

Holistic approach for improved sanitation in Warangal

Summary:

Warangal is the second-largest city in the state of Telangana with a population of over 8 lakh people (Office of the Registrar General & Census Commissioner, India, 2011). In 2015, 30 per cent of the city's population was reported to practice open defecation (OD) due to the lack of adequate IHHL, CT and PT. The city did not have any underground sewerage system and depended entirely on onsite sanitation systems (OSS) and there was no monitoring mechanism for emptying and disposal of Faecal Sludge (FS) collected from containment units. The innovative technologies and holistic approach adopted by the Greater Warangal Municipal Corporation (GWMC) in 2016 has been key in achieving and sustaining 100% ODF status and will be a benchmark in reaching the ODF+/++ status.

Objectives:

- To adopt a holistic approach combined with innovative technologies to improve sanitation services.
- To engage with government on ground data and involve the private sector for innovative technologies to improve sanitation services (India Sanitation Coalition, 2011).

Key Stakeholders:

- Greater Warangal Municipal Corporation (GWMC)
- Administrative Staff College of India (ASCI)
- Bill & Melinda Gates Foundation
- UK Department for International Development (DfID)
- Citizens of Warangal

Implementation strategy:

- Septage Management Guideline and institutionalising FSSM: GWMC with support from Administrative Staff College of India (ASCI) developed the Septage Management - Regulations in 2016. It was the first city in the country to implement septage management regulation across the sanitation service chain for effective FSSM. The regulation entails guidelines for construction of septic tanks, conversion of insanitary toilets to sanitary toilets, septic tank desludging, transportation and treatment of septage etc. GWMC also formed a Non-Sewer Sanitation (NSS) cell within the municipality to plan, design and monitor sanitation-related interventions in the city (ASCI, 2016).
- Mechanised Desludging: Desludging activity in Warangal is carried out by private desludging operators as the ULB does not own any desludging vehicle of its own. To regulate 100 per cent mechanised desludging, and safe disposal of faecal sludge, GWMC enforced a standard license agreement for private desludging operators and uses a GPS-based monitoring system (FSM Tracker) to track their live location. Additionally, a sanitation helpline known as S-line was established as a call centre for desludging requests and for sanitation-related complaints and redressal (regarding prevalence of insanitary situation around the house).
- Public Private Partnership (PPP) for Faecal Sludge Treatment Plants (FSTPs): In 2017, a pilot 15 KLD FSTP based on pyrolysis was constructed on a PPP model. While GWMC provided land for the construction of the FSTP, BMGF funded the CapEx. Private partner Tide Technocrats is responsible for the O&M of the FSTP. Another 10 KLD FSTP was constructed under the Corporate Social Responsibility (CSR) initiative of *Banka Bioloo*. Moreover, all the public toilets (PTs) in Warangal are managed by private players via PPP model and GWMC collects citizen feedback on PT through punching machines with 1-5-star ratings. PT monitoring app maintained by municipality is used for weekly monitoring. The PPP has played a major role in ensuring investment, effective resource management and providing sustainability (ASCI, 2016).
- SHE Toilets: GWMC constructed SHE toilets specifically designed only for women. It started off as a pilot project in Warangal in the year 2017. It has now become a major policy measure and a document has been released for the entire state of Telangana (Reddy P. L., 2019).

Resource Utilization:

In the year 2017, ASCI set up a small Technical Services Unit (TSU) for implementing “City Wide Delivery of Sustainable and Equitable Sanitation Services in Warangal” with the support of the Bill and Melinda Gates Foundation (BMGF) and the UK Department for International Development (DfID). As part of the SBM, the focus of the TSU was to primarily aid the city on Individual Household Latrine implementation. Under the same project, a state level Project Management Unit (PMU) and city level Project Implementation Unit (PIU) were also set up within GWMC. A non-sewer sanitation (NSS) cell was established in 2018 at the state-level to manage and operationalise NSS in 72 cities. Additionally, a City Sanitation Task Force comprising multiple stakeholders including civil society groups was established for dialogue and participation by the GWMC (WaterAid, 2019).

Impact/ Outcomes:

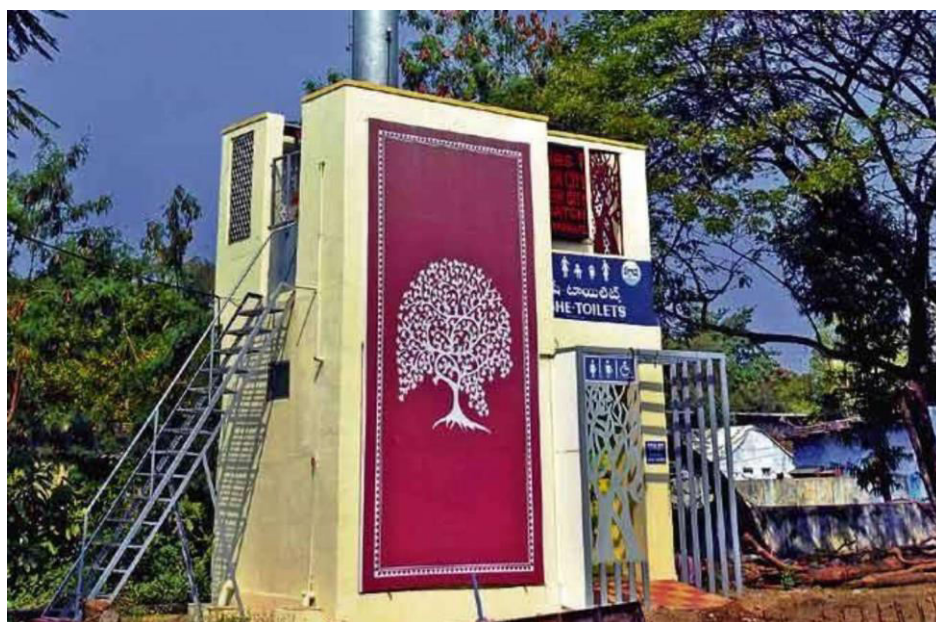
- After the successful implementation of SHE toilet in Warangal in 2017, it has become a major policy measure and a government order has been shared to scale up the same in the state of Telangana. Other cities like Trichy, Delhi, and Chennai etc. have also replicated the SHE toilet model.
- The city has committed to scaling up the faecal sludge treatment plants to a capacity of 150 kilolitres/day; the land for which has already been identified by GWMC (WaterAid, 2019).

Challenges/ Lessons Learnt:

- The holistic approach adopted at the municipal level is key in achieving improved sanitation scenario in Warangal. This includes the construction of FSTs via PPP model, ensuring the use of Personal Protection Equipment (PPE) by sanitation workers, construction of SHE toilets and institutionalising FSSM (ASCI, 2016).

Replicability & Sustainability:

- The PPP based approach for managing the FSTPs has been scaled up and used in 76 towns in Andhra Pradesh, and in towns like Chunar in Uttar Pradesh and Wai in Maharashtra. The systems, processes and tools introduced in Warangal are replicable and scalable, and as a result, professionals from across India and the world have visited Warangal to learn more about them.
- The holistic approach for improved sanitation has informed several state level policies and directives that contribute to an enabling environment for FSM throughout the state of Telangana and other states as well.



Source: (Reddy P. L., 2019).

Fact Sheet:

Thematic area	City wide sanitation planning
First-year of the program	2016
Responsible institution	Greater Warangal Municipal Corporation (GWMC) and Administrative Staff College of India (ASCI)
Target audience	Citizens of Warangal
Coverage	Warangal, Telangana