

# PROJECT SAMMAAN

- **Background**

The problem of public sanitation in slums is critical and complex, as the development of basic amenities for slum dwellers has often not been able to match the fast growth of urban slum. This is due to high population density, poor quality of infrastructure & its management, limited space and lack of clarity on tenure, poor local administration and political will, unwilling & unsupportive local heterogeneous communities, etc.

Given these constraints, shared communal sanitation facilities may be an appropriate solution. However, there are two key challenges to ensuring such facilities effectively address sanitation needs: to design and build toilets that people are likely to use (the “Hardware”) and to design institutions and business models that will ensure appropriate services, pricing and maintenance required for sustained use (the “Software”).

An in-depth ethnographic study (Potty Project) of sanitation practices in slums across five Indian cities was commissioned by Bill & Melinda Gates Foundation (BMGF), that explored people's relationship with sanitation: their motivation, behaviours, and attitudes, as well as the community dynamics that mediate access and use of facilities for open-defecation and related activities. The study found that genesis of most of these problems can be traced back to free riding and collective action failures. For example, under-investment in operations and maintenance made community facilities fall into disrepair leading to subsequent rejection by users. Individual users choose not to assume maintenance responsibility over a shared facility. As a result, they will prefer open defecation over poorly maintained community toilet facility.

Previous studies from Delhi (Banerjee et al 2011) and Bhubaneswar (J-PAL 2011) indicated that many households in informal settlements that are using constructed sanitation facilities (as opposed to practicing open defecation) rely on shared toilets. During June and July 2011, a Rapid Assessment was conducted to determine the current number and condition of Bhubaneswar slum sanitation facilities. Findings from all such research studies were collated that highlighted many sanitation challenges in urban slums.

Decades of development initiatives by governments and non-profit organizations have not produced lasting solutions. Eradication of these complex sanitation issues in urban slums calls for a multi-pronged strategy to be taken by government and other stakeholders in a synergetic manner. Project Sammaan is a step in this direction.

Project Sammaan is an urban infrastructure project that seeks to develop a sustainable improved sanitation model for urban slums that can be scaled up and replicated in a larger number of cities across the world. It has been designing, implementing and rigorously testing a range of hardware and software innovations within shared sanitation facilities, with the aim to inform urban sanitation strategy elsewhere through in-depth quantitative research and sharing of insights through a practical ‘toolkit’. The project is being piloted in urban slums in Bhubaneswar and Cuttack (Odisha, India).

“Project” Sammaan will provide user-friendly innovatively-designed facilities, developing a system for community management of operations and maintenance, and studying behavioral

change processes through collection of usage data. With funding support from BMGF, in addition to city government funds, Project Sammaan brought together a stellar group of designers, architects and social science researchers to tackle one of the developing world's leading problems – open defecation in crowded urban settings - making it a massive collaborative project. Each entity brings complementary skills to jointly address the engineering design and behavioral/institutional challenges to create a comprehensive, scalable and sustainable service delivery model for urban sanitation.

India's urban growth, in conjunction with industrialization and lack of infrastructural and employment opportunities in rural areas, has led to mass rural-urban migration straining urban infrastructure and leading to rapid increase in number of urban poor, many of whom live in slums and other squatter settlements. All this continues to put additional pressure on already strained urban infrastructure, especially sanitation.

- **Location, Date**

Bhubaneswar and Cuttack (Odisha), year 2011 onwards

- **Areas**

Urban slums

- **Stage/Scale**

The Project shall deliver 58 community sanitation facilities by December 2018, in selected slums in Bhubaneswar and Cuttack. 32 community toilet facilities shall be built in Cuttack, while 26 community toilet facilities shall be built in Bhubaneswar. Currently, the toilets are in various phases of construction, with very few of them opened to public.

- **Objective of the assignment**

To test a scalable model of community toilet infrastructure and management that can be replicated across cities to ultimately reduce open defecation and improve health among the urban poor.

The overarching goals of this project are to:

- design and build innovative, effective community toilet facilities for informal urban settlements (hardware interventions),
- institute financial and organizational management systems (both at community-level and municipality-level) for the toilet facilities to ensure proper maintenance over the long run,
- identify effective strategies to encourage behaviour change and habit formation, including site-level demand generation activities, and household-level discounts (software interventions)
- use rigorous data collection methods to test the optimal combinations of hardware and software interventions that maximize impact on reduction of open defecation rates.

- **What was done**

Project Sammaan aims to address the design, management, and operational challenges of communal toilet facilities in urban slums by evaluating a mix of hardware and software interventions at different levels. These impact evaluations are being conducted using rigorous randomized controlled trial (RCT) methodology to generate an evidence base. A randomized

evaluation uses random assignment to differentially allocate program resources as part of the study design.

For Project Sammaan, this methodology is being used to generate multi-layered evidence on habit formation. Through random allocation, certain sites will receive a demand generation intervention, which is a modified version of Community-led Total Sanitation (CLTS) tailored to an urban setting. At the household level, households will randomly receive discounts and non-price habit forming 'triggers'. This method of assignment produces unbiased results which allows for the actual impact of these interventions to be measured.



Evaluation results will be disseminated through several channels: discussions with policymakers and stakeholders, presentations to sanitation officials and experts, development of platforms to share process and implementation lessons, the production of a research report and policy publications, and most importantly, by informing the design of the "toolkit" for effective sanitation interventions in low income urban contexts, which is the end goal of this project.



The different stages of the Project include: Memorandum of Understanding (MoU) amongst implementing partners, site identification, design & tendering, construction and demand generation activities, handover to communities and operations & maintenance of facilities. All these stages are accompanied by research, community mobilisation & outreach, capacity building of municipal officials, etc.

- **Impact**

The Project has resulted in development of gender-segregated community toilet facilities that are spacious and have more natural light, with provisions for stalls for defecation, bathing and clothes washing, besides specially designed disabled-friendly stalls, with large water storage capacity; incinerators for burning sanitary napkins, hand & feet washing space, spitting trough (to match local culture) i.e. a highly untypical community toilet structure. All toilet facilities follow standard professional branding system for better visibility and acceptance by the community.

The impact has been that communities have come forward and shown interest in managing the facilities themselves, for their own benefit. As a result, Sammaan Ward Sanitation Committees (WSC) have been formed from amongst the community and trained by the Project Team to perform various tasks for successful operation & maintenance of the facilities. As the project is still in implementation phase, more results are yet to flow in.

- **Challenges and Issues**

Though highly innovative, the project has its own set of challenges which have resulted in delays on many fronts, such as:

- Lack of coordination amongst project implementing partners.
- Occasionally, the project has witnessed site identification issues, despite working in tandem with the community and the municipality.
- Administrative delays (pertaining to approvals, release of payments to builders, MoU, giving electrical connections, etc.), on account of municipalities, has delayed toilet construction process.
- At many sites, WSC members are pro-active, while at others they are not.
- Opening of bank accounts for each WSC got delayed due to absence of essential paper work.
- Quality of construction was affected at some sites, where the construction contractor further out-sourced the work

## • Innovation

Project Sammaan:

- is a unique collaboration between various agencies working together with the BMC & CMC in project implementation
- toilets bring together user-centered innovation in architecture, business and operating models.
- involves design and implementation of sustainable models for Operations and Maintenance, as well as formalization of the model through signing of MoUs between Municipal Corporations and community managers.
- mandate goes beyond just construction of toilets, but extends to research that aims to study behavioral change processes and reduce open defecation.
- shall support policy decisions around sanitation for urban slums in India through evidence

## • Lessons learnt

- Community toilets need not be dingy. Instead, they can be aesthetically beautiful.
- If made project partners from the start, the community can play a crucial role in project planning & implementation.
- If trained well and through advocacy efforts, community can be convinced to manage the toilet facilities themselves, once operational.
- Branding of toilets can play a major role in how communities perceive toilets.

## • Financials

Not Available

## • Economic sustainability/Revenue Model

To ensure economic sustainability, users pay a pre-determined user fees. Additionally, each WSC shall receive financial benefits for supporting research and data collection and a grant from BMC/CMC. At launch of each facility, the WSC is provided with a set of cleaning supplies and project stationary. They are provided handholding support before launch of the facilities and for initial months (after launch) to help understand, operate and maintain the facilities and record keeping. Besides, a special Project Sammaan Grievance Redressal System has been developed and integrated in the existing grievance redressal mechanisms of both BMC and CMC, for timely redressal of toilet-related issues. This system follows a bottom-up approach, in sharp contrast to the top-down approach prevalent in the State.

- **Implementer Contact Persons**

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- **Sources and References**

- ✓ Project website
- ✓ Project documents
- ✓ Abdul Latif Jameel Poverty Action Lab (J-PAL)

