

# IMPROVED SANITATION IN TRIBAL GUJARAT

## TATA WATER MISSION, TATA TRUSTS – CENTRAL INDIA INITIATIVE

- **Background**

Dahod is a tribal district, which was carved out of Panchmahal district in 1997. The district is prevalent with issues related to drinking water security and poor sanitation. During the monsoons, drinking water sources are contaminated by the runoff carrying pollutants from the waste around the villages. During summer (and winter to a lesser extent) the acute scarcity compels communities to utilize sources of drinking water with poor water quality. Shortage of water also affects the personal hygiene and sanitation practices. Hence, water borne and skin diseases are common health disorders. Sanitation infrastructure - both community based and individual - is underdeveloped. As per the baseline survey of Swachh Bharat Mission - Gramin (SBM-G) in 2014, the district had the lowest sanitation coverage within the state with 22.39% of the households having Individual Household Toilets (IHHL).

To improve the access to clean and safe drinking water and building sanitation infrastructure to people and to bring irreversible impact on the livelihood among people in the Central India region, CInI worked with close collaboration with the TATA Water Mission and anchors the TWM initiatives in the tribal region of Gujarat.

This case study highlights an innovation in Dahod that CInI undertook within their TWM sanitation program. This was done through formation of collectives like federations, making it possible to create bridge/funding or gap funding strategies which then contribute to strengthening of the supply chain involved in a sanitation program.

- **Location, Date**

Dahod, Gujarat; 2014

- **Areas**

Rural

- **Stage/Scale**

Pilot Demonstration

- **Objective of the assignment**

To improve the access to clean and safe drinking water and building sanitation infrastructure to people

## • What was done

A KAP and Baseline survey was conducted before commencement of work in the targeted programme area through household surveys and FGDs. Based on the findings, following activities were conducted.

### • Exploring Suitable Cost-Effective Sanitation Models

- *Exploration of suitable technical options for sanitation and cost effectiveness with appropriate supply chain:* Considering broad guidelines under SBM, 4 models were tried in the area. The fourth model was tried out using AAC blocks - it was similar to the brick masonry model and received more acceptances from the community.

Model	Positive Aspects	Negative aspects
Model 1 – Brick Masonry	<ul style="list-style-type: none"> <li>• As the traditional model, well accepted by the Community</li> <li>• Good Strength</li> </ul>	<ul style="list-style-type: none"> <li>• High construction time (Average 4 days per unit)</li> <li>• High Mason and labor charges, high unit Cost</li> </ul>
Model 2 – Precast Concrete material	<ul style="list-style-type: none"> <li>• Construction time (Average 1.5 days per unit)</li> <li>• Less Mason and labor charges</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy weight includes high risk during elevation total weight is around 2.5 ton</li> <li>• Not easily accepted by the community</li> </ul>
Model 3 – Toilet with AAC panels	<ul style="list-style-type: none"> <li>• Construction time (Average 2 days per unit)</li> <li>• Less weight panel is easy to install compared to model 2, around 1.25 ton</li> <li>• Comparatively Less cost</li> </ul>	<ul style="list-style-type: none"> <li>• Panel elevation needs to be really accurate that demands involvement of only trained skilled mason.</li> </ul>
Model 4 – AAC Block toilet	<ul style="list-style-type: none"> <li>• Construction time (Average 1.5 days per unit)</li> <li>• An cost effective model comparative to brick masonry</li> <li>• Light weight bricks are easy to handle while construction</li> <li>• Mason does not need any special skills or instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Required special chemical cement for bonding blocks, which is available with AAC block manufacturer only</li> </ul>

- *Using Behaviour Change Communication (BCC) to Trigger Demand:* The first part of the BCC campaign was to finalise an appropriate toilet model ensuring community participation. The second part was to ensure skill building at the village level to ensure quality construction, and the third part was to ensure supply chain to scale up. Each and every model was demonstrated with some households. During construction, it was ensured that all the masons and at least one member from the household would be present during the construction. Post demonstration, exposure visits to the constructed units were also organised to understand the quality and technical details of toilet units. During demand creation, the cost of each model was also discussed upfront with the community. This has also helped build trust within the community. The IEC material developed for the cause was also based on transparency.

### • Institutional Support to Promote Loan Based Models

- *Institutional Interface:* CInI explored the opportunity to work with an established community based organisation in the area. As a result, a program with the **Lift Irrigation Cooperative Federation (LI)** in Limkheda Taluka of Dahod district was initiated. **CInI** was responsible for Overall Capacity Building of the staff, village level institutions and federations. It was also responsible for providing technical support for ensuring quality implementation of the program. The **Federation** was supposed to work closely with the village level member LI

cooperatives for overall planning, implementation and monitoring of the program interventions in the target villages/clusters. It was responsible for overall financial management, ensuring regular field documentation, setting up adequate systems and process required for the implementation of the program. It had to facilitate the process of generating demand with the target of achieving ODF hamlets in the selected villages. Lastly, it had to ensure the loan repayment from the beneficiaries.

- *Demand Generation through BCC Campaigns:* During construction of the toilet units; Mason training and door to door contact were organised. Post such events hamlet level meetings with all Households used to be organised. During these meetings, information for toilet construction used to be shared, developing clarity on loan component. Series of small activities were conducted with appropriate sequence and time line, such as one day one village campaign, school programmes, Healthy home survey, cleanliness drives and video shows etc. IEC materials were also developed around the developing understanding of importance of sanitation.



- *Sustaining Behavioural Change & Scaling up Intervention:* CInI ensures a robust social mobilization and capacity building process. For triggering\sensitisation activities were steered by the Sanitation Committee and conducted at the hamlet level.
- *Financing Construction of Sanitation Units:* CInI, along with the federation, developed a system for financing construction of sanitation units in which the initial amount of INR 500 was taken as token money from the beneficiary and provided a loan towards availing the material for the toilet unit.

## ● Impact

- The sanitation coverage has increased from 22.39% in 2014 to 59% in 2016.
- 517 beneficiaries availed loan and constructed toilets
- 52 Toilets were constructed with Bathrooms
- INR 43, 539, 55 bridge fund was utilised

## ● Challenges and Issues

- The community perception was that good quality usable toilets were a distant dream, even though incentives for sanitation were available under Government schemes. It can be attributed to lack of ownership and contractor driven approach for toilet construction. Community Involvement to modify existing structures through judicious

usage of available resources has helped challenge the notion that the government is solely responsible for construction of toilets.

- In addition to the above factors, availability of material at the village level is also a challenge. As the villages and hamlets of the region are scattered, transportation cost of the materials also adds a significant amount to the toilet unit cost. So the challenge was to develop a cost effective model along with the support of a revolving fund with proper repayment mechanisms put in place.

- **Innovation**

The program was based on **Bridge Financing Model**. The model provides flexibility of funding options and availability of quality material along with technical support and has no doubt ensured good quality toilets but also achieved additional feats.

- **Lessons learnt**

Flexibility of funding has also triggered innovations, modification and different sizes of superstructures as per the convenience of the beneficiaries, thus increasing ownership and adoption.

- **Financials**

Not Available

- **Economic sustainability/Revenue Model**

Construction of toilets is a huge investment; layering sanitation program with other livelihood related activities provides a support mechanism for repayment.

- **Implementer Contact Persons**

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- **Sources and References**

- Study submitted by Tata Trusts