



# **Project Sammaan**

Newsletter: March-April 2013

# PROJECT OVERVIEW

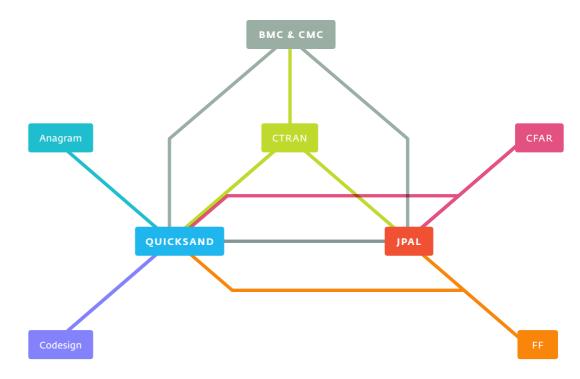
Project Sammaan is an urban sanitation initiative dedicated to redesigning and improving facilities for slum communities across India. The initiative is being piloted in Bhubaneswar and Cuttack with the aim to replicate it in other cities, if successful.

The objective is to rethink the current models of sanitation facilities and design a new programmatic infrastructure and physical structure that instills a sense of dignity while addressing issues affecting sanitation practices in India and encouraging community members to stop defecating in the open.

Over 100 of the re imagined facilities will be built and a dedicated research team will analyze the qualitative and quantitative impact they have on the communities in which they're built. The results of this intensive research will be shared in an open-sourced toolkit that will allow for replication in cities across India and beyond.

Project Sammaan was born out of the research conducted for the Potty Project, an in-depth design research study focused on all aspects of the current sanitation models employed in urban slum communities throughout India.

# **PARTNERS**





The Abdul Latif Jameel Poverty Action Lab (J-PAL) is a network of 70 affiliated professors around the world who are united by their use of Randomized Evaluations (REs) to answer questions critical to poverty alleviation. J-PAL's mission is to reduce poverty by ensuring that policy is based on scientific evidence.

J-PAL is the primary grantee and the project's principal investigators and are designing and conducting the monitoring and evaluation for the facilities:

- » Business model development
- » Operations and Maintenance modelling
- » Project evaluation



A multi-disciplinary innovation consultancy that places user-centered design principles at the core of every innovation effort. The studio has successfully delivered on several new services, products, brands and developmental strategies, creating both measurable social and business impact.

Quicksand is responsible for project management as well as anchoring the hardware design process for the project:

- » User-experience research and corresponding hardware design
- » Design, branding and communication project management
- » Project toolkit and website development





The municipal corporations of the pilot cities Bhubaneswar and Cuttack. These entities are tasked with providing services in sectors such as Health & Sanitation, Slum Development, Urban Planning, and Waste Management to improve the quality of life of their respective citizenries.

The local municipal corporations are key partners in the project and aid in the facilitation of its various components:

- » Provide funding for construction and infrastructure
- » Site selection assistance
- » Identify contractors for construction
- » Ensure regular water, electricity, and sewerage facilities for the toilets
- » Manage sewerage and waste treatment systems
- » Oversee functioning of facilities through a PMO until capacity-building with the BMC is complete
- » Provision of temporary sanitation facilities
- » Ensuring long-term sustainability of the project



The Centre for Advocacy and Research (CFAR) is an Indian organization committed to working and partnering with marginal communities. It has expertise in conducting research, process documentation, capacity building and strengthening advocacy by leveraging media and networking to shape and impact policy issues related to urban poor.

CFAR is actively involved in facilitating community interactions in the field:

- » Social mapping of each slum
- » Community engagement and dialogue during design and construction phases
- » Facility management training for community members





CTRAN Consulting Manages large, complex development projects, providing the right mix of program management and technical assistance.

They are the one-point contact for interfacing with various government agencies:

- » Establish a Project Management Office within the two municipal corporations to ensure continued, and future, use and grievance redressal of the facilities
- » Facilitate meetings with government representatives
- » Assist in land approval process
- » Set up and operate the help line that ensures proper functioning of the facilities

The community engagement entity of Feedback Infrastructure Services Private Limited, which assesses, administers and advocates for community engagement in development projects. FF works closely with the four key proponents of development projects: Government, Corporates, Multilateral Agencies, and International NGOs

They are the main project managers for on-field activities:

- » Land surveying and approvals
- » Demand generation
- » Tendering
- » Facility construction management





A brand and communication design studio whose expertise lies in bridging the gap between product and service offerings and what end-users really care about, with communication that is meaningful and relevant.

Codesign is the communication and brand consultant for Project Sammaan.

- »Ensure facility related branding and communication is contextually relevant and encourages behaviour change and adoption
- » Develop the facility identity and corresponding collateral that promotes larger goals of sanitation and health for better life
- » Creating facility signage that is functional and facilitates access and experience

An award-winning consultancy internationally recognized as amongst the top emerging practices in the world with a commitment towards delivering innovative, context specific designs that encourage sustainable lifestyles. Anagram Architects is a full spectrum spatial design consultancy firm that offers expertise in urbanism, architecture, interior design, and research.

They are leading the architectural design of the 119 facilities:

- » Provide site-specific architectural designs
- » Consult on waste management issues
- » Oversee facility construction

# Four Pillars of Innovation



#### 1. Operations & Maintenance

Community sanitation facilities are in an ever deteriorating physical state with derelict toilet hardware, broken doors or tiles, and accumulating layers of filth seeming an inevitable end for most. Overcoming people's perceptions around participation in cleaning and maintaining these toilets will be a key challenge.

### **Key Learnings**

- Reframing the issue of maintaining a clean facility as one of personal or familial well-being rather than one of time or effort will help make it personally relevant and encourage participation.
- Caretakers lack the bandwidth to police facilities, leading to acts of vandalism, theft, and general misbehavior by users that all act as deterrents for community use. Designing systems that discourage these behaviors will make the facility sustainable and attractive to users.
- Unfair business practices that place financial burden on caretakers, along with the community perception of this individual as someone from a lower caste thereby making fee collection a challenge, makes maintaining and operating a facility a constant struggle. Mitigating this through improved business models and interventions that improve overall perceptions of the caretaker's role would enable better management of the facilities.
- Incentivizing users and designing mechanisms to voice their opinions will lead to an increase in people's tendency to proactively prevent actions detrimental to the community sanitation facilities thus considerably affecting maintenance.



#### 2. Architectural Infrastructure

Design and development efforts need to focus on toilet features and attributes that improve the user's experience throughout the journey of the space, while recognizing that users will include women, children and the aged. Architects must also keep in mind a user's perception of barriers of use of a toilet.

### **Key Learnings**

- Creating boundaries (whether symbolic or physical) around both the toilet itself and the facility will help reduce instances of malfeasance (e.g., dumping of garbage, defecating outside the facility) by clearly demarcating the area in which defecation is to occur. This will reduce the footprint of the perceived "dirty area" or "zone of filth".
- Designing for gender in the past has amounted to little more than ensuring privacy and safety by having separate, but symmetrical, facilities. This fails to take into account the different ways men and women club their sanitation practices: men tend to defecate and bathe at community facilities, whereas women tend to only defecate, coupling their bathing with clothes-washing at a community water point. Alternate space designs tailored to gendered sanitation practices would make toilets more useful.
- Most facilities do not provide mechanisms for disposal of menstrual waste, nor do they provide communications interventions that foster awareness around sanitary practices regarding menstrual hygiene. As a result, many toilets are blocked by pads and towels women attempted to flush and the facility grounds are littered with used sanitary towels. Taking this into account while designing will ensure awareness is nurtured while making for a cleaner, more hygienic, environment.
- Existing facilities rarely have amenities that take into consideration the sanitation needs of children. This leaves either open-defecation or using adult toilets as the only alternatives.

# FOUR PILLARS OF INNOVATION



#### 3. Branding & Communications

Recent times have seen a surge in construction of community sanitation infrastructure for slums with government agencies, but these efforts have largely failed to advocate proper use and hygiene practices, rendering current solutions ineffective. Users of these facilities do not seem to understand the link between proper sanitation habits and disease transmission, making achieving behavior change a difficult task.

### **Key Learnings**

- Making links between diseases and improper sanitation through community engagement activities are necessary to sensitize people to the issue and foster awareness.
- Behavior change can be seeded through emulation by engaging with key influencers in communities. People tend to be hesitant to change unless its value is reinforced by peers, or by seeing the positive benefits experienced by someone in their social network.
- Transparency in communication with the communities these facilities are housed in will help ensure its members feel like they are stakeholders of the toilet and encourage greater adoption and use, especially amongst those most at-risk (e.g., women and children).



#### 4. Business Models

Despite a lot of emphasis on creating thriving self-sustaining community sanitation models, most of the toilet facilities are currently unprofitable, in financial and structural disarray. Many of these toilet facilities have failed to create enough value to convince regular toilet users to pay consistently and, in turn, have failed to convince open defecators to use toilets. In other cases, lackadaisical management structures are partly responsible in different variations for this. There is a dire need to establish systems that provide users with a positive experiential service coupled with creative revenue generation mechanisms.

### **Key Learnings**

- Interesting revenue-generation systems can be created
  if users can be convinced of the long-term value of safe
  sanitation practices, especially in regards to their personal
  well-being.
- User-friendly payment models need to be developed in order to encourage, and sustain, usage of sanitation facilities. Present models employed feature either monthly passes or pay-per-use fees. The former can be cost-prohibitive as many users do not have the level of income requisite for such a purchase; the latter can lead to costs that are nearly 4-times the rate of a monthly pass on an aggregate basis.
- Shared community ownership and maintenance offers an alternative to structured, hierarchical sanitation systems implemented by an agency (e.g. NGO, CBO). An example of such a model is allocating one toilet booth to neighboring families who know each other and reprimand others on misconduct, or getting familiar families to share the cost of a private toilet and use it among themselves.

# FOUR PILLARS OF INNOVATION

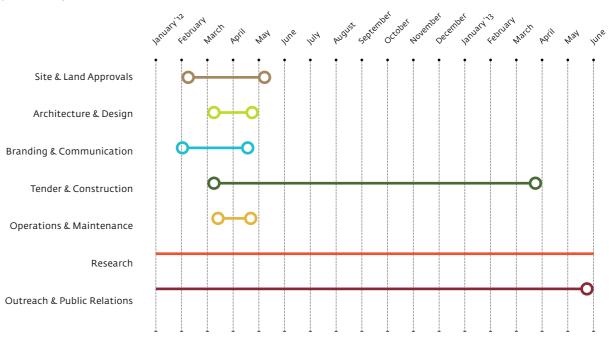
These insights and learnings are the foundation that Project Sammaan is built upon, making it the implementation phase to Potty Project's research phase. The failures, and successes, observed in various urban centers across India have been the focus of internal stakeholder brainstorming sessions that, in turn, have helped to arrive at conclusions that drive all Project Sammaan workstreams. These conclusions were then rigorously tested amongst community members in Bhubaneswar and Cuttack wherever possible to ensure that they are in line with not only what people need, but what people want as well. This user-experience focus will continue throughout the project, including the effectiveness evaluation that will continue for years after the facilities have been built.

The project is a unique innovation initiative due to the diversity of the organizations working on it: design firms, government bodies, empirical researchers, architectural firms, waste management experts, community engagement specialists, and an interface management team. 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 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 (e.g., site selection, land tenders, access to communities, etc.), 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.

Additionally, community engagement activities thus far have shown there is not only demand for the facilities from the communities, but also a willingness to work with the project team in sharing insights on everything from preferred design elements in the facilities themselves to sanitation practices and how they could be augmented with these facilities. Co-creation sessions, feedback meetings, end-user testing of prototypes (e.g., the Potty Lab), and general conversations with individuals and families while visiting the communities Project Sammaan will work with have all helped direct the project thus far. Continued engagement along these lines is planned and will quide the team as the project nears construction.

# TIME LINE



# MILESTONE OVERVIEW

#### Till date

- Quicksand conducted multiple user-experience exercises that directed several components of hardware design (e.g., Universal Access Stalls for physically impaired users)
- Anagram Architects and Quicksand completed designs for various capacities of public toilets in Bhubaneswar and submitted requisite drawings and details for the tender process to the BMC.
- Feedback Foundation finalized the tender type
- Codesign presented the toilet facility brand name and statement to internal stakeholders
- J-PAL conducted randomization activities for Base and Enhanced Layer facilities, across most sites

#### Upcoming

- Hardware contract for the Bhubaneswar public toilets will be awarded after vendor evaluation and negotiation with the BMC and Feedback Foundation
- J-PAL will finalize the design of the O&M management framework and pricing model
- Quicksand will finalize the sewage strategy for community toilets in Bhubaneswar and Cuttack.

### April calendar of events

There are several meetings throughout April that will direct the project's activities in the coming months:

- Feedback Foundation will conduct a pre-bid meeting to share the project's vision with potential contractors and respond to their tendering queries
- Codesign will present the signage graphics for public toilets, as well as the visual identity and brand identity guidelines for the community toilets
- Quicksand will present to BMC & CMC representatives on Architectural Design, Branding, and O&M for the community toilets

# Workstreams

### A. Site & Land Approvals

Project Sammaan's initial pilot phase in Bhubaneswar and Cuttack involves the construction of 119 separate community and public sanitation facilities. Some of these facilities will replace existing, non-functional toilet blocks on the land these failed facilities currently occupy, whereas others will be built on new land allocated by the municipal corporations for use in the project.

Irrespective of this, every site requires vetting to ensure it complies not only with building codes but also within parameters set by the project itself. In order to arrive at the final list of 119 sites, nearly twice as many proposed areas needed to be documented and evaluated.

Feedback Foundation has been the lead agency in conducting the site surveys, including photo-coding of each, collecting, compiling and analyzing land details, and interfacing with the municipal corporations for additional sites that require evaluation.



Feedback Foundation gathering site information in Bhubaneswar

CTRAN has also played an active role in this approval process by interacting and establishing a liaison with officials in BMC and CMC to consolidate a contact base for the project. They have been instrumental in facilitating site selection by compiling lists of sites born out of constant interactions with various government representatives. They've also facilitated site visits and collected site specific details, while drafting NOC letters to different departments (e.g., Irrigation and R&B Department).

Activities in April include:

- Feedback Foundation will partner with J-PAL for site identification activities, while also collecting land details and surveying sites from an approved list provided by Quicksand.
- J-PAL will finalize the list of sites for community toilets in Bhubaneswar. CFAR will then coordinate and complete the requisite surveys of these sites.

#### B. Architecture & Design

Potty Project provided a great deal of detail regarding issues around design that, if improved, could facilitate greater adoption rates of facilities by the communities they serve, and, consequently, reduce instances of open-defecation in these areas.

There will be two broad facility types:

Base Layer: facilities that will include only toilet stalls, menstrual waste incinerators, and handwashing stations. Enhanced Layer: In addition to the base layer features, these facilities will also have bathing stalls, clotheswashing stations, and retail spaces.

The Project Sammaan facilities were designed by focusing on the needs of all users and not by following the standard model of creating symmetrical facilities that provide the same amenities to both males and females and prioritize only privacy and not utility. Additional, supplementary research was conducted to better understand the sanitation habits of children, elderly, the physically disabled, single adult males, and women with children.

The need to shift from the facilities being seen as merely "zones of filth" to that of hygienic and clean areas to conduct all sanitation-related activities (e.g., bathing, clothes-washing, defecating, etc.) required additional exploration as well. Specifically, much attention was paid to designing a structure that allowed for natural lighting and ventilation while increasing the ease in which it can be maintained.

The materials used to construct the facilities is another factor considered during the design phase. The intention is to capitalize on locally available materials as much as possible. This will help reduce costs, while also providing a resource that is reflective of the community that houses it.

Finally, the sewage systems for the facilities required a great deal of attention and conclusions on the direction to take in this regard are currently being finalized. Initially, the facilities were being designed to tie into an existing sewerage network. However, Bhubaneswar is not slated to expand their sewage system for another two years, while Cuttack lacks a centralized sewage system altogether.



Preliminary 3D model for a public toilet facility.

Anagram Architects and Quicksand met with BMGF representatives and sewerage experts to discuss various treatment options and, considering the context, it was concluded that an improved septic tank with an improved soak pit would be the best option. It was also agreed that such a system should be designed on the basis of space availability and site conditions. We are compiling a package with site specific data (for the sites that are confirmed on the list across Cuttack and Bhubaneswar), in order to ensure treatment options are designed to cater to the realities of the sites.

#### Activities in April include:

- Anagram Architects is continuing to develop working drawings for several public toilet sites, as well as different typology designs for base and enhanced layer community toilets in both cities.
- Project Sammaan team members will make a presentation to CMC on design for Community Toilets in Cuttack

### C. Branding & Communication

While Project Sammaan is the project's name, the sanitation facilities we design and build will carry their own brand identity.

It's important to brand these sanitation facilities appropriately to ensure optimal adoption rates amongst end users in the communities, a feeling of professionalism in the people who run these facilities, and brand recall amongst stakeholders in the government and other organizations working in this sector to maximize its impact.

Keeping these goals in mind, Codesign and Quicksand conducted a workshop to identify possible ideas that drive brand and communication design efforts. Based on insights from Potty Project and preliminary field insights, group-based role-playing activities were used to chalk out possible end-user sanitation facility experiences. The workshop also attempted to define the personality of the facility and examine the validity of emerging ideas against real, actionable features.

At the end of the workshop, four strong themes emerged that could potentially drive the facility brand:

**Community**: Strongly rooted in community (e.g., location, user-base, ownership)

**Health & Well-being**: The immediate, measurable impact for users

**Convenience**: A great motivator to use this service rather than existing options

Dignity & Respect: Long-term impact for users and staff

After the workshop, specifications for facility signage design were created to support the mandatory tendering formalities. These are based on functional requirements and current ergonomic considerations.

### Activities in April include:

- Codesign will present the initial visual identity of the community toilets for both cities. A presentation around signage graphics for public toilets will also be made.
- Feedback will conduct a pre-bid meeting on architecture signage for the first batch of public toilets.
- A presentation to CMC on Branding for community toilets in Cuttack will be given by Quicksand.

# WORKSTREAMS

#### D. Tender & Construction

The construction vendors are identified through an exhaustive tendering process managed by Feedback Foundation. The tendering process is administered by the local governments and it is supported by the project team. It is important for the project team to understand the documents that need to be submitted along with the approvals required so that the process is completed within project's timeline.

Feedback Foundation interfaced with the BMC engineering team to obtain more details on the tendering process and to review the tender documents that had already been prepared. They also collaborated with Anagram Architects on incorporating the facility design changes suggested by the engineering team. These efforts help to ensure that the process is completed in a timely manner with all requisite approvals in place.

Anagram Architects prepared site-specific drawings, along with the Bill of Quantities (BoQs), according to the BMC-mandated packages and submitted this for approval to the municipal corporation.

CTRAN facilitated the initial phase of the tendering process by collecting information on the process and packaging of sites with the help of the BMC City Engineer, and getting feedback on the design drawings, estimates, and BoQs. They have also been in constant contact with the Engineering team for progress updates.

The tender documents for all sites will be submitted in the coming weeks and months.

## Activities in April include:

• The BMC will evaluate and negotiate with vendors, as well as award the hardware contract, for the first batch of public toilets. They will also begin the e-tendering process of these facilities. Feedback Foundation will play an active role in assisting the BMC during the process, and to ensure that the award of the tender will safeguard the innovation mandate of Project Sammaan.

#### E. Operations & Maintenance

Operations & Maintenance (O&M) is one of the four pillars of innovation, primarily due to the fact that shortcomings and failures within this largely determines the success of the facilities.

Given the importance of this workstream, a great deal of time and effort has gone into understanding the current models that are employed, while exploring practical changes that can be made to operating and maintaining these facilities while improving the quality of life of the caretakers themselves, both through their perceived value and position within the communities they serve and by addressing unfair business practices that put an undue financial strain on them.

The active participation of the local municipal corporations in Bhubaneswar and Cuttack provided the opportunity to create a Project Management Office (PMO) to oversee the facilities going forward. CTRAN worked with both the BMC and CMC to develop the PMO to act as the single window of communication between the municipal corporations and government. This office is instrumental in capacity building efforts with BMC and CMC representatives, ensuring that the project is sustainable both now and in the future.

The PMO will also integrate an operations help desk into the existing frameworks of the BMC and CMC, including developing a back-end support framework for the webbased system. This help desk will serve as an interface with Project Sammaan communities to assist them with any issues they're facing relating to the facilities.

### Activities in April include:

- J-PAL to finalize the design of O&M management framework and pricing model for Community Toilets in both cities
- Preparing the O&M tender for the public toilets in Bhubaneswar

#### F. Research

Project Sammaan's objective is to rethink the current models of sanitation facilities and design a new programmatic infrastructure and physical structure that addresses issues affecting sanitation practices in India. However, in order to validate the actual impact these facilities have on improving the lives of the end-users, extensive and robust evaluation is required.

As part of Project Sammaan, J-PAL is studying how improved community sanitation models impact open defecation rates in urban slums in Bhubaneswar and Cuttack and is currently conducting large scale surveys in the communities Project Sammaan works in.

J-PAL initially draws maps of the slums, based on which their survey team conducts a door-to-door census survey, which provides the basis for a more in-depth baseline study.

Since May 2012, J-PAL has completed drawing maps of all 32 Project Sammaan communities in Cuttack, as well as 63 communities in Bhubaneswar. Census data collection for both cities started in the last quarter of 2012. J-PAL has also surveyed close to 20,000 households. In March, 14 new communities were mapped and 1,000 households surveyed. In support of these activities, CTRAN has organized consultation sessions with BMC officials to keep them informed on the project's research methodology.



A community feedback and co-design session

### G. Outreach & Public Relations

A key component of Project Sammaan is to communicate its activities, and associated learnings, to stakeholders, sector partners, interested organizations, and the general public. This level of transparency will culminate in a toolkit available to anyone interested in replicating the project's successful sanitation interventions, whether in India or beyond. Quicksand is the lead organization for strategic communications.

The broad strategy in communicating Sammaan to the outside world involves various touch-points: a web site and blog provides ongoing updates while sharing project documents and fostering conversations around sanitation, films have been and will continue to be created to share the lives of community members affected by Sammaan and project developments as they occur, photography is utilized in visually presenting the project in various forms, social media channels share not only

information on the project itself but also provides context through articles and reports regarding sanitation, and print collateral such as brochures and this newsletter will provide even deeper understanding into the goals of the project, its challenges, and the milestones reached along the way.

The project blog has been migrated to the website (projectsammaan.com). It will continue to act as a real-time progress report and repository for insights by members of the project team on their work. Authorship has been extended to all Project Sammaan team members and participation is strongly encouraged. The blog will be a vital tool in developing the toolkit as it will afford the team the ability to review activities over the course of the project rather than rely on ex post facto reflection. Additionally, this is the first edition of a monthly newsletter that will provide an up-to-date progress report on project developments while also providing insight into the activities in the coming month. Its purpose is to streamline communication and project knowledge sharing between partners.

Pertinent workstreams will be highlighted in each newsletter, with each of the project partners providing updates on their individual efforts and their impact on the overall project. These workstreams will evolve as the project progresses and different activities take greater precedence.

### Activities in April include:

- Creating the May newsletter
- Finalize the film series plan and corresponding calendar
- Updating the blog and website, as well as social media channels

# Conclusion

April is a critical month for Project Sammaan across many workstreams: design for a large number of community toilet sites will be finalized, vendors will be vetted and the construction contract awarded for the Bhubaneswar public toilets, the sanitation facility brand identity is set to be unveiled, the O&M management frameworks and pricing models are to be presented, sewage strategy will be finalized, and the final remaining sites will be surveyed.

Each of these broad activities require many sub-activities that involve multiple partners working together to accomplish them. Furthermore, the work in the coming months is contingent upon the timely completion of these activities. These interdependencies and overlaps are vitally important to keep in mind as the project progresses as Project Sammaan is more a collaborative effort amongst partners than it is an assemblage of independent entities operating in a vacuum.

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