

Project Notes

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Improving Urban Poor's Access to Sanitation: Community-Led Sanitation Project, Sangli, Maharashtra

Indo-USAID FIRE (D) supports the Citywide Community-Led Sanitation Program in Sangli, Maharashtra in partnership with Sangli-Miraj-Kupwad Municipal Corporation (SMKMC), Shelter Associates (SA), a NGO, and Bandhani, a local Community Based Organisation (CBO). The initiative is assisting 3,500 urban households in twelve slums gain access to sanitation services. Significant improvements in personal and environmental health benefited Sangli's most disadvantaged and marginalized communities.

The Sangli model emphasizes individual toilets where feasible, and also demonstrates sustainable management structures for community toilets which can potentially be replicated elsewhere. The financial structuring utilizes donor and public funding to ensure affordability for households who are investing their own resources. Access to improved sanitation facilities provides immediate and powerful results and serves as an effective entry point for further slum upgradation.

The sanitation situation in urban India is substandard – while the 2001 Census recorded urban sanitation coverage at 61 percent having access to pit/water closet (WC) flush latrines, recent research shows that only 25 percent of the population has access to a sewerage connection.¹ Historically, sanitation infrastructure has been a low priority for cities, and like other public services it suffers from inadequate maintenance and management. Of the 300 Class-1 cities, only 70 (23%) have partial sewerage systems and treatment facilities. The urban poor are disproportionately affected because they lack access to clean water and adequate sanitation services resulting in more intense exposure to contamination and diseases. Women and adolescent girls suffer the highest risk since they are responsible for providing the household with basic services when the local government fails to do so. They face additional risk as their socially ascribed roles keep them at home most of the time, in constant contact with the contaminated environment.

Sangli-Miraj-Kupwad is a rapidly growing city in the state of Maharashtra with a population of half a million. Approximately 15 percent of the city's population lives in slums with minimal— if any— access to basic infrastructure. SMKMC has not

¹ WHO and UNICEF. 2006. *Meeting the MDG Drinking Water and Sanitation Target: The Urban and Rural Challenge of the Decade*. Geneva and New York.

been able to undertake any significant infrastructure improvements during the last twenty years. Consequently, SMKMC solicited the Indo-USAID Financial Institutions Reform and Expansion-Debt (FIRE -D) Project, which previously assisted Sangli with urban management reforms, to strategize and help implement pro-poor service delivery.

Salient Features

- Improving access to sanitation facilities with emphasis on individual toilets, where feasible, or community managed toilets.
- Spatial mapping and use of Geographic Information System (GIS) as a planning tool.
- Multi stakeholder partnerships between donors, government and private sector.
- Micro-credit savings program and household contributions.
- Health and hygiene education.
- Community-led planning and labor contribution.

Project Development

Under USAID FIRE (D) support, the project commenced in April 2001 with Sangli's first citywide slum survey to assess the level of basic services and facilities. The survey conducted by SA

FIRE(D)

revealed that almost 90 percent of Sangli slums lacked sanitation facilities. Following the survey, the project launched a pilot in 2002 to construct two community toilet blocks in Sangli Wadi and Rajiv Gandhi Nagar

Community Toilet Pilot, Sangli Wadi

Sangli Wadi is a small settlement of 55 families, mostly employed as agricultural wage laborers. The settlement's distant location from the city's sewerage network and the degree of community interest reinforced its suitability for a community toilet project. The community-led design process, facilitated by SA, resulted in a toilet design which included separate facilities for men and women, squatting pans for children, a caretaker's house and a biogas energy system. The user charges pay for the caretaker's salary, and the integrated biogas energy system provides the caretaker with fuel for cooking and lighting.

Sangli Wadi families receive a monthly pass for Rs.20, while five other families residing outside the settlement each pay Rs. 30 per month for toilet use. The community unanimously decided that the two poorest families, who cannot afford the user charge, should receive free access to the facilities.

Where no previous sanitation facilities existed, the entire slum now has access to a clean, well-lit and sustainably managed toilet facility accessible 24x7.



slums.¹ The successful community toilet model incorporated sustainable management practices and an innovative waste-based energy system in the form of a biogas plant. The pilot also included an overarching supervisory "forum" consisting of representatives from government, media and civil society, responsible for preventing mismanagement and malpractices. The forum cultivated strong partnerships based on transparency and accountability that helped foster enthusiasm for subsequent scaling-up of the project.

After the successful pilot, SMKMC agreed there would be value in applying the strategy citywide. During the program's third phase (2004-2006) SA assisted SMKMC to shortlist twelve slums that had very limited/no

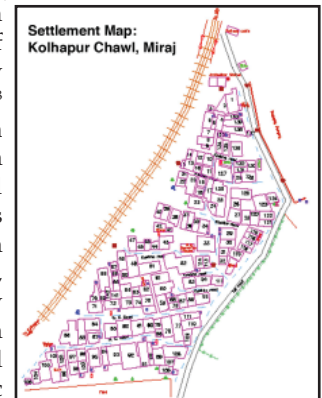
¹ This second phase was implemented with financial assistance from the Institute on Governance, Canada.

access to sanitation facilities. With these twelve slums, SA facilitated participatory planning processes that included spatial mapping and socioeconomic surveys to help design appropriate sanitation interventions.

During preparation of this Project Note, the program was in its fourth phase, assisting twelve slums (approximately 3,500 households) gain access to individual toilets. USAID's global Community Water and Sanitation Facility and Cities Alliance, a multilateral donor agency, have provided US\$182,000 towards construction (covering 20% of construction cost) and technical assistance.² SMKMC has made a commitment to fund 40 percent of construction costs while the balance will be met by household contributions as well as state and central government schemes aimed at ensuring access of urban poor communities to adequate sanitation.

Strategies Adopted

Spatial mapping, socioeconomic surveys and GIS as a tool for planning. Using the plane table survey methodology, accurately drawn maps were created showing spatial data such as the location and size of houses, and community infrastructure.³ Socioeconomic data collected through settlement and household surveys provided information on caste, family size, occupations and family income. Integrated with GIS software, spatial and socioeconomic data together provide a comprehensive picture of the communities, potentially down to household level. This innovative approach developed by SA demonstrated to SMKMC how GIS could be used to ascertain community needs and aspirations and to develop feasible strategic and technical infrastructure designs.



Sanitation domain – encouraging individual toilets. The degree to which sanitation facilities provide protection from diseases depends on the sanitation domain (i.e. public versus individual) and the management of facilities. Public facilities often do not represent 'improved' sanitation because they frequently lack adequate maintenance thereby deterring use and creating health risks. Substandard design and

² Of the Cities Alliance money, US\$75,000 was used for technical assistance. Activities supported under technical assistance include building federations through saving groups, facilitating community processes for designing sanitation facilities, co-ordination with local administration and facilitating local government to access funds for construction of toilets from central and state governments schemes.

³ Mapping community infrastructure includes showing location of common water points, toilets, manholes, surface gutters, garbage containers, street lights, electric poles, telephone poles, trees, etc.

management systems make public facilities largely inaccessible to users such as children, elderly and disabled and lead to open defecation. Alternately, when families build individual toilets, they are making investments and creating new assets. Ownership confers household responsibility, often leading to cleaner, safer and more efficient use of resources that, in turn, provides better disease protection and healthier environments. The program has encouraged construction of individual household toilets where technically (proximity to existing drainage network) and financially feasible (with some household contributions).

Based on the spatial data collected and the level of community interest, three slums initiated individual toilet construction in 2006, namely, Jatkar Vasti, Bouddha Vasahat and Khaja Vasti.

Community mobilization was essential to the project's success since households needed to buy into the benefits

Shabana's Individual Household Toilet

Shabana Iqbal Sheikh is a resident of Khaja Vasti settlement. Shabana lives in a kuccha house (temporary structure) with her husband and two daughters. The family income is approximately Rs. 4,000 per month primarily earned by her husband who works in an automobile repair garage. The only sanitation facility present in the settlement prior to the initiative was a dilapidated four-seat public toilet which was defunct forcing most of the families to defecate in the open. Shabana lamented how unsafe and humiliating it was for women to defecate in the open, especially at night. She quickly embraced the idea of individual toilets during a community meeting and was one of the first people to participate in the project. She thought an individual toilet would provide her family with dignity, safety and security while also reducing frequent illness.

To help convince her family, Shabana along with her husband and children visited Jatkar Vasti, a slum where individual toilet construction was in full swing. Thereafter, the family determinedly raised its own contribution of Rs. 1,300 (40% of the total cost of Rs. 3,500). Shabana and her husband provided their own labor for the unskilled portion of the toilet construction. Their kuccha shack now has a quality pucca (permanent structure) toilet and bath within it.

The process instilled confidence in the family to continue upgrading its house. Shabana mentions that she is no longer shy of inviting her relatives and friends to visit. Shabana's new toilet, the first in Khwaja Vasti, represented such a positive change that the remaining sixty-five families initiated the process and began construction.

of improved sanitation, contributing their resources, and maintaining facilities after construction. Working with Bandhani (a community based organization), SA effectively facilitated small group meetings to discuss sanitation options, highlight similar initiatives in other slums (or cities) and conduct the socioeconomic surveys. This process helped overcome initial community resistance while slowly building trust and solidarity. Small saving groups, limited to twenty members, helped raise the households' financial contributions. Households also contributed building materials, provided unskilled labor, and supervised overall construction.

Individual Toilets Constructed in 2006				
Settlement	No. of toilets constructed	Average cost per unit (Rs.)	Contribution by families (%)	Support by project funds (%)
Jatkar	103	6,000	20	80
Boudha	144	6,300	20	80
Khaja	66	3,500	5	95
Total	313			

Improving broader environmental health and hygiene practices. Developing a sanitary and healthy living environment goes beyond providing toilet facilities. It also requires adopting healthy living practices and proper collection and safe disposal of solid waste. Upon the request of two communities, namely Sangli Wadi and Jatkar Vasti, the project team addressed concerns of improper garbage collection. The community-oriented solution focused on household garbage segregation, collection, recycling and composting. Ms. Lata Shrikhande, a vermiculture expert, facilitated



Above: row of individual toilets next to houses and improved road.

FIRE (D)'s Role

- As a facilitator FIRE (D) promoted key policy decisions and negotiated local government and state-level support.
- Networking with international donors allowed SA-SMKMC to access financial assistance from Cities Alliance to scale up the sanitation project citywide.
- Financial and technical assistance supported the spatial mapping, socioeconomic surveys, and GIS software for planning and design.

awareness sessions on handling of wet and dry garbage, and explained how solid waste could be used for agricultural compost. The communities embraced the idea and planted green spaces and vegetable gardens throughout the slum.

Personal hygiene is as important as a clean physical environment and the two are integral to preventing disease transmission. As toilet construction accelerated, Junction Social, a Mumbai-based consulting firm, helped identify current hygiene behaviours and suggested simple improvements such as raising awareness on the need for regular hand washing and menstrual hygiene. During these workshops, SA staff and communities learned about the critical need to address these issues, and regular follow-up sessions have resulted in a positive shift in hygiene behaviours including regular hand washing after using the toilet and disposal of infant faeces.

Outcomes and Impacts

The Sangli Citywide Community-Led Sanitation Program has resulted in improved access of urban poor communities to sanitation services. With previously minimal or no access to sanitation facilities, the slums covered by the project now have good quality individual or community toilets. The improvements in sanitation infrastructure coupled with improved hygiene behaviour have resulted in better health and improved well-being for the target communities.

The Sangli model has demonstrated the feasibility of providing individual toilets as a solution for the sanitation problems facing urban poor communities. It has demonstrated the feasibility of household financial contributions for individual toilet construction and a community-managed shared/public toilet model. The toilet project proved to be an effective entry point for further slum upgrading including solid waste management, road paving, and house improvements.

Success of the program stemmed from a strong multi-stakeholder partnership between the local government, CBOs, and NGOs. The initiative has been supported by collaboration among various international agencies providing financial and technical support including Cities Alliance, USAID's Community Water and Sanitation Facility, FIRE (D), and the Institute of Governance, Canada. FIRE (D) technical input helped drive the initiative during negotiations with international donors, SMKMC, and private sector. The initiative has also been successful in leveraging resources from private individuals like Friends of Shelter Associates — formed by Professor Sunil Bhatia of Connecticut College, USA, which pledged US\$30,000 and will facilitate extension of the initiative to other slum settlements not initially shortlisted.

As a grassroots and local source of community change, the program is an effective solution for improving service delivery for the urban poor. Its positive impact on basic service delivery aligns with the Government of India's Jawaharlal Nehru National Urban Renewal Mission,¹ which provides an opportunity for financial support for wide-scale replication.

This project was implemented by Shelter Associates (SA). The team at SA was led by Ms. Pratima Joshi. Mr. Chetan Vaidya, Principal Urban Management Advisor, FIRE (D) managed the project on behalf of FIRE(D). The project note was written by Ms. Shikha Shukla Chhabra, Consultant, FIRE(D) and Stephen Matzie, TCGI based on various reports and presentations prepared by SA and FIRE(D). The reports are available in the FIRE office in New Delhi, and TCGI in Washington, DC. All Project Notes are available online at www.tcgillc.com/docs_firenotes.htm.

¹ Under the sub-mission on Basic Services for the Urban Poor (BSUP) and Integrated Housing and Slum Development Program (IHS DP).

Indo-US Financial Institutions Reform and Expansion Project - Debt Market Component FIRE(D)

The mission of the Indo-US FIRE(D) Project is to institutionalize the delivery of commercially viable urban environmental infrastructure and services at the local, state and national levels. Since 1994, the Project has been working to support the development of demonstration projects and of a sustainable urban infrastructure finance system. Now, the Project is also pursuing this mission through:

- Expansion of the roles of the private sector, NGOs and CBOs in the development, delivery, operation and maintenance of urban environmental infrastructure;
- Increased efficiency in the operation and maintenance of existing water supply and sewerage systems;
- Strengthened financial management systems at the local level;
- Development of legal and regulatory frameworks at the state level;
- Continued implementation of the 74th Constitutional Amendment; and
- Capacity-building through the development of an Urban Management Training Network.

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