

1. Title of grant:

Demonstration of a decentralized and sustainable FSM solution in a low-income resettlement colony in Delhi

2. Subtitle (more descriptive title):

Demonstrate viable decentralized solutions for FSM/Septage management solutions in Delhi and provide TA to Delhi government to build on the momentum/support finding solutions that can be scaled up in urban slums

3. Name of lead organization:

WaterAid India

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5. Grantee location:

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6. Developing country where the research is being or will be tested:

India

7. Start and end date:

13 September 2016 – 30 September 2018

8. Grant type: (e.g. Global Challenges Explorations, Reinvent the Toilet Challenge, Other)

Reinvent the Toilet Challenge

9. Grant size:

USD 2,040,042

10. Short description of the project:

Background –

WaterAid India (WAI) along with its partners International Water Management Institute (IWMI) and Centre for Urban and Regional Excellence (CURE) is implementing a pilot project on Sustainable Faecal Sludge Management (FSM) and Decentralised Sanitation Solution for low-income community (Savda Ghevra) in Delhi. The Bill & Melinda Gates Foundation (BMGF) is supporting the project implementation under its mission to address health and sanitation challenges in India.

Project Description –

The project aims to demonstrate a small-scale pilot of a viable and sustainable decentralised FSM solution in an urban low-income re-settlement colony in Delhi. In future, the proposed project intends to provide technical advisory support to the Delhi Government to facilitate adoption of such practices in similar low-income high-density settlements in the city. Additionally, we will setup a stakeholder dialogue platform to bring together government departments, NGOs, community groups and private sector to ensure that the demonstration integrates both public policy objectives with local preferences.

There will be activities undertaken to engage the communities and enhance educational programmes on FSM.

The proposed project will also address contemporary innovations encompassing the entire containment, collection, transport, treatment/reuse sanitation value chain, and develop a viable business model for successful demonstration of the solution. To achieve the desired impact, we will be working closely with relevant government agencies such as the Delhi Jal Board (DJB), and the Delhi Urban Shelter Improvement Board (DUSIB).

Project scope –

The proposed demonstration project will initially target a population of around 20,000 people to address existing sanitation challenges and provide viable FSM solutions. Basis the existing baseline data, an understanding of the current situation at Savda Ghevra and the challenges faced by the community, the FSM unit will demonstrate the following:

- A business model and plan for FSM in nonsewered locations
- A decentralised modular design for treatment. It is possible to expand the area covered with corresponding investments in a phased approach
- Construction of Cluster Septic Tanks with Upflow Anaerobic Filter (UpAF) in two blocks of Savda Ghevra to address containment issues at household level
- The solution will address each component of the sanitation value chain – containment, collection, transportation and treatment for disposal or reuse
- A participatory approach involving all stakeholders to deliver a sustainable FSM solution

The business plan will include and require:

- Consultation with the community
- Development of protocols and systems for financial management and long term operations and maintenance
- Inclusion of the current service providers who will provide the last mile connectivity to the system
- Involvement of local government bodies in an effort to seed the idea into their future development planning
- Demonstrate the project in a phased modular approach. This approach will help in enhancing the investments in the project. It will also permit inclusion of additional modules such as service connections thereby minimising risk to the current investment and provide the option for scaling up to include more households in future.

The project aims to move beyond information provision and ensure actual changes in FSM in India that will help build sustainable sanitation solutions. Though this pilot is a short-term two year project, the long-term outcomes will aim at establishing a robust network of stakeholders who can further build partnerships to scale up FSM solutions on ground and develop replicable models. The overall long-term impact will

lead to improved standard of living by providing better sanitation conditions, ensuring a cleaner and more hygienic environment.

11. Goal(s):

“To demonstrate a decentralized and sustainable FSM solution and advocate with government for replication through self-financing in appropriate contexts”

12. Objectives:

- To demonstrate a small scale decentralized, viable and sustainable FSM solution in Savda Ghevra resettlement colony with replication & scale-up potential to Delhi or elsewhere in India
- To develop a solution engaging communities, relevant Government authorities and other stakeholders in a participatory manner
- To create a demonstration based on a modular design for treatment of faecal sludge which can be expanded in a phased manner with corresponding investments
- To address contemporary innovations encompassing the entire sanitation value chain – containment, collection, transport, treatment/reuse, and develop a viable business model for successful demonstration of the FSM solution
- To help facilitate creation of a favorable opinion within government departments to expand this to address the problem of FSM in low-income urban settlements in India.

13. Research or implementation partners:

WaterAid India (WAI) along with its partners International Water Management Institute (IWMI) and Centre for Urban and Regional Excellence (CURE) is implementing a pilot project on Sustainable Faecal Sludge Management (FSM) and Decentralised Sanitation Solution for low-income community (Savda Ghevra) in Delhi.

The partnership combines the complementary expertise of the three organizations. While WAI's goal is universal access to WASH, WAI focuses primarily on the excluded and most marginalized communities. WAI works on drinking water security, WASH in Health and Nutrition, WASH in Schools, Climate Change and Disaster Risk Reduction and Rural and Urban WASH. WaterAid India is part of National Faecal Sludge and Spetage Management Forum of development partners and organisations that contributes to national level advocacy agenda on Faecal Sludge Management with Ministry of Housing and Urban Affairs (MoHUA) and other stakeholders. As a result, the MoHUA has released a “National Policy on Faecal Sludge and Septage Management (NFSSM) policy.

http://www.swachhbharaturban.in:8080/sbm/content/writereaddata/FSSM%20Policy%20Report_23%20Feb_Artwork.pdf.

WaterAid India with its long-term experience in WASH, close partnership with various organizations across India and established relationship with Government caters a lead role in overall project governance, project management, government liaison and quality assurance in project implementation.

IWMI's Resource Recovery and Reuse (RRR) theme has worked over 15 years on safe sanitation measures that includes developing reuse products from faecal sludge from onsite sanitation and safe wastewater use. With its decade of research experience on excreta management and safe

wastewater and reuse in Africa and Asia, IWMI is providing technical assistance in designing the technology and quality assurance.

CURE is a not-for-profit, development organisation that works with urban, informal and low-income communities. It strives to achieve three goals; reconnected urban societies that take rightful decisions to ensure sustainable urban development; strengthened local agencies with capacities for community engagement, participatory planning and development; and evidence building from the ground up for people-centered planning and development of cities. CURE brings over decade of experience working in target community and has demonstrated a DEWATS system. CURE is responsible for on-ground facilitation and implementation of project activities and community processes.

In addition, this project intends to enhance the participation of other institutions including the relevant Government agencies, stakeholders and communities at relevant stages and processes of the project.

14. Links, further readings – results to date:

The rapid assessment of sanitation (FSM) situation of low-income communities in Delhi, process adopted to select target community (Savda Ghevra Resettlement colony), technical concept note on proposed FSM technology and persuading relevant Government agencies – Delhi Jal Board (DJB) & Delhi Urban Shelter Improvement Board (DUSIB) for demonstration and exposure visit of senior Government officials to successful FSM site helped achieving Government buy-in and approval for demonstration of the project.

At community level series of interpersonal communications, household and community level meetings, sharing of concept and advantages of FSM and along with various socio-economic and technical assessments enabled designing and finalizing a community centric FSM technology.

Apart from securing necessary approvals (technology approval) from the relevant government agencies and the concerned govt. department has also shown willingness to own the Faecal Sludge Treatment Plant (FSTP) constructed by the consortium under this project., the earmarked land parcel for FSTP has been transferred by DUSIB to DJB for construction of FSTP. Presently, the consortium is in process of tendering to initiate construction of FSTP, facilitating study and assesment required for the development of SBCC strategy. Parallely, the economic assessment for suitable business model and strengthening of community engagement processes, institutions building etc. are underway.

15. Current state of affairs:

Post securing required land for FSTP construction, signing of MoU (non-financial) with the Delhi Jal Board (DJB) and process for selection of suitable contractor to construct FSTP is underway. In addition, WaterAid India has also proceeded for creation of the dedicated website for the project and pre-intervention documentary, animations and photo shoot. At one side where IWMI is undertaking intensive study to develop an appropriate business model, it is also engaging with relevant government agencies to developing relevant institutional framework. CURE at its front sensitising the community for toilet construction, community participation & contribution in proposed Cluster Septic Tank (CST) in Block A & C and community engagement to participate in FSTP planning process. WaterAid India is in the process of securing permission to construct FSTP and CST in the community and developing Social and Behaviour Change Communication (SBCC) Strategy & IEC. WaterAid India is also in the process of developing independent project website and capture pre-intervention status of the project.

16. Biggest successes so far:

The consortium successfully convinced decision makers from Government agencies, that is, Delhi Jal Board (DJB) and Delhi Urban Shelter Improvement Board (DUSIB) for demonstration of FSM project in Delhi, which resulted into gaining their inputs in technology design finalization and approval, willingness to own the FSTP post successful commissioning and implementation of the project.

The other biggest success is securing required land for FSTP construction and consistent support & participation by both the government agencies at various platform in the project processes.

17. Main challenges / frustration:

- Complex processes at intra and inter departmental level in government causing delays and shifts in project timelines
- Vested interest of few community members and their affiliation to different political parties causing slowdown of community mobilization processes