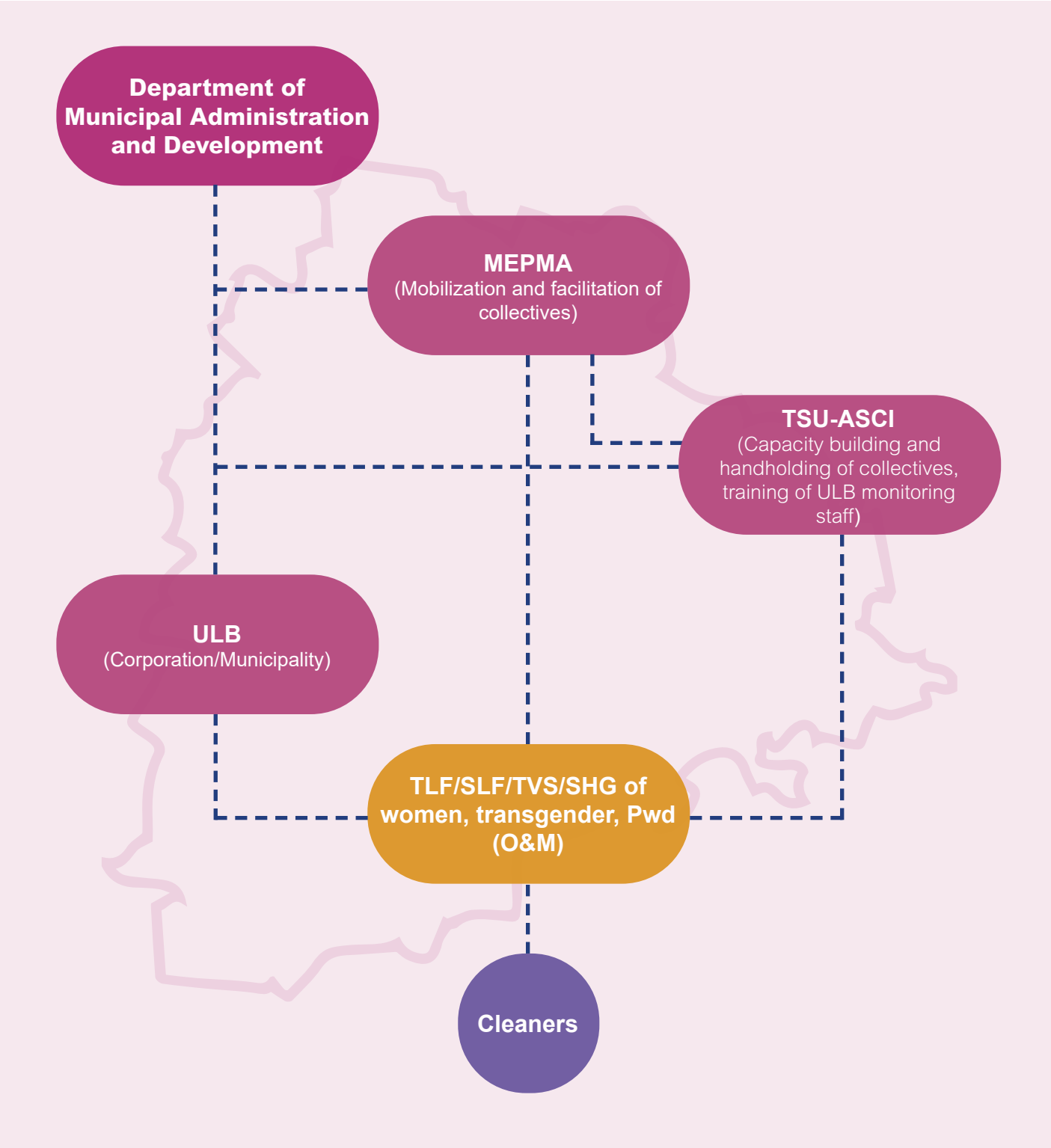
Background

The sanitation-livelihoods ecosystem in the two cities of Nizamabad and Warangal comprises the government, TSU i.e., the Administrative Staff

College of India (ASCI), urban collectives, and cleaners, as presented in Figure 1.

There are various models of sanitation service provision in both cities, as summarized in Table 1.

Figure 1: Sanitation livelihoods ecosystem

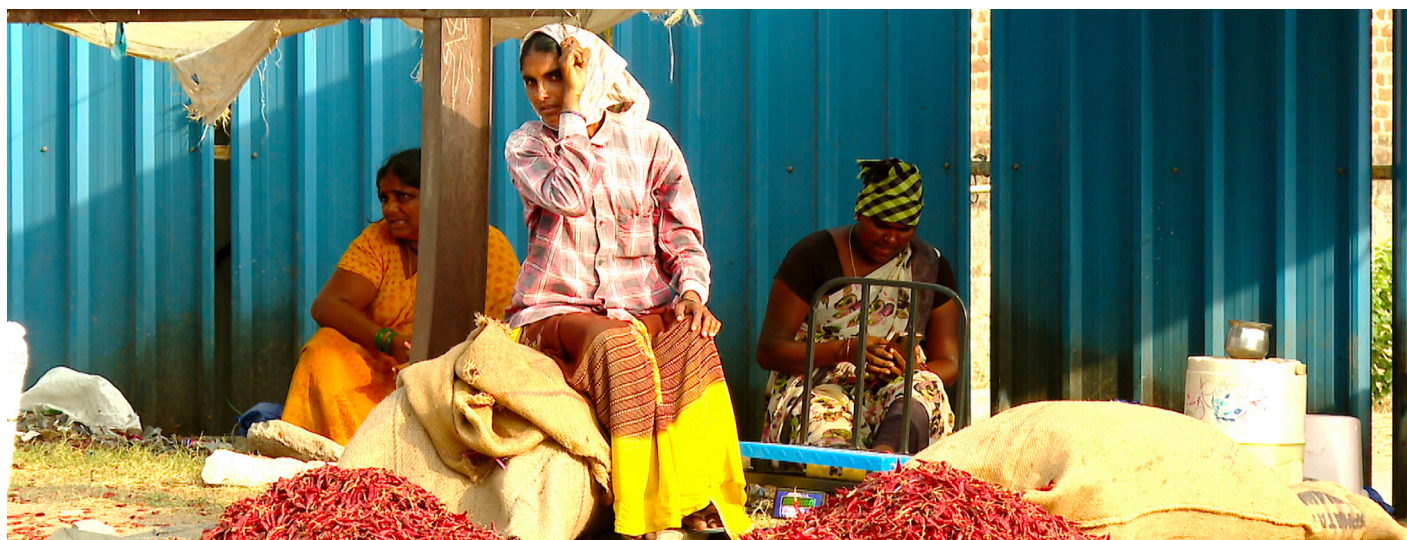


Note: TLF = town-level federation; SLF = slum-level federation; TVS = town vikalangula samakhya (town-level federation of people with disabilities); PwD = people with disabilities.

Table 1: Models of sanitation service provision

Enterprise	Management type	Operation and maintenance	Revenue	Usage fee
Community toilets / public toilets	Pattana Pragathi collective-managed	Collective members or sanitation workers are hired by the collective.	The ULB paid Rs.2,500 per seat per month as compensation to the collective.	Free use
SHE toilet (public toilets exclusively for women)*	Pattana Pragathi collective-managed	Collective members or sanitation workers hired by the collective.	The ULB paid Rs.2,500 per seat per month as compensation to the collective.	Free use
Mobile toilet (toilet on wheels; a bus redesigned into a bio-toilet. The back is used for the sale of sanitation products produced by collectives) *	Maintained by the ULB	Driver hired by the ULB	The ULB pays the driver's salary. Profits generated through the sale of sanitation products is retained by the collective.	Free use
Loo café (public toilet with added space for commercial use)*	Pattana Pragathi collective-managed	Collective member	The ULB pays no compensation to the collective. Revenue generation is through the sale of eateries and articles at the café.	Free use
Community toilets / public toilets	Public-private partnership: private contractor managed	Caretaker and cleaner deployed by the contractor	Revenue is generated through the collection of user fees.	Pay per use

*SHE toilets, mobile toilets, and loo cafes are novel facilities and fewer in number than CT/PTs.



Our study

We used qualitative research methods, including in-depth interviews, focus group discussions, and unstructured observations of sanitation facilities, to understand the feasibility and sustainability of collective-led CT/PTs between November 2021 and March 2022.

We focused on two cities, Nizamabad and Warangal, where we collected information through:

- **Sixty-five** in-depth interviews with members of urban collectives (and their families), resource organizations and government officials;
- **Four** focus group discussions with urban collectives; and
- **Twenty** unstructured observations of sanitation facilities.

Detailed findings

Appropriateness and feasibility

Contracting

In July 2020, ULBs handed over the sanitation facilities to collectives for operation and maintenance (O&M) under the Pattana Pragathi program.

While the contracting guidelines are uniform, every ULB has adopted unique execution processes. A one-year contract is issued with an annual renewal, which depends on how the collectives manage the facility's O&M.

In Warangal, ULBs signed contracts with slum-level federations (SLFs) rather than self-help groups (SHGs), as coordination and regular monitoring of facilities is easier through a smaller cohort of SLF leaders. The SLFs further identified SHGs interested in taking up facility O&M. One SLF managed two to three facilities, and one SHG managed a single facility.

The key criteria for contracting sanitation facilities to collectives were as follows:

- Proximity of the SLF/SHG to the sanitation facility;
- Good credit management ability of the SLF;
- In Warangal, preference was given to collectives with transgender people, people with disabilities, or members traditionally involved in manual scavenging; and
- In Nizamabad, access to information on the contracting process, relationship, and extent of networking with the ULB played a pivotal role in issuing contracts. The Mehtar community was predominantly involved in sanitation work.

Training

ASCI provides training to collectives on the maintenance of sanitation facilities, documentation, and recordkeeping. It also provides training to ULB staff on monitoring of sanitation facilities. Due to the vibrant

presence of ASCI, more frequent training (both online and offline) were held in Warangal compared to Nizamabad.

Monitoring

The sanitation inspector and jawans (*junior monitoring staff*) appointed by the ULBs visit the sanitation facility twice a week. They photograph different parts of the facility and upload these pictures to the PPTMS mobile app, developed by ASCI. The commissioner and director of municipal administration reviews the maintenance of facilities through PPTMS every week. Stakeholders including caretakers, ULB officials, and TSU members use WhatsApp® as leveraging technology for faster communication and grievance redressal. The weekly citizens' grievance redressal meeting with the ULB commissioner in Warangal provides a platform for citizens (users) to raise grievances related to sanitation facilities.

Figure 2: Key themes of process documentation

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

Detailed findings

Fidelity

Operations and maintenance

While the collectives secure contracts, the facility O&M is managed mainly by individual caretakers; this is a role played by different individuals in different collectives. In Warangal, resource persons (in women’s collectives), office bearers, and executive committee members (in collectives with transgender people and people with disabilities) are caretakers. While caretakers from collectives with transgender people and people with disabilities clean the facilities themselves, those from women’s collectives largely hired cleaners, usually from scheduled caste communities. In Nizamabad, members from the Mehtar community work as caretakers and cleaners on behalf of the collectives. At some facilities, subcontracting the cleaning work has led to declining service quality.

Most facilities were open and regularly maintained during the COVID-19 lockdown. Caretakers and cleaners were considered frontline workers and received free vaccinations from ULBs. A separate caretaker box close to the facility provides safe seating space for caretakers (particularly women).

Caretakers in Warangal regularly update record books of facilities’ attendance, hygiene, footfall, and expenditure. Record books in collectives with people with disabilities and transgender people were better maintained than those in women’s collectives, as the former were primarily present at the facility during

the day and could record the footfall and hygiene. In Nizamabad, the books were maintained mostly by the Mehtar community leader, who acted as a proxy caretaker for collectives.

Data from the PPTMS show that collective-managed toilets are performing well and on par with public-private partnership toilets. While both collective-led and private facilities were observed to be well-maintained in Warangal, private facilities in Nizamabad were cleaner than collective-led facilities. It can be concluded that the active presence and handholding by the TSU (in Warangal) ensured effective bookkeeping and well-maintained sanitation facilities.

Income generated from the sanitation enterprise is perceived to significantly support the management of household expenses. Caretakers can earn additional income by combining it with other government benefits, including pensions for disabled people and an honorarium from the government (for resource persons of women collectives). Unlike women who were previously employed and had other sources of income, members of vulnerable groups (e.g. transgender people and people with disabilities) have found that this provides a first-of-its-kind stable employment opportunity.

Most caretakers, however, expressed that the monthly payment per seat from the ULB is delayed (for three to six months due to bureaucratic procedures) and insufficient. ULB officials, however, reported that the monthly payment of Rs.2,500 per seat is high considering the scalability

of the initiative. There are recurring expenses on damages and repairs, and the theft of items (e.g. soaps, buckets, mirrors) from the facilities. Although the ULB pays for significant repairs, reimbursements are delayed, and the caretaker must bear this expense out of their pocket initially.

Acceptability and adoption

Caretakers report recognition from the community and support from their families. However, women’s household responsibilities remain the same as before. In Nizamabad, women cleaners could travel to clean facilities only when accompanied by a male family member, and were expected to wear a veil at all times. Collectives with transgender people and people with disabilities and Mehtar community members (cleaners) value the opportunity more than women’s collectives. They see it as a good and stable vocation and a way to integrate into society. However, the occupation is not seen as an aspiration for children.

Sustainability

MEPMA has played a vital role in convening a robust network of collectives and advocating for sustainable livelihoods of collectives, at the town, city, and state levels. The promotion of the TSU across cities as a resource for handholding and capacity building of collectives in managing sanitation facilities (mainly during the initial months) has been beneficial. It is essential to support the collectives in contracting, bookkeeping, and business. Sanitation enterprises can eventually become independent and sustainable.

Table 2: Revenue and income from sanitation enterprises

Revenue	Expenditure on cleaning	Maintenance and repairs	Income
Rs.2,500 per month per seat	Rs.250–500 per month per seat	Minor repairs: < Rs.1,000 per month per facility covered by urban collectives	Rs.1,000–1,500 per month per seat
(A facility can have 2–4 seats)	(Payment for cleaner and cleaning materials)	Major repairs: > Rs.1,000 per month per facility covered by ULB (Minor repairs include fixing doors, latches, wash basins, light bulbs, purchasing buckets and mugs. Major repairs include that of borewells, water pumps, plumbing and electrical repairs)	Free use

Recommendations

- Update contracting guidelines and include a clause to prioritize and promote collectives of the most vulnerable groups, including transgender people and people with disabilities. Also, a criteria checklist for collectives, which can be used by ULBs while issuing contracts, ensures that the process is transparent and uniform across ULBs. It is essential to ensure that collective members, caretakers, and cleaners of the facilities are made aware of the criteria in these checklists through training.
- Promote the presence of TSUs across cities to assist collectives via handholding and capacity building, particularly during the initial months of their inception, in order to ensure effective bookkeeping and O&M of sanitation facilities.
- Improving facilities' infrastructure and creating behavioral change among users (towards responsible and hygienic usage) remain key focus areas. A separate caretaker box for each facility ensures a safe space for caretakers to manage the facility.
- Devise systems for timely payments – by integrating a window for uploading the bills and invoices by caretakers and cleaners on the PPTMS app – to facilitate timely invoice approval by officials and process payments on time. An in-built reminder can also be embedded into the app for each procedure.
- Ensure effective implementation of systems – such as creating a ready pool of plumbers and electricians and suppliers of low-cost cleaning materials – to support collectives in repairs and maintenance. This is essential, as mentioned in the contract.
- From a scalability point of view, although ULBs reported that Rs.2,500 per seat was a high payment, this must not be reduced. Instead, advocacy must be strengthened among ULB officials regarding the importance of paying this amount.
- Innovative models like mobile toilets and loo cafés have the potential to generate income for caretakers. However, their implementation must be accompanied by strong behavior change communication to ensure uptake of products and dispel stigma.

About this learning summary

This brief summarizes findings from a formative study conducted in Nizamabad and Warangal in Telangana to document the processes of urban collectives engaged in sanitation-linked livelihoods. The study was conducted by 3ie with support from ASCI 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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Endnotes

¹ Collectives include SHGs, SLFs, town-level federations, and town *vikalangula samakhya* (federations of people with disabilities). An SHG is a group of 10–12 women, 5–6 transgender people, or 5–6 people with disabilities. An SLF is a group of 20 SHGs. A town-level federation is a group of 25–35 SLFs. A town *vikalangula samakhya* is a group of 20 SHGs for people with disabilities.



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