

Policy Brief

One Home One Toilet





ONE HOME ONE TOILET

Strengthening the approach for a more effective implementation of Swachh Bharat Mission in cities and towns

Cities across India are struggling to meet the deadline for a 'Swachh Bharat' or Clean India by October 2019, calling for innovative and effective sanitation models. Shelter Associates, an NGO based in Pune, in partnership with the Pimpri- Chinchwad Municipal Corporation has demonstrated an approach that can lead to a more efficient and effective delivery of the Mission goals. The critical elements of the approach are the use of spatial information for planning and monitoring sanitation interventions; ensuring that existence of functional sewerage network is a pre-condition to the construction of toilets; generating effective demand for toilets through community mobilization and public awareness; involving households and community institutions to supervise and monitor construction; establishing a formal agreement on responsibilities between stakeholders; and improving implementation and delivery structure of SBM

1. INTRODUCTION

Urban sanitation in India came into focus as late as in 2008 with the launching of the National Urban Sanitation Policy (NUSP). The Policy, for the first time, looked at sanitation as a city wide and integrated service and focused on establishing an enabling environment: it addressed the entire waste management cycle, aspired for open defecation free cities and aimed for 100 percent collection and treatment of waste. Moreover, the Policy called attention to critical institutional and systems reforms centered on the Urban Local Bodies (ULB) and communities. With foresight, the NUSP did not prescribe any specific sanitation technology and instead left it to each city to choose what best fitted its unique profile and needs. And most importantly, it recognized and addressed the barriers that the poor faced in accessing sanitation facilities and services, i.e. limited availability of land, its informal and untenured nature and associated legal and environmental issues. It also addressed the community's lack of information and knowledge and an almost total absence of engagement with the institutions of urban governance.

The NUSP paved the way for the country-wide urban Swachh Bharat Mission (SBM). SBM translated the larger aspirations of NUSP into tangible interventions, planned outcomes and committed budget, with the onus of delivering services primarily vested on the ULBs. Launched in 2014, SBM is set to achieving an open defecation free status by October 2019- a daunting task that calls for innovations, enhanced planning, supervision and community support. The ULBs have been struggling to keep up with the overwhelming targets and in the process often, together with NGOs, have developed innovative approaches, overcoming institutional and capacity constraints. Pimpri-Chinchwad, a twin city of Pune in Maharashtra, is a case in point.



The Pimpri-Chinchwad Municipal Corporation (PCMC) is situated to the north-west of Pune and is part of the Pune Metropolitan Region. The PCMC has seen the toilet coverage in the slums going up by 28 percent points from 3095 to 12,047 toilets since the start of SBM- i.e. only 9,052 toilets were constructed in a period of three and half years. Incidentally, much of this increase (4,124) is attributed to the NGO Shelter Associates and the remaining (4,828) to the ULB, vis-a- vis its twin models of contractor-led and installment-based implementation. 20,659 households still remain to be covered in the next 18 months. What then can be learned from the various models to help municipal corporations like PCMC to meet their goal of an ODF/ ODF + city, against a background of difficult targets, tight timeframe and a conspicuous human resource crunch? Shelter Associates commissioned an independent survey to find this out and identify elements from on- going models that could be adopted to strengthen the SBM framework of implementation. The survey was undertaken in the months of February-March 2018. It covered 300 households in three slums of Pimpri-Chinchwad where the two PCMC-led SBM models were being simultaneously implemented, along with Shelter Associates model.

2. THE THREE MODELS OF SERVICE DELIVERY IN PCMC

The three sanitation models currently being implemented in Pimpri-Chinchwad for increasing toilet coverage and promoting an ODF city are, SBM's Installment and Contractor-led models and Shelter Associates One Home One Toilet (OHOT). The models are all distinctly different in approach: At a broad level under SBM, the households are given the option of building the toilets themselves through installments or having it constructed through a PCMC commissioned contractor. The OHOT model, on the other hand, adopts a cost sharing approach, wherein Shelter Associates delivers all the material required for construction at the doorstep of the beneficiary, while the latter in turn contributes towards construction cost in terms of their own labor or the cost of hired masons

The contractor-led model

In the contractor-led model the PCMC hires approved contractors who are issued a work-order by the Municipal Corporation. The execution under this model is rapid as compared to the SBM-installment model as the contractor's payments are linked to the completion of construction. However, the Municipal Corporation may at times choose to get the toilets constructed by one contractor and connected to the sewerage network by another. Additionally since no survey is conducted prior to issuance of the work order to assess the availability of a functional sewerage network, the rapid execution of work order does not necessarily translate into immediately usable toilets. Infact, households in this model in the survey had to wait the longest time to connect to the drainage network. Supervision by PCMC is minimal and mostly towards the end of the execution process and hence, timely corrective interventions are not always undertaken.

It takes about 8 to 10 days on an average to complete a single unit, and longer if the beneficiary does not cooperate. In fact the relationship between the beneficiary and the contractor is not always cordial with the former complaining about the quality of material and construction and the latter taking unilateral decisions without consulting the beneficiary. The contractors also have complaints about inadequate budget. This, together with inadequate supervision, is perhaps one of the reasons why the contractors are seen to cut costs and compromise on the quality of the material and construction.

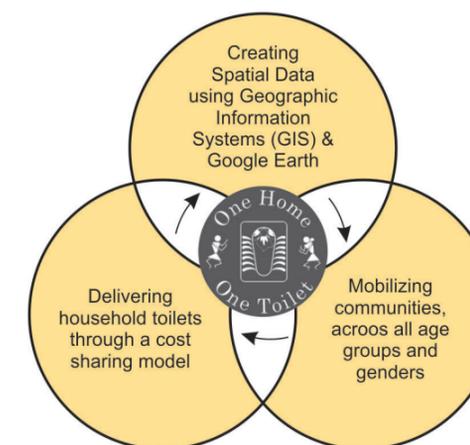
The installment model

The installment model on the other hand has a relatively complex process of submission and approval of applications. Beneficiaries are paid Rs. 16,000 in two equal installments with the money being credited directly to the beneficiary's bank account. Delays in approvals and release of the first installment occur due to multiple levels of verification and slow pace of construction by the households. This often results in extended execution period of 3 months to over a year. Similarly PCMC's verification and approval of release of the second installment is known to take anything from one to eight months leading to financial hardships for the beneficiary. Like the contractor-led model, the installment model too struggles with the problem of connectivity to a functional sewerage network. In the survey, a quarter of the beneficiaries of the installment model reported having to wait for an inordinately long time to start using the toilets after it was constructed.

The OHOT model

Shelter Associates' OHOT model is rolled out in three steps

- (i) creating spatial data for planning and efficient implementation;
- (ii) mobilizing communities for awareness, behavior change and consequently active participation and adoption of facilities; and
- (iii) finally delivering quality toilets.



step 1

In step one of the strategy settlement and household level data is integrated with a map using the GIS platform in a step by step process. Spatial information is used to identify gaps in services such as availability of sewerage and water supply networks, families without toilets, general layout and gradient of the settlement, other infrastructure, etc. The household survey is meticulously designed and uses a digital application (Kobo) for data collection and analysis. The representatives of PCMC (Sanitary Inspectors and Junior Engineers) are part of the process and the data collected is validated by them.

The household and infrastructure mapping data is viewed in conjunction with each other on a spatial platform. This allows for a planned phase wise intervention to cover maximum households.

step 2

Step two focuses on creating space and processes to ensure support from the local elected representatives (LER), the concerned Administrative Ward Officer, and the community at all stages and activities of the project. Additionally, awareness creation is undertaken to generate demand for household toilets and to ensure sustained use through behavior change. Sanitation Committees are established and capacities built to facilitate the implementation process as well as to monitor and support the community after Shelter Associates has withdrawn from the site.

step 3

Step three involves actual construction of individual toilets. For ensuring convenience and security Shelter Associates specifically promotes locating the toilet inside the house. An agreement is drawn up between Shelter Associates and the beneficiary family which enunciates clear responsibilities of each party. Shelter Associates ensures desired quality of raw material at lowest of cost following a strict diligence process. The material is delivered by Shelter Associates at the doorstep of the beneficiary in three phases, while the latter arranges and provides for labour. A pictorial list of raw material has been developed for the beneficiaries which makes for easy reading even for the less educated. Execution is quick and Shelter Associates provides constant onsite support and supervision. Connection to the sewerage network is immediate and hence toilets too become immediately functional. Shelter Associates mobilized PCMC to construct or upgrade the sewer lines so that any remaining households could also get quickly connected.

Key features of the models: a sum up

Key features	SBM - Installment	SBM - Contractor	SA – OHOT
Spatial data for planning	x	x	✓✓
Rapid Household Survey and infrastructure Mapping	x	x	✓✓
Evaluation of existing sewerage network for capacity and functionality	x	x	✓✓
Unique Reference Identity assigned to each household	x	x	✓✓
Formation of Sanitation Committee at community level	x	x	✓✓
Awareness creation for behavior change	✓	✓	✓✓
Demand generation	x	x	✓✓
Formal agreement with beneficiary	x	x	✓✓
Construction material at door step	x	x	✓✓
Quality control of construction material	✓✓	✓	✓✓
Mason of beneficiary's choice	✓✓	x	✓✓
Provision to upgrade fixtures	✓✓	✓	✓✓
Existence of functional drainage network a pre-condition	x	x	✓✓
Toilet connected to sewerage networks	✓	✓✓	✓✓
Onsite support	✓	✓	✓✓
Monitoring & Supervision	✓	✓	✓✓
Unit cost contribution by ULB/ SA	Rs.16,000	Rs.16,000	Rs.13,000
Cost to the beneficiary*	Rs. 5000	Nil	Rs. 8300

✓✓: Complete ✓: Partial x: No

* Contractor-led model remains the cheapest. Beneficiaries were required to bear the cost of labour and upgrades (such as fixtures of their choice) in the other two models towards which an additional average amount of Rs 5000 (approximately) has been spent.

3. WHAT WORKED AND WHAT DID NOT

The beneficiary survey indicated low satisfaction amongst beneficiaries who had benefited from the contractor model. What worked was that the contractors were quick to complete the construction as compared to the installment model. What did not work was the poor quality of construction as well as the material in the contractor model. In addition the contractors had no responsibility for connecting the toilet to the drainage network, leading to post construction problems and delays. Both OHOT (89%) and the installment (70%) beneficiaries, largely preferred the model they had benefited from. What seems to have worked and what did not work for them?

SBM-Installment and OHOT models: What worked and what did not

Installment model	OHOT model
What worked for the beneficiaries... <ul style="list-style-type: none"> • construct at their own pace • freedom to design and choose material and fixtures according to their likes and capacities 	What worked for the beneficiaries... <ul style="list-style-type: none"> • construct at their own pace • the material was delivered at their door step • were 'informed about the technicalities' • intervention included clearing drains and managing the solid waste, along with the construction of toilets
However, the deterrents were... <ul style="list-style-type: none"> • difficulties in procurement of required materials and fixtures on their own • inordinate delays in the release of funds leading to financial overloads 	
And for the PCMC... <ul style="list-style-type: none"> • Monitoring and supervision were difficult; and defaulters compounded the problems leading to delays in completion of work 	And for the PCMC... <ul style="list-style-type: none"> • 'Hassel free' as planning, supervision and monitoring was undertaken by Shelter Associates and the funds for material were provided under CSR (Corporate Social Responsibility)

The contractor model fell short on critical quality, while the installment model was largely faulted for the delays in approvals and release of funds. In both cases the inadequacy of evidence based planning, supervision and monitoring appear to be the primary gaps in the project. However, the survey indicated that overall there was a significantly high level of acceptance of the facilities being provided as 88 percent of the toilets, across the three models, were constructed, and connected to the sewerage network and in use. Acceptance of the facility is reflected in the significant percentage of beneficiaries who, not only chose to upgrade the toilets with additional expenditure but also upgraded their dwelling units in the process, largely in the OHOT (38%) and SBM-Installment (27%) categories.

4. CONCLUSIONS AND POLICY RECOMMENDATIONS:

Improve implementation and delivery structure

The OHOT model reflects greater efficiency and effectiveness in the time taken to construct, connect to the sewer lines and in the quicker use of the completed toilet by all the members of the households because of a range of interlinked factors. What can, therefore, be learnt from here to improve the implementation and delivery structure of SBM?

i. The meticulous survey and creation of a dynamic data base mapped in detail the condition of the existing sewerage and drainage system, the gaps in sanitation infrastructure and facilities, and the socio-economic data of every household in PCMC. This together with the digitization and use of GIS platform allowed for accurate planning and updating. The pace of work visibly speeded up when the PCMC also started to use the data base, with increase in both the drainage coverage as well as the construction of toilets.

RECOMMENDATION 1:

Municipalities should use spatial information for planning and monitoring sanitation interventions by integrating household level data with a map on a GIS platform.

ii. The existence of a drainage network as a pre-condition for starting construction work ensured speedy connection and use, post-construction in PCMC.

RECOMMENDATION 2:

Availability of sewerage network should be a pre-condition to the construction of toilets. Implementation may be taken up in phases prioritising areas where functional networks are available, while elsewhere they are upgraded or new networks constructed. Alternative plans (like septic tanks) should also be made for those households where toilets cannot be constructed because of some technical issue along with a commensurate increase in the subsidy amount to defray the additional costs involved.

iii. Pre-project mobilization and awareness creation ensured the transfer of adequate technical know-how so that the beneficiaries themselves could monitor quality; further, onsite support from the NGO ensured timely advice and corrections; it was also instrumental in generating effective demand for individual toilets and proper construction and use. This also ensured that toilets were constructed inside the house and there were no dispute with neighbors regarding encroachment or right of way.

RECOMMENDATION 3:

Establish and/or strengthen Sanitation Committees at the slum level to supervise and monitor quality and progress. Further, partner with NGOs to strengthen public awareness, community mobilization and generate demand for toilets. The NGOs could also be engaged to build capacities of the Sanitation Committees and ULBs in planning, supervising and monitoring.

iv. The delivery of standard material of adequate quality and quantity at the doorstep of the beneficiary, was an incentive for them to undertake construction; the delivery of material in phases, ensured that it was not wasted or misused and construction followed a viable timeline.

RECOMMENDATION 4:

Alternative modes of procurement and disbursement of material should be explored. The NGOs, together with the Sanitation Committees could ensure delivery of construction material of desired quality and quantity to the beneficiary, supervise construction of toilets, and ensure connections to drainage networks.

v. On site supervision and support contributed towards better quality work and quick progress from end to end.; and a formal agreement with the beneficiary ensured a good amount of commitment and accountability from both the stakeholders.

RECOMMENDATION 5:

Improve implementation and delivery structure of SBM vis-a-vis an agreement between the ULB, individual beneficiaries and the Sanitation Committees describing the rights and responsibilities of each of the stakeholders; and creating an integrated ward wise implementation team consisting of the concerned Junior Engineer, Sanitary Inspector and Area Ward Officer from the ULB, the concerned elected representative, Sanitation Committee members and local NGOs for better supervision, coordination, facilitation and oversight.

REFERENCES

Anjali Radkar, Rama Kawade, T. Abhilash, Deepa Thakur (2018); *An Impact Assessment of Shelter Associates' 'One Home One Toilet' Program*; Gokhale Institute for Politics and Economics, Pune

Web Links

- <https://www.youtube.com/watch?v=CQ9r1JG6BTE&t=38s> : Partnering For Change- short film on the 'One Home One Toilet' model
- <https://swachhbharat.cloudapp.net/home/course/84?lessonid=00001150> : MoUD's film on Shelter Associates's OHOT model
- <https://app.shelter-associates.org/city::y8ioR6FXfHws0lqvwnU9iVjAMq0zZ5Vy2NP1MNHtoeo-> Linkage of Pimpri-Chichwad Municipal Corporation's website to Shelter Associates's data portal

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