



HUDCO AWARDS FOR BEST PRACTICES TO IMPROVE THE LIVING ENVIRONMENT



A COMPENDIUM OF THE AWARD WINNING AND OTHER ENTRIES RECEIVED
FOR THE HUDCO BEST PRACTICES AWARD FOR THE YEAR 2014-15

2014-15



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HUDCO Awards for Best Practices to Improve the Living Environment

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**HOUSING AND URBAN DEVELOPMENT CORPORATION LIMITED
NEW DELHI - 110 003**

ONE HOME-ONE TOILET PROGRAM

The best practice award given to M/s. Shelter associates jointly with Pune Municipal Corporation, Maharashtra under the category of "Sanitation" for its initiatives of improving urban sanitation by increasing access to safe toilets through city-wide 'One Home-One Toilet' program

M/s. SHELTER ASSOCIATES, PUNE

SUMMARY

Open defecation and unclean community toilets in urban slums; create untold health problems and human dignity and safety violations. Shelter's One Home-One Toilet Program collects data and creates detailed GIS maps of every slum in a city, thereby understanding the state of toilets and open defecation, and waste management accurately and in-depth.

Along with municipal authorities, Shelter uses this data to create practical and viable sanitation plans to build individual household toilets in slums, conducting detailed surveys and running workshops to both educate people about sanitation, and understand their concerns.

Shelter builds toilets, which cost Rs. 20,000 per house, with the family paying 25-30% and Shelter contributing the balance in form of material. Shelter has built over 2,500 toilets in urban slums and is scaling its program to reach more cities, through a process that is holistic, data-driven, transparent and participatory.

MAIN FOCUS OF THE BEST PRACTICE

1. Collecting and mapping city - wide slum information to develop economically viable, intelligent and sustainable programs to increase availability of safe and economical toilets for slum - dwellers

2. Using data and behaviour change programs to improve behaviour such as using toilets and collecting disposable solid waste in hygienic manner

KEY DATES

Date	Significance/Achievement
2004 - 2007	Built Individual and community toilets for 3500 households across 12 slums in Sangli-Miraj under Cities Alliance-USAID supported project with funding leveraged from Normal Bharat Abhiyan for community toilets
2010 - 2012	Providing household toilets in 500 hutments in slums of Pune
2013 - 2014	Appraisal and Mapping of all 316 slums in Pune with 106,700 households—found that only 28% have household toilets, rest use community toilets or defecate in open
2013 - 2016	Building 1,500+ household toilets in Pune and Sangli (over 900+ toilets already built)

BACKGROUND

The project is running in Pune where 40% of almost 3.5 million people live in slums. 500,000 slum-dwellers are forced to use dirty toilets or defecate in the open—women and children are most affected with health, nutrition and safety issues. By building household toilets, Shelter creates a long-term and sustainable solution to urban sanitation.

ESTABLISHMENT OF PRIORITIES

As the mission is to have an effective process to increase access to safe toilets in urban slums, the following key priorities emerged:



A “poor” condition toilet in a community toilet block that is used everyday by women in Pune



An “individual household toilet “built by Shelter Associates

1. Building safe household toilets which are a convenient and long-term solution
2. Minimizing financial burden on government: toilet partly paid for by the family and zero repairs burden on municipal authorities
3. Participatory model including municipal authorities and community, so all concerns are addressed and process is viable and sustainable
4. Collecting current data and using GIS Technology and Maps to properly understand ground realities and track progress in a transparent manner

RESPONSIBILITIES OF KEY PARTIES

➤ SHELTER ASSOCIATES:

- Collected data and created maps, and submitted to municipal engineers for verification
- Identified sewerage networks needed to build toilets
- Mobilized communities to create demand for toilets
- Supervised construction of quality toilets

➤ MUNICIPAL:

- Verified maps and decided which sewerage repairs were feasible
- Participated in community mobilization efforts

➤ COMMUNITY MEMBERS:

- Paid 30% of the cost of toilet
- Participated in solid waste management programs

MOBILISATION OF RESOURCES

Shelter raises funds from philanthropists and corporate foundation including TATA Trusts, Forbes Marshall, HDFC Bank and Google, Alfa Laval, Yardi etc. for data collection, mobilization and building toilets.

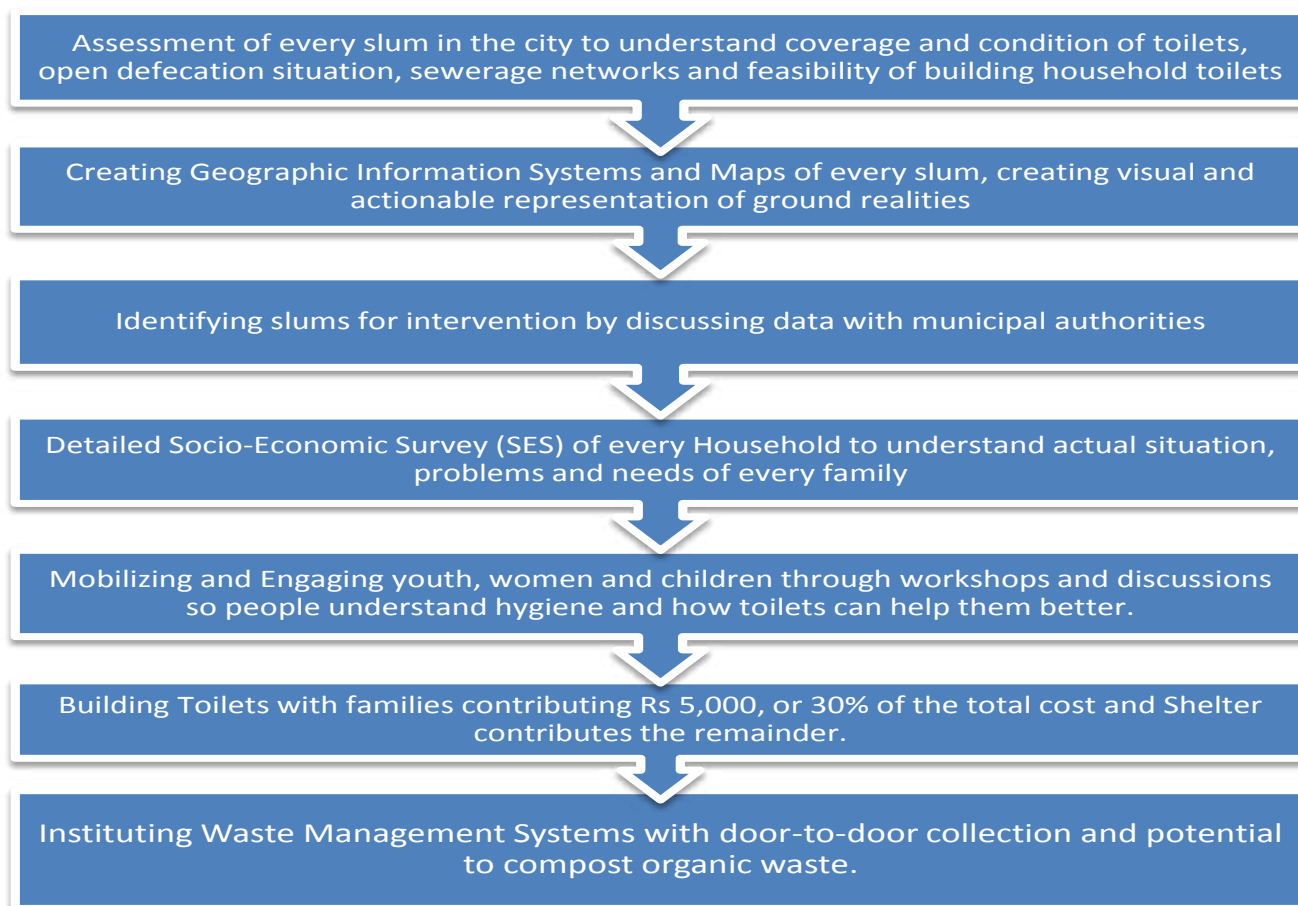
The Pimpri-Chinchwad Municipal Corporation recently agreed to pay for an entire city-wide mapping of slums and Pune Municipal Corporation has made budgetary allocations of Rs. 2 Crore to build an additional 1500 individual toilets to match the funding raised by Shelter for a similar number of toilets.

The team comprises of experienced architects, geographic information system experts and social and community workers to manage all aspects of operations and quality control.

Shelter collaborates with expert technical organizations to design and deploy bio-toilets and with municipal engineers to improve sanitation infrastructure.

PROCESS

Shelter's process has 7 steps:



The efforts taken to collect data through surveys and understand the challenges faced by people, helps to convince people to participate and take advantage of this work, as they understand it is for their own benefit. Training staff and volunteers to engage with communities in a respectful yet firm and clear manner is therefore critical.

Standard Operating Procedures are established for every process to ensure planning and execution is standardized across teams in different places. AQL data re-checking is built into data collection and entry process to ensure accurate data is captured. Tablets are used for capturing data to reduce errors.

RESULTS ACHIEVED

Building a toilet for a family has guaranteed immediate, deep and sustained impact. Improved health and associated savings—less diarrhoea, urinary tract infections and related problems, could be seen which reduces missed

days at work or school and thus improved incomes and education. Women, girls and elderly feel safe and can go to the toilet at any time without assistance or fear. This enables them to eat meals and drink water properly, especially dinner, which improves nutrition and reduces likelihood of chronic digestive tract and other internal health problems. Having their own private toilet is transformational for any slum-dwelling family.

At the community level, improving sewerage networks makes water supply safer, and solid waste management programs make the community cleaner and healthier, particularly in monsoons. The workshops also create a sense of joint responsibility and people learn how to engage with civic authorities and demand their rights.

By providing accurate data and maps to municipal authorities, Shelter hopes to improve and bring transparency into city-wide public works so cost-effective and informed decisions are taken

regarding sanitation and other programs.

Lastly, Shelter's model and experience has influenced policies such as RAY, to create better policies and processes for implementation of large government programs for urban renewal.

CASE STUDY

Impact Case: Rajiv Gandhi Nagar Slum Sinhgad Road, Pune

Settlement is on a hill with population of 329 consisting of 87 households.

Being on top of a hill makes it isolated and difficult to provide water, sanitation, waste management and other basic services. More than 65% of people defecated in the open, thus putting themselves, others and the environment at risk. There was no sewer system at the top of the slum and hence about 25 houses were deprived of the opportunity to have their own toilet.



1. **INVOLVEMENT OF PMC OFFICIALS:** From the very beginning Shelter involved officials from the Pune Municipal Corporation and the Councillor, who was actively present



in community meetings and workshops, which helped her form a bond of trust with the women living there. This also resulted in the ward office extending the sewer lines to cover the top 25 families who were getting left out.

2. **BEHAVIOUR CHANGE:** Community meetings, workshops with children and women helped to make residents aware of how their situation could improve through better sanitation and waste management. Personal interactions helped build trust so residents believed that Shelter will act in their best interest and not implement solutions that will breakdown or create problems in the future



3. **CONSTRUCTION OF INDIVIDUAL TOILETS:** The constant emphasis on the benefits of constructing individual toilets, especially for women as they have to face the worst ordeals of open defecation in terms of sexual harassment and impact on reproductive and digestive health, led to families coming forward to have their individual toilet constructed.





Pune, to a clean, more respectful place where people could live safely and with dignity. People also felt less marginalized and more valued as Shelter and the Councilor had undertaken a lot of trouble to help improve their lives, earning tremendous goodwill.

SUSTAINABILITY

The program evolved due to a desire to make it sustainable, transparent and replicable across India.

FINANCIAL:

- o Cost effective solution due to zero maintenance cost of toilets for ULB.
- o Slum-dwellers contribute 25-30% of total cost, reducing outlay of government

SOCIAL:

- o Increases safety of women, reduces incidence of water borne diseases in children. Reduces harassment by men and improves dignity

ENVIRONMENTAL:

- o Reducing open defecation reduces air and ground water pollution
- o Solid waste management programs clean slum environment

INSTITUTIONAL:

- o A model for partnership between municipal bodies and non-governmental organizations
- o Data availability to ULB improves planning, prioritizing and decision-making
- o Research helps move policies away from wasteful community toilets and towards sustainable individual toilets

TRANSFERABILITY

Shelter has replicated its work in Pune, Sangli and Pimpri-Chinchwad, following the same core process described herein. Active support of local municipality and elected officials significantly improves effectiveness, but the model can work in any urban city across India.

4. **WASTE SEGREGATION AND MANAGEMENT:** In Workshops and FGDs, the importance of waste segregation was discussed and they were given proper training on the same. The women in the community were provided bins for waste segregation and were trained on composting.



All the above efforts have led to the slum being 95% open defecation free slum.

All in all, Shelter's intervention transformed the slum from one of the worst living conditions in



The process has certain technical aspects such as data analysis, GIS, Mapping, improving sewerage systems and building toilets, which require special expertise. Thus, a team is needed that has these skills, and has social workers to mobilize and educate people, and create demand for toilets.

Shelter plans to expand to 5 new cities between 2015-18 in partnership with local NGOs.

LESSONS LEARNED

In 2000, Shelter built community toilets for the Pune Municipal Corporation but in a few months, realized these were inadequate solutions as maintenance was poor, vandalism broke the infrastructure and repairs were expensive, and elderly and unwell people could not use them due to distance. Having 1 toilet seat for 50 people, which was the prescribed ration of the PMC, was very inconvenient for all people and it became clear that community toilets were not a sustainable or economical solution.

Thus, Shelter realized that individual household toilets that are maintained by and easily accessible to the family, was not only a practical solution, but also more cost effective. A community toilet for 100 families costs Rs. 20 Lacks to build and Rs. 7-15 Lack to maintain for 5 years. 100 household toilets are a one-time cost of Rs 16-20 Lacks to build, saving Rs 11-15 Lacks in 5 years alone.

To do this at scale, Shelter needed data and maps to plan and monitor implementation as the status of each house can be tracked over time on maps.

Lastly, Shelter engaged with the municipal authorities through an MOU, as they have to provide sewerage infrastructure, and community involvement builds ownership and joint responsibility especially for solid waste management programs.

