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## For Immediate Release

India has the dubious distinction of having the largest population of open-defecators in the world, with a staggering 626 million citizens lacking access to toilets.

With over 60% of its population underserved by municipal and state sanitation services, India faces a grave challenge in this area. Poor sanitation services lead to an increase in preventable diseases and lost labour that amounts to a loss of over 6.4% of India's GDP, nearly USD 54 Billion annually (WSP, "Economic Impact of Inadequate Sanitation in India").

Project Sammaan is a sanitation initiative that seeks to rethink the current model of facilities serving urban slum populations in India in a holistic manner. The project was born out of research Quicksand undertook as part of the Potty Project, an in-depth design research study focused on understanding three things:

- The end-user experience at community toilet facilities within urban slums in India
- End-user perceptions, attitudes, and mental models around sanitation and hygiene
- The "supply side" aspects of community sanitation in slums including things such as pricing, operations & maintenance, caretaking, and business models.

The study found various patterns of behavior that define the end-user experience in urban sanitation, and embody the characteristics of the shortcomings inherent in this context.

Potty Project research led to insights around opportunities to improve sanitation facilities and service delivery and, consequently, end-user perceptions around sanitary practices. These learnings were cased in four "pillars of innovation": Operations & Maintenance, Branding & Communications, Architectural Infrastructure, and Business Models.

#### O&-M

Community sanitation facilities are in an ever-deteriorating physical state

## **Branding Communications**

Branding a space in a professional manner, also impacts perceptions around the space and thus could have a highly positive effect on how it gets used and maintained.

### Architectural Infrastructure

Architects must keep in mind a user's perception of barriers of use of a toilet.

In May 2011, the Jameel Poverty Action Lab (J-PAL), Project Sammaan's lead grantee, conducted a Rapid Assessment of the sanitation facilities throughout slums in Bhubaneswar. This rapid assessment survey found that two-thirds of the individuals questioned lacked an in-house toilet, and that nearly one-in-five identified open fields or plots as the primary place for their defecation needs.

The project is a unique innovation initiative due to the diversity of the organizations working on it: designers (QS + Codesign), government bodies (BMC + CMC), empirical researchers (J-PAL), architects (Anagram Architects), waste management experts (CDD PROJECT SAMMAAN
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Society), community engagement specialists (C-FAR), and an interface management team (C-TRAN).

This amalgamation of seemingly disparate entities provides a robust and exhaustive approach that ensures community members' needs are designed for, the facilities are both functional and valued, and the effectiveness of the engagement is thoroughly evaluated.

The project team divided the sanitation challenge into its two parts: designing and building toilets that people would like to use (infrastructure, or Hardware) and designing and implementing business models to ensure appropriate services, pricing and maintenance (institutions, or Software).

**Hardware**: Facility-level Interventions consist of two layers: Base Layer amenities include gender-segregated toilets, clothes-washing areas, disabled access toilets, and a menstrual waste incinerator; the Enhanced Layer includes these plus private bathing stations and a retail outlet. Re-imagining sanitation facility Hardware requires the inputs from numerous experts to ensure the new model is a functional utility that people want to use.

**Software**: The software interventions focus on toilet management models (with both privately managed and community managed models), capacity building in the local municipal corporations, and demand generation and behavioral change activities within the communities.

The involvement of government representatives is particularly important. The partnership between public and private entities is rare, and the BMC and CMC should be considered precedent setters in this innovation. The support and participation of the municipal corporations streamlines many processes, validates the project to the citizenry the project seeks to help, and ensures that the facilities will be valued commodities in the cities for years to come.

Project Sammaan works closely with the government to achieve the project objectives, in an attempt to tie in the project's innovation efforts with the government's existing plans for urban slum improvement.

Most city governments in India are seriously looking into slum improvement through various programs ranging from the Rajiv Awas Yojana to preparing City Sanitation Plans under the National Urban Sanitation Policy announced by the Ministry of Urban Development, Government of India.

The project thus seeks to innovate within the framework and constraints of the government's urban policy and planning processes. While this poses several challenges for the project's innovation mandates, it also ensures that the facilities that are built are more sustainable and do not become only 'models' of innovation, but truly usable spaces that enhance the quality of life of its beneficiaries.

By working through government - - issued tenders that go through a detailed process of scrutiny and approval by government engineering departments, Project Sammaan also

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seeks to build a model that enables adapting these innovations in other cities within preexisting systems and policies of urban sanitation improvement.

The budgets for the toilet facilities are primarily from government funds already set aside to build toilet facilities, with supplementary financial support from The Bill & Melinda Gates Foundation, thus also making it a more sustainable financial model for scale. A primary objective of the project is to also develop a toolkit that enables stakeholders in other cities to replicate the project's innovations in their own context.

Project Sammaan reinvents the wheel by making necessary changes to all aspects to the current approach to India's urban slum sanitation.

#### Hardware

The primary purpose of Project Sammaan is to provide functional, appealing and sustainable toilet facilities for the communities that the 100+ facilities will cater to. Through the provision of these facilities, the project seeks to reduce the number of people who have no option but to defecate in the open, by providing them a viable alternative that reduces the health hazards, both to those practising OD as well as the larger community. Specific aspects within the facilities like provision of adequate water, along with waste disposal mechanisms including menstrual waste incinerators are also aimed at enabling and maintaining a clean and hygienic environment within the toilet facilities.

# Software

Project Sammaan also seeks to create viable and sustainable operating systems and business models for the toilet facilities thus ensuring that the toilets remain in a functional and hygienic state over the long term as well.

The reason why most toilets fall into a state of disrepair and filth, is because there is often no viable business model for the operators and simultaneously the user fee structure does not take into account challenges of the users.

By creating more robust business models, Project Sammaan seeks to make the operations of these toilet facilities viable in the long-term for both private entities as well as community management groups.

### Communication Design

In addition to building functioning and well-maintained toilet facilities, a critical aspect of Project Sammaan is to build awareness of the health hazards of OD and educate communities about right defecation and hygiene practices. Through a detailed communication strategy that involves engaging with individuals within the target households, the project seeks to change perceptions and encourage new behaviors.

In addition to this, a professional branding effort at the toilet facilities will remove the perception of toilets as 'zones of filth' and create pride and ownership amongst the communities.

# Challenges of Project Sammaan

\* Complex multi-stakeholder engagement

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For a large infrastructure project of this nature, multiple stakeholders are a given. How do you manage innovation and design mandates with stakeholders having poor design "literacy"? Further, how do you leverage individual organizational interests to ensure the project's needs are met?

# \* Driving innovation within stringent cost benchmarks

To work within government frameworks implies that each toilet has to beat a preset benchmark. However, these benchmarks are for standard public and community toilets built by government, which are known to be a failure.

# \* Prototyping at scale

Within the competing constraints of rigorous evaluation methodology that necessitates a large sample size (100+ toilets) and government accountability of providing basic sanitation to all its citizens, how does one prototype at scale?

# \* Balancing innovation with public accountability

Public accountability is of paramount concern to the city government anchoring this project. The innovation mandate is therefore severely bounded and has to be located on the side of caution or "reasonable risk". In a constrained environment such as this, how does one attempt to innovate, especially when there is very little precedent for these innovations?

The tenders have been released for most of the facilities and groundbreaking on the first sites is expected in the coming few months.

For additional information, please feel free to contact me with any questions.

Thank You,

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