



**Project Sammaan**  
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## PROJECT OVERVIEW

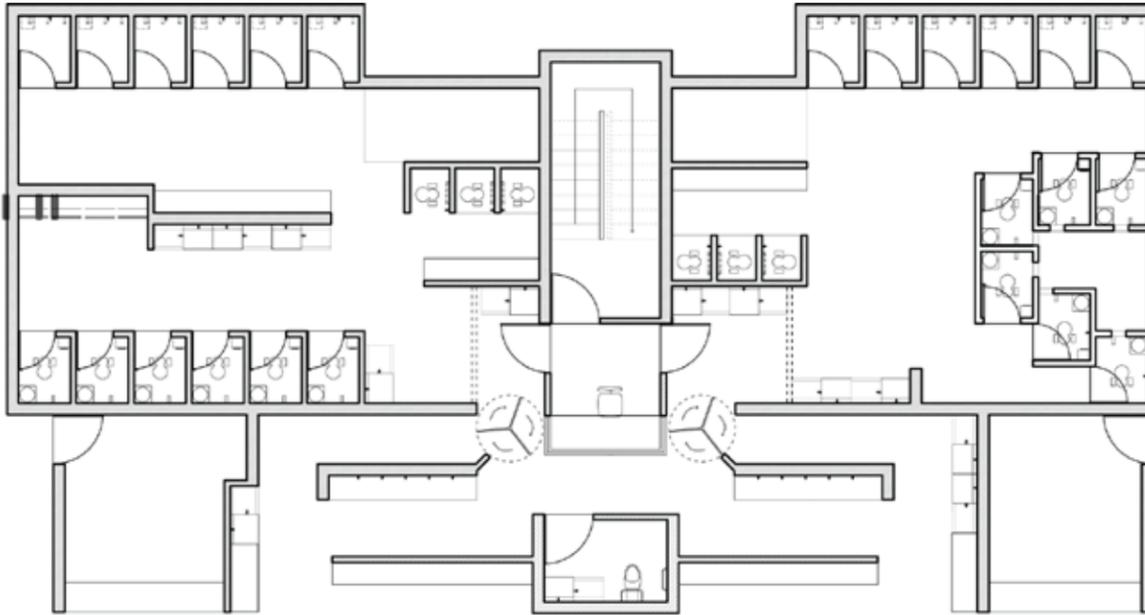
Project Sammaan is an urban sanitation initiative dedicated to redesigning and improving facilities for slum communities across India. The initiative is being piloted in Bhubaneswar and Cuttack with the aim to replicate it in other cities, if successful.

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 reimagined 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.

## FEATURE: *Achievements*



### Facility designs were finalized.

After months of internal deliberations and community engagement exercises, the design features of the facilities were agreed upon, thereby allowing the individual facility designs to proceed. This is the first, most critical, component of the design process and one that seeks to shift the Potty Project findings from the conceptual phase and into practice.

The first point of the project's grant proposal is to "reduce the incidence of open defecation and improve health among the urban poor." Designing with these parameters in mind requires deviating from the standard model of simple toilet blocks, to offer additional amenities that cater to all sanitation needs.

To this end, enhancements such as bathing and hand-washing stations, menstrual waste incinerators, children's toilets, and universal access stalls for physically-impaired users were added. Furthermore, functional aesthetic improvements such as improved natural lighting and ventilation were taken into consideration and included in architectural designs.



### The toilet facility brand name and statement has been created and presented to internal stakeholders.

The branding and subsequent communication for the Sanitation System Prototype is one of the key areas of intervention that can drive adoption of the sanitation facilities and lead to awareness and behavior change with regards to sanitation and well-being. The Project Sammaan facilities' brand vision and values are driven by the need to:

1. *Create awareness about the invisible link between diseases and improper sanitation.*  
A majority of people do not seem to attribute transmission of diseases to poor sanitation and waste management, pointing to a larger lack of understanding of the repercussions of poor sanitation and waste management habits and practices.
2. *Seed behavior change through emulation.*  
People in the slum learn about new practices, sanitation related or otherwise, by emulating either their peers or people they interact with at work.
3. *Build an aspirational image around sanitation.*  
While most personal hygiene products are connected to driving personal beauty, there is an absence of any connection between better sanitation and an aspirational self-image.
4. *Engage people in the planning phase.*  
Agencies that work towards providing sanitation facilities in slums rarely consult residents during the planning and design phase of the community blocks.

## FEATURE: *Achievements*



### **Randomization activities for Base and Enhanced Layer facilities across most sites, have been conducted.**

The effectiveness of various toilet infrastructure interventions will be rigorously tested using a randomized impact evaluation methodology.

This type of evaluation uses random assignment to allocate resources, run programs, or apply policies as part of the study design. Like all impact evaluations, the main purpose of randomized evaluations is to determine whether a program has an impact, and more specifically, to quantify how large that impact is. Impact evaluations measure program effectiveness typically by comparing outcomes of those (individuals, communities, schools, etc) who received the program against those who did not. There are many methods of doing this. But randomized evaluations are generally considered the most rigorous and, all else equal, produce the most accurate (i.e. unbiased) results.

Prior to Project Sammaan's interventions, J-PAL collected baseline data from households living in communities surrounding each toilet block. It also conducted detailed audits of the baseline toilet facilities. After the hardware and software interventions are introduced, toilet use at each facility at high frequency will be monitored, and ongoing monitoring data on open defecation practices and on the management challenges and financial health of the toilet operators will be collected. There will also be two further rounds of intensive household survey work: a midline survey for a subset of sample households, and a detailed endline survey at all sample households at the end of the project period.



### **Multiple user-experience exercises that directed several components of hardware design (e.g., Universal Access Stalls for physically impaired users) have taken place.**

The mandate to design a facility that is both functional and valued by its host community can only be adhered to by including members of said community in the design process, both at its inception and throughout its development. This notion builds off of the initial research conducted during the Potty Project where end-user habits and individual aspirations were studied to identify areas for improvement in regards to sanitation in India's urban slum context.

Co-design activities were conducted with community members in Bhubaneswar and Cuttack that put the onus on users to identify the elements that needed to be included in the facilities (e.g., hand-washing stations, menstrual waste incinerators) as well as the layout of these facilities. Community members shared their sanitation processes with researchers while also informing on physical design considerations for the facility.

As these facilities will serve the entire population of host communities, all users must be taken into consideration for the design and features. This necessitated prototyping activities with elderly and physically-impaired users, since they have unique needs outside the standard user set. As such, Quicksand created the "Potty Lab" to have volunteers identify features that would meet their needs while working within the spatial constraints each facility must adhere to.

# PEOPLE OF ORISSA

A collection of portraits taken by members of the Project Sammaan team



## BLOG HIGHLIGHT:

### “Building Momentum” by Ayush Chauhan



These are early days still to claim success but we may have finally managed to move the project forward through a small but extremely important milestone - the tendering of public toilets in Bhubaneswar. The technical sanction and Public Health standing committee approvals are in place and the tender documents await the administrative sanction before they are floated on the e-tendering platform of Bhubaneswar Municipal Corporation.

Like I said, this is a small but extremely important milestone for the project consortium, and here's why.

It's small because, strictly speaking, public toilets fall outside the purview of randomised control trials which is one of the major outcomes of the project. In lay terms, it means that the eventual impact of public toilets on public health through mitigation of open-defecation will not be measured. From a purely developmental perspective, this may seem odd because it suffers the fate of most development projects where the impact is either not measured or, if measured, done so inaccurately. But from a project perspective, this was unavoidable because the first and foremost challenge that Project Sammaan seeks to address is the failure of community toilets located within low income residential communities. The investment in research, being limited, was therefore prioritised for community toilets over public toilets.

Regardless, the successful tendering of Public Toilets is an extremely important milestone and, at the risk of sounding self-congratulatory, something all of us at Project Sammaan should be proud of.

The reasons for it are the following:

*Successful test run of complex multi-stakeholder negotiations and processes* The design of public toilets coming through marks a successful collaboration between multiple

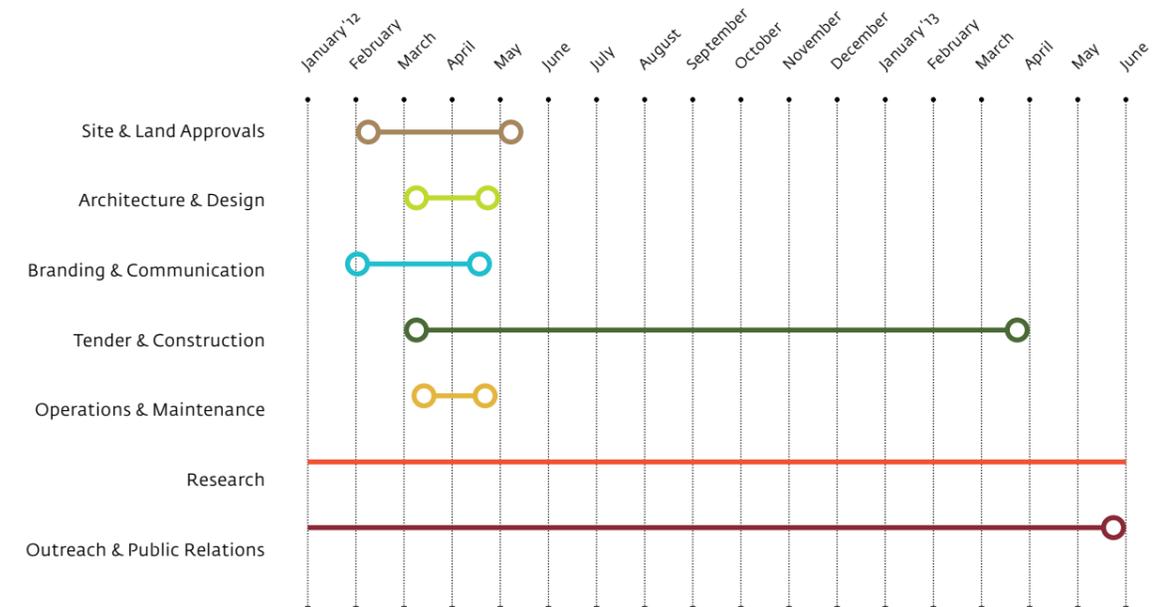
partners from fields of architecture, engineering, design, economics, research and management. While its still too early to say if the toilets by themselves are “successful”, this phase lays a solid foundation where each consortium member is aware of each other's strengths and limitations. We also now have first-hand knowledge of the challenges that we must collectively overcome if we have to deliver this project while adhering to the strict quality and efficiency benchmarks that we must hold ourselves accountable to.

*Truly innovative toilet model is months away from deployment.* To my knowledge, the hardware designs being used in public toilets in Bhubaneswar are the first time certain innovations are being attempted by a city corporation and the prospect of seeing them deployed in a few months is exciting. The innovations range from simple construction guidelines that ensure easier cleaning and maintenance to certain features such as menstrual waste incinerators that are being tried out at such a scale for the first time.

*Established a working relationship between Project Sammaan and the city governments that is based on mutual trust and respect.* The design and planning of public toilets went through several phases where the working relationship between Project Sammaan and the city governments was tested. As we went through the design phase, it became evident that to gain the government's confidence the team would need to work within the constraints of the established legal and administrative frameworks - often inimical to the design process which banks on being highly iterative and conversational. The government on the other hand took time to warm up to a process that relied on frequent check-ins, and often their guidance on how to navigate bureaucratic bottlenecks that could potentially derail the project. As the public toilet design moves into the tendering phase, we feel reasonably confident of having a partner in the government administration that is equally excited and eager to see the results.

Notwithstanding the time it has taken to get this far, as we step into the design of community toilets, it seems like the team is surer, more confident in its own abilities to design and deliver sanitation services to the people of Bhubaneswar and Cuttack - and that in my opinion is a valuable asset that we must cherish and celebrate, even if in a small way.

## TIME LINE



## MILESTONE OVERVIEW

### To date

- A team from the BMC travelled to Nagpur to study DEWATS systems that CDD has recently put in place there. The team was impressed with the DEWATS technology and have green lit it for use in the Bhubaneswar sites where feasible.
- The Preliminary Project Report for the community toilets in Cuttack has been approved by the Commissioner and Mayor of Cuttack and has been forwarded to the Principal Secretary of the Housing & Urban Development department at the state government.
- Community toilet design features were presented to the engineering teams of both the BMC & CMC

### Upcoming

- Pre-construction activities (e.g., awarding work order) will commence on all Public Toilets
- A list of sites that can fit DEWATS and improved septic tanks will be identified and presented to the municipal corporations. After which site-specific design schemes will be prepared
- Community facility designs will be finalized by Anagram Architects
- Public toilet O&M processes and guidelines will be completed by J-PAL and the corresponding tender document released

### June calendar of events

- Acquire facility-specific inputs required for the O&M pricing model and incorporate them into the corresponding pricing document
- Finalize the tender document draft for Batch 2 community facilities
- A pre-construction dialogue tool will be developed to assist in soliciting contractors
- The first draft of the O&M tender document will be shared with the project team
- Site approvals finalized for Batch 3 community facilities
- BMC is to write a letter to the Housing and Urban Development department for formal take-over of land for Batch 3 sites

## WORKSTREAMS

### A. Liaisoning & Capacity Building

The month of May was all about coordinating for the advancement of the project and the pending deliverables to be accomplished. CTRAN successfully coordinated for the exposure visit to Nagpur for the DEWATS system. Apart from this CTRAN arranged and corresponded for the monthly meetings on the 8th and 9th of this month.

Multiple interactions with other divisions concerned with water supply and sewerage for creating a database of information on the sewerage connections in the proposed locations were facilitated.

CTRAN also took tasks related to the technical aspect through facilitating submission and acquiring critical inputs on the design and layout of the toilet units from the officials of Bhubaneswar Municipal Corporation and Cuttack Municipal Corporation.

But more importantly, CTRAN has been working closely with the Government departments to keep records of the meetings and the interactions on Project Sammaan. The same has also been shared with the project partners. These updates have provided the guidelines for the strategic progression of the project.

CTRAN has also successfully worked on the operations helpdesk feasibility report which would help the end users to track their complaints regarding the sanitation facilities. This would certainly provide a crucial input to ensure the sustainability of the facilities.

*Activities in June include:*

- Working towards the release of tender for Public Sanitation facilities in Bhubaneswar
- Coordinating with engineers for the validation of nearby sewerage connections



**Project team meeting at CMC**



**Water pump at a Bhubaneswar basti**

### B. Operations & Maintenance

Determining the right pricing for the community toilets constructed under this project is an important input for the Operations and Management framework. As a first step towards developing O&M models for the community toilets, a detailed pricing model was developed. The J-PAL team will feed in specific costs based on the inputs received from the hardware team, which will help in estimating monthly operating costs for the toilets. These costs will be offset against the charges that the users pay and the money earned through advertising, renting shops, and the like, to arrive at a break-even price.

The pricing model will help J-PAL understand what are the highest costs that contribute to toilet expenses and when presenting these expenses to the BMC/CMC, we may be able to suggest costs that the municipal corporations can contribute towards, or may need to raise money for through other sources.

The project team will recommend 2-3 feasible models to the City Commissioners and incorporate their feedback while arriving at the final price.

*Activities in June include:*

- Working on finalising the O&M for the Public toilets with the BMC Commissioner
- Continuing work on the training manual for the community toilets
- Public toilet O&M processes and guidelines to be completed and the corresponding tender document released

## WORKSTREAMS

### C. Research

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. J-PAL is currently conducting large scale surveys in the communities Project Sammaan works in.

In May, J-PAL focused on identifying additional communities that need a community sanitation facility. J-PAL successfully identified more than 20 communities with the help of Bhubaneswar Municipal Corporation officials and administered a door-to-door census survey in these communities. Close to 2000 households were surveyed in the process.



**Community engagement activities**

The census survey provides a preliminary assessment of sanitation conditions that helps estimate user demand for a proposed community sanitation facility. J-PAL is working on using randomized control trial methodology to select sites for provision of a community sanitation facility. In the month of June J-PAL aims to complete the process of preliminary census data collection and shift its focus on to a detailed baseline survey.

*Activities in June include:*

- A site location census will be conducted on Batch 4 community facilities in Bhubaneswar
- Data collection activities to aid in evaluating O&M and pricing models

### D. Architecture & Design

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. Additional, supplementary research was conducted to better understand the sanitation habits of elderly, the physically disabled, single males, and women with children. There will be two broad facility types:

1. Base Layer: facilities that will include only toilet stalls, clothes-washing stations, menstrual waste incinerators, and handwashing stations.

2. Enhanced Layer: base layer features, along with bathing stalls and retail spaces.

The month of May was an extremely busy, and productive, time for Architectural & Design activities as the project is moving ever-nearer to commencing pre-construction activities. June will be even more hectic as decisions made regarding sewerage will be incorporated into tender drawings for facilities prior to selecting a contractor that will break ground for the first batch of the toilets.

*Activities in June include:*

- Community facility designs will be finalized
- Tender drawings for the various types of toilets, incorporating CDD's sewerage inputs to be drafted

### E. Outreach & Public Relations

May was yet another very busy month for the communications team, with blog activity crescendoing, work continuing on the Technical & Design Guidelines document, and Project Sammaan being added to SuSanA, the online sustainable sanitation alliance forum.

As the overall project activities continue increasing, the blog has seen an influx in participation from all partners. Posts about the state of sanitation in India joined those on public relations, branding, project management, and community census activities, making the month of May one of the most diverse in terms of features.

The Technical & Design Guidelines document continues to be fleshed out with project details. This document will not only act as the one-stop source of project information, but will also serve as the initial version of the toolkit, one of the key deliverables of Project Sammaan.

SuSanA, a global forum for individuals and organizations working on sustainable sanitation projects, is featuring Project Sammaan. This is obviously a very exciting development and one that will increase the project's footprint exponentially. The profile is being finalized now and will be on the site ([www.susana.org](http://www.susana.org)) soon.

*Activities in June include:*

- Finalizing the Project Sammaan profile for SuSanA
- Developing a short-term media plan for additional films



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



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 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

## CODESIGN



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



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

## CONCLUSION



June will be an extremely busy, and important, month for the team and Project Sammaan: the tender for public toilets in Bhubaneswar will be released, final decisions will be made on sewerage, tender drawings for the community toilets will be initiated, the project will be featured on the one of the world's largest online sanitation forums, decisions will be made processes and pricing for O&M, and pre-construction activities will commence.

There is a real sense of excitement building amongst the team members as the project prepares to construct the first of its facilities. The many months of long nights and marathon meetings are paying dividends as we move closer and closer to breaking ground and providing the communities with the improved facilities they so desperately need. There is much work still to be done before we reach that moment, but it's going to come sooner rather than later, and this thought has re-energized the team and instilled a sense of anxious excitement and camaraderie.

