



Community septic tanks - possible solution for converting insanitary to sanitary toilets

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1 Background

In 2019, 114 urban local bodies in Odisha have self-declared themselves as 100% Open Defecation Free (ODF) cities/towns. This can be translated in terms availability of toilets (individual household toilets, community toilets, public toilets and hybrid toilets) for urban households in the state.

However, per the rapid assessment conducted for nine AMRUT Mission towns¹ in June 2017, it was observed that out of the sample size of 780 households in Bhubaneswar, 28% toilets were insanitary. Similarly, in other cities, almost 15-20% toilets were insanitary².

While the state has declared all cities as ODF and is a front runner in the country in achieving ODF++, the government is taking steps to convert insanitary toilets to sanitary toilets. Under Swaach Bharat Mission (SBM), there is a provision for converting insanitary latrines to sanitary latrines. A total amount of INR 8000 is provided under SBM to a marginalized community i.e., INR 4000 from Government of India (GoI) and INR 4000 from Government of Odisha (GoO). In case of non-marginalized communities, a total amount of INR 6667 (INR 4000-GoI and INR 2667-GoO) is provided. However, in slums non-availability of land for each household to have a containment unit is an issue.

This leads to the need for a community septic. A community septic tank is a cost-effective model as compared to individual containment unit. This can be demonstrated by the following example:

An individual latrine along with containment unit costs approximately INR 25000-30000 for a household with five members, while community septic tank costs approximately INR 17000 per household.

This model has been implemented in Maa Mangala slum of Bhubaneswar through the SBM-Urban scheme. In line with this initiative, Berhampur Municipal Corporation is piloting the construction of community septic tank in a ward with 27 households wherein owners of these households are masons.

2 The Process

The process to construct a community septic tank can be broken down into seven broad steps.

Step 1: To initiate this intervention, the ULB must list out the number of households have insanitary toilets. Typically, the sanitary inspector of each ward is aware of this scenario and data can be collated at ULB level. This data can be mapped to identify the cluster wherein a community septic tank could be built.

Step 2: Post mapping, a ground level assessment is required to locate land for construction of community septic tank. The land should be at lower elevation from households to enable gravity flow of septage from toilets to the septic tank.

Step 3: Once the cluster is identified and land is available, the next step would be to convince the community to construct a safe onsite system. This can be done through focused group discussions focusing on importance of having a sanitary toilet and its impact on health and

¹ Atal Mission for Rejuvenation and Urban Transformation (AMRUT) towns in Odisha are Bhubaneswar, Berhampur, Bhadrak, Balasore, Baripada, Cuttack, Puri, Sambalpur and Rourkela

² An insanitary latrine is a latrine which doesn't have scientific containment unit like pit, septic tank, aqua privy etc.

environment along with financial implications and benefits. The community has to be convinced to connect only the black water outlets to the pipe line which carries all the black water to the community septic tanks.

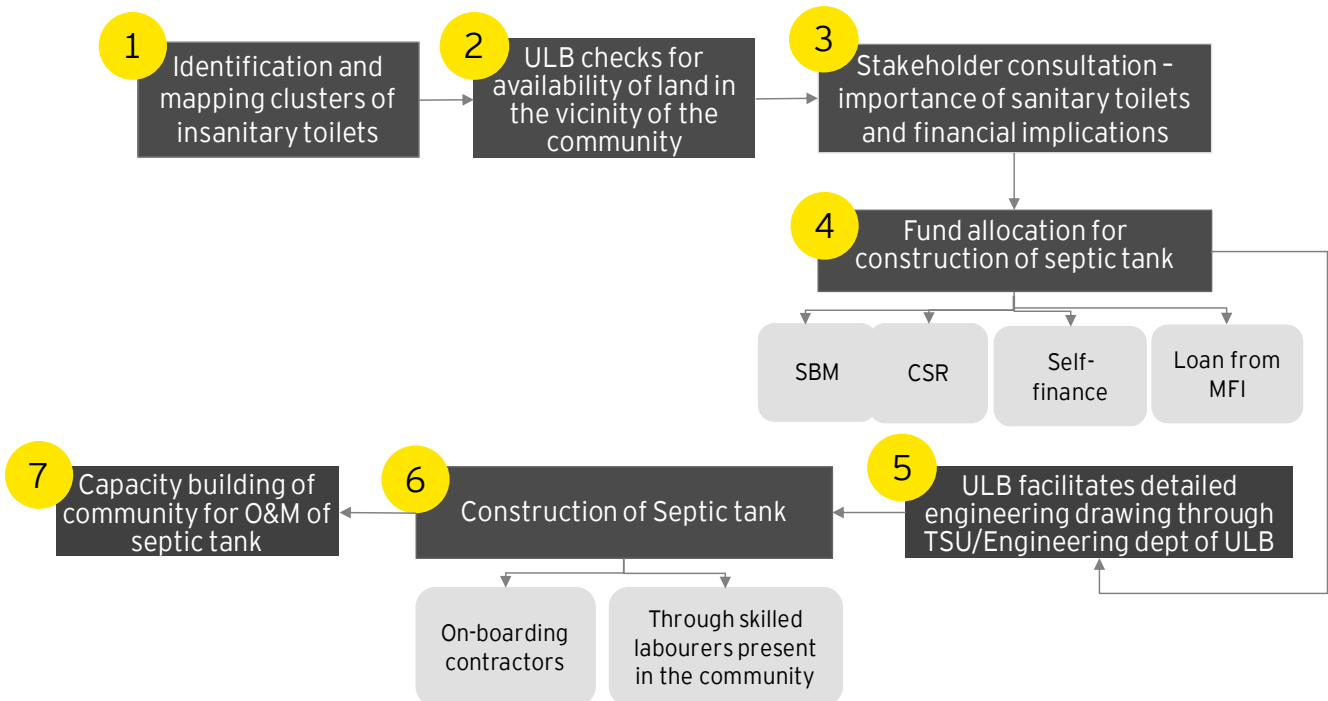
Step 4: The next step would be to identify the funds for construction of the community septic tank. The cost per household is approximately INR xx which is inclusive of construction, plumbing and contract fee. Following are the source of funds that can be explored:

- SBM
- Corporate Social Responsibility funds
- Community pays for themselves through:
 - Self-funding
 - Loan from Micro Finance Institutions

Step 5: While the funds are being sourced, the parallel activity to be taken up should be to finalize the design of community septic tank. In Berhampur, the design has been provided by technical support unit along with support from engineering section of the ULB. Plumbing design will vary based on the location

Step 6: Post availability of funds and design, the ULB will support the community in identifying and onboarding contractor for construction of the septic tank. Alternatively, the tank may also be constructed by the community provided, they have required skillset.

Step 7: A stakeholder consultation on O&M of the community septic tank has to be organized by the ULB/technical support unit post the construction. The training will focus on the typical plumbing maintenance required and on desludging the same within in 2-3 years. During the consultation, the communities should agree to pay for desludging.



3 Recommendation to enable scale up of this initiative:

This initiative has been introduced as one of the solutions to converting insanitary to sanitary toilets in areas where land near a community is available. As mentioned above, the process to constructing a community septic tank is linear and so it is required to check all the steps to reach the result. To enable checks at every level, following initiatives are recommended:

- a. Creation of database for insanitary toilets at ULB level and State level: Currently, the latest data available on insanitary toilets is of Census 2011. Since census is updated every decade, it is difficult to monitor the situation of sanitary toilets. Therefore, a database of the same can be maintained at ULB level. This can be collated and updated in the SBM dashboard. Post construction of community septic tanks, the desludging of the same can also be recorded.
- b. Policy intervention to provide financial support: Subsidized rates for construction of community septic tanks can be introduced as a policy intervention. This can enable scaling this initiative in other towns.
- c. Creating awareness on importance of sanitary toilets: Onboarding community is one of the important steps to initiate the construction of the community septic tank. In Berhampur, the Corporation initiated the conversation for construction of septic tank followed by stakeholder consultation. To scale up the intervention, it is essential to generate demand from the communities and to do so, frequent IEC should be considered.
- d. Scale up of the intervention in Berhampur: To demonstrate the success of this intervention, it is envisaged to construct ten more community septic tanks in areas with prevalence of insanitary toilets and faulty design of septic tanks
- e. Operations and Maintenance of Community Septic tanks: In Berhampur, the capacity building will be taken up by Technical Support Unit with support from the Corporation. To enable the same in other cities, the same can be taken up by training the Self-Help Groups and Community Organizers. This will help in sustaining the process within the ecosystem.

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