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Environment and Urbanization 2003 15: 11

DOI: 10.1177/095624780301500202

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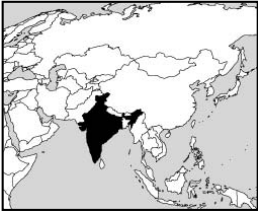
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Community-designed, built and managed toilet blocks in Indian cities

Sundar Burra, Sheela Patel and Thomas Kerr

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This paper is a longer version of a chapter in Steve Bass, Hannah Reid, David Satterthwaite and Paul Steele (editors), *Politics, Poverty and the Environment: Experiences from Asia, Africa, Latin America and the Caribbean*, Earthscan Publications, London (forthcoming) and the authors are grateful to the Department for International Development (DFID) for their support for writing this paper.

SUMMARY: This paper describes the ten-year programme of community-designed, built and managed toilet blocks undertaken by urban poor federations and women's cooperatives, with support from the Indian NGO SPARC. This programme has reached hundreds of thousands of poor urban dwellers with much improved sanitation and facilities for washing; it has also demonstrated how such provision is affordable and manageable for all Indian cities. But this programme has also demonstrated to city authorities the capacity and competence of urban poor organizations, and helped change the relationship between the residents of slums and local government agencies. The paper begins by explaining why sanitation has been neglected, and describes the inadequacies in government sanitation programmes. It then describes the first experiments with community sanitation and the difficult negotiations in many cities, including Mumbai, Kanpur and Bangalore. Then it discusses the major community toilet programmes that developed in Pune and Mumbai. It highlights the innovations that allowed these to work better than previous public toilet blocks, the reasons why the urban poor organizations took on these projects, the lessons learnt and the ways in which community toilet blocks helped address other problems faced by the urban poor.

I. INTRODUCTION

THIS PAPER DESCRIBES the involvement of an Alliance of three Indian organizations in community-designed, built and managed toilet blocks that now serve more than half a million low-income urban dwellers in eight cities in India. These three organizations are SPARC, the National Slum Dwellers Federation and Mahila Milan. SPARC is an Indian NGO established in Mumbai in 1984 that began working with women pavement dwellers. The National Slum Dwellers Federation (NSDF) links together and represents organizations and federations of slum dwellers throughout India and, by March 2002, was operating in 52 cities and 9 states with over 750,000 members. The largest membership is in Mumbai where 250,000 households are members. Mahila Milan ("women together") is the name given to collectives of women slum and pavement dwellers that work closely with the National Slum Dwellers Federation. The community toilet blocks are part of a larger programme of work in which the SPARC-NSDF-Mahila Milan Alliance⁽¹⁾ is involved. It includes community-managed resettlement programmes,⁽²⁾ slum rehabilitation programmes (for instance, the construction of apartment blocks in Dharavi, Mumbai's largest

and perhaps most dense slum, to allow housing improvements without displacing any inhabitants) and housing programmes for pavement and slum dwellers.⁽³⁾

II. THE INADEQUACIES IN PROVISION FOR SANITATION

IN RECENT DECADES, few city governments in India have invested much in extending provision for sanitation to the slums. It is common for between one-quarter and one-half of the population in Indian cities to have inadequate or no provision for sanitation, mostly those living in slums.⁽⁴⁾ Lack of funds may explain the lack of attention to sanitation in many cities, but this is not so for cities such as Mumbai and Pune where, until recently, municipal authorities did not spend the money that had been allocated to construct toilets. Nor can the inadequacies in provision for water and sanitation in cities such as Bangalore be explained by lack of funding, since large investments have been made in infrastructure there; here it is political choices regarding what infrastructure to prioritize and what to ignore that explains the inadequacies in provision.⁽⁵⁾

In Indian cities, what little investment that has been made in sanitation in low-income areas has generally been through local bodies (slum boards, housing authorities, development authorities and municipal corporations) building public toilet blocks; these bodies are also meant to maintain them. But the number of toilet blocks built in any year does not seem to be based on an assessment of need in relation to the population or on available budgetary resources. The need is far greater than what is planned for, even though resources allocated for sanitation often remain underutilized.

For the toilet blocks that are built, the traditional method has been for the corporation to estimate the construction costs according to a government schedule of rates, and then to call for tenders from contractors. Generally, the engineering wings of local bodies deal with these matters, and there is rarely any consultation with inhabitants regarding the location, design, construction and provision for maintenance. The agencies responsible for construction and maintenance generally have little accountability to the communities in which they build, and there is no sense of ownership among the inhabitants or their organizations for the new toilet blocks. The quality of toilet construction (undertaken by contractors) is often poor and the design often inappropriate – for instance, with limited water supplies so the toilets get blocked and dirty, and with no access to drainage.

Municipal corporations have conservancy departments whose duty it is to clean and maintain public toilet blocks, as well as maintain drains and streets. But the staff usually fail to maintain the public toilet blocks in slums, and the local population has no control over them. Communities often have to pay them extra money to do the job for which they are already being paid. Municipal bureaucracies are also large and cumbersome, making supervision difficult, and attempts to impose discipline among the staff invariably fail. The local government bodies that build the public toilet blocks see these as their property and make no effort to involve communities in their maintenance.

The public toilet blocks are often in serious disrepair within three months of being constructed, leaving people with little or no alternative

1. Called “the Alliance” in the rest of this paper.

2. See Patel, Sheela, Celine d’Cruz and Sundar Burra (2002), “Beyond evictions in a global city; people-managed resettlement in Mumbai”, *Environment and Urbanization* Vol 14, No 1, pages 159–172.

3. Patel, Sheela and Diana Mitlin (2001), “The work of SPARC and its partners Mahila Milan and the National Slum Dwellers Federation in India”, IIED Working Paper No 5 on Urban Poverty Reduction, IIED, London.

4. UN–Habitat (2003), *Water and Sanitation in the World’s Cities; Local Action for Global Goals*, Earthscan Publications, London, 274 pages.

5. See reference 4; also Sinclair Knight Merz and Egis Consulting Australia in association with Brisbane City Enterprises and Feedback HSSI–STUP Consultants – Taru Leading Edge (2002), “Bangalore water supply and environmental sanitation masterplan project; overview report on services to urban poor, stage 2”, AusAid, March; and Benjamin, Solomon (2000), “Governance, economic settings and poverty in Bangalore”, *Environment and Urbanization* Vol 12, No 1, pages 35–56.

but to defecate in the open. The space around the public toilets often becomes heavily used for open defecation which, in turn, produces a very large health burden and contributes to high infant and child death rates. Toilet blocks also become places where household wastes are dumped, since communities often have no garbage collection. Women suffer most from having no accessible and safe toilet. To protect their modesty, they often wait until nightfall to defecate in the open – but this need to wait until dark also causes widespread gastric disorders.

Various organizations such as charitable trusts, NGOs, international agencies and local business associations (such as Rotary Clubs) have had some involvement in “toilets for the poor” projects. They often build “pay-and-use” toilets. In many cities, there are agencies that function as contractors, construct sanitation facilities and appoint caretakers to keep the facilities clean. User charges help to pay the salaries of caretakers and cleaners, provide materials and cover maintenance. These public toilets work well in large concourses such as railway stations and bus stops, but are not a workable solution in slums because of the high prices charged, usually 1 rupee per person each time the toilet is used. A family of five would have to spend 150 rupees a month to allow each member to use these toilet blocks just once a day – a sum beyond the means of most of the urban poor. As in the case of government built toilet blocks, the question of community participation in designing, constructing and maintaining these “pay-and-use” toilets does not arise.

Thus, neither the government toilet blocks nor the private or charity toilet blocks serve slum inhabitants. The corporation model results in early deterioration and disuse, and the “pay-and-use” approach produces toilets too expensive for low-income households.

III. THE POLITICS OF SANITATION

THUS A CRITICAL question is when and how do city authorities develop some sensitivity to issues of sanitation for the poor? When does investment in extending sanitation to the slums and informal settlements begin to figure in municipal budgets? For the city of Mumbai (formerly Bombay), India’s financial capital, the first investment in a comprehensive drainage system for parts of the city was spurred by external pressure. At a conference on cholera in 1867, the French and Egyptian representatives referred to Bombay as a “cholera nest”. Then, in 1876, the Egyptian Board of Health imposed a quarantine on ships carrying pilgrims that had departed from Bombay. Arthur Crawford, the municipal commissioner, argued that to maintain Bombay’s role as an important port within the British Empire and to overcome the fear of exporting cholera, financial assistance was required to improve the city’s sanitation. Here, as in many other cities at that time (including New York and London), the fact that cholera epidemics threatened the city’s economic future helped overcome the reluctance of governments and of middle- and upper-income groups towards large public investments.⁽⁶⁾

More than a century later, pressure for attention to sanitation came mainly from civil society. The city of Mumbai sought funding from the World Bank to expand its sewer system and received a US\$ 167 million non-concessional loan and a US\$ 25 million concessional loan,⁽⁷⁾ but the original project focused on setting up marine outfalls and sewage treatment plants. The loans were approved and the project was initiated. But

6. Rosenberg, Charles E (1962), *The Cholera Years*, University of Chicago Press, Chicago; also Chaplin, Susan E (1999), “Social exclusion and the politics of sanitation in urban India”, *Environment and Urbanization* Vol 11, No 1, April, pages 145–158.

7. Most loans from the World Bank are provided at interest rates which fully recover the Bank’s costs – so-called “non-concessional” loans. The Bank also has a soft loan facility – the International Development Association – which provides loans at very low interest rates, although these are only available to low-income nations.

the city government had to be reminded by NGOs that half of Mumbai's population lives in slums and informal settlements, where the installation of toilets and sewers was a greater priority than the construction of sewer outfalls and sewage treatment. The municipal corporation responded by offering to provide some minimum sanitation for about a million people, using a small part of the available funding.

There are various reasons for the lack of attention to sanitation in Mumbai over the years. A primary reason is that the large health burdens associated with inadequate sanitation no longer affect most middle- and upper-income groups, whose homes and neighbourhoods have piped water and sewerage connections.⁸ Another key reason is the inaccurate stereotypes concerning the poor held by most middle- and upper-income groups. The poor are often judged to be "freeloaders", who apparently get access to free amenities. But the reality for most of the urban poor is that they often end up paying far more than middle- and upper-income groups for water. Meanwhile, the only toilets they have access to are ones for which they have to queue and pay. Middle- and upper-income groups also see "the poor" as irrational people who moved from "nice" villages, attracted by the bright lights of the city, despite the wealth of evidence over the last 30 years showing that migration patterns are logical responses by individuals and households to changing economic opportunities. Many in government feel that if municipalities improve conditions, it will encourage more poor people to come and live in cities. Even where more progressive attitudes towards urban poor groups are evident in government policies, as in support for "slum rehabilitation" or the need to provide alternative accommodation to those displaced by large infrastructure projects, generally only those who can prove that they arrived in the city some years previously are eligible.

In Mumbai (and many other cities), three further reasons help explain the lack of attention to sanitation. The first is the concentration of many slums and informal settlements on land belonging to national government institutions such as the Railways Authority, the Port Trusts or the Airport Authorities. These national government agencies will not permit municipal corporations to provide sanitation or other amenities to the population settled on their land, fearing that this would legitimate these settlements.

The second reason is the reluctance of international funding agencies to see public toilets or community toilets as an appropriate solution. Although ensuring provision for toilets in each house might seem preferable, this would be far more expensive; it is also particularly difficult in densely populated settlements with only small winding alleyways between houses where pipes could be installed. There are also the uncertainties regarding ownership of each unit, and public or community toilets have the advantage of serving both tenants and owners.

The third reason is the political opposition to new models of provision for sanitation which have a more realistic chance of ensuring large-scale improvements for low-income groups. Many politicians have opposed community-managed processes, which remove from their control a key part of the patron-client relationships with slum populations through which they sustain their political careers. Community management also goes against the long and dishonourable tradition of contractors, engineers and councillors getting a cut from each project, often through inflated cost estimates. Government staff do not like working with groups which they find difficult to approach for bribes.

8. See reference 6, Chaplin (1999).

The following accounts illustrate the range of political obstacles that have been faced by Alliance-supported, community-managed toilet projects, both in the large-scale programmes in Mumbai and Pune, and in the smaller earlier projects in other cities, and their varied success in working with these obstacles.

IV. THE EARLY PROJECTS: WHAT PEOPLE WANTED AND WHAT THEY COULD DO THEMSELVES

IN 1985, AS the women pavement dwellers in central Mumbai began to discuss their needs and priorities with SPARC, access to water and toilets was one of the most common themes. The pavement dwellers had no place to defecate and no legal access to water. Many of the women worked as servants in nearby houses, and so used their employers' toilet facilities, or they defecated in the open or into newspaper and threw it away. As noted earlier, women often waited until nightfall to defecate. Not surprisingly, good provision for water and sanitation was a high priority. These women recognized that, even if toilets in each home were preferable, the size of most homes (usually less than 100 square feet or ten square metres) made this unrealistic. The toilet would also have to be next to the "wet area", where washing, laundry and cooking took place – and the women knew that their irregular water supplies would make it difficult to keep toilets clean. They also recognized that community toilets were much cheaper per household served, and that community toilets could include large tanks to ensure regular water supplies. Government subsidies were also available to support the construction of community toilets. Discussions with slum dwellers came to the same conclusions about the need for community toilets.

The women pavement dwellers went to visit communities with public toilets, and saw the poor management and the fact that the surrounding area was often widely used for open defecation. They saw the early morning queues as people rushed to defecate before going to work – and how the children were simply pushed out of the way. Early in the day, women are often cooking or getting ready for work, so they had no time to accompany children to the toilets; instead, they let them defecate outside their houses.

When women's groups suggested improvements to municipalities, they were laughed at. When they suggested that community processes could result in better quality, better designed community toilets at a lower unit cost, they were ignored. Few engineers would concede that low-income communities could do this. International donors were approached for support but they lacked the mechanisms to fund such a project. Accepting these kinds of solutions is never easy for official donors, in part because the projects are so simple and so cheap. Donors prefer expensive projects because they reduce administrative burdens and staff costs per pound or dollar spent. A ten-seat toilet block that serves a community of 500 can cost as little as UK£ 500 or US\$ 800, especially if there are piped water and sewers to connect to. This is less than the daily cost of most foreign experts.⁹ But these projects and their simple, cheap processes do not fit with the agencies' procurement and assessment procedures.

However, the Alliance decided to build some toilet blocks, drawing funding from the UK charity Homeless International and some other

9. Foreign consultants often charge UK£ 500–1,000 (US\$ 800–1,600) a day and receive an additional daily allowance that covers their living expenses in top class hotels.



Photo 1: Aundh toilet block built by the community in Bangalore. Credit: Photo provided by the UK charity, Homeless International

donors. This followed the Alliance’s long-established practice of supporting urban poor community organizations that want to try out new ways of addressing their problems, learn from these experiences and, over time, develop precedents and practices that work. These precedents then serve to show municipalities and donors what community organizations are capable of doing. This was also to demonstrate to international donors that community toilets were a solution.

Some of the earliest experiences with community toilet blocks took place in Mumbai, Kanpur and Bangalore between 1988 and 1996; community toilets were also being built during these years in Hyderabad and Lucknow.¹⁰ The construction of these community toilet blocks was usually preceded by community-managed slum surveys to demonstrate the need and the inadequacy of public provision.

a. Initial work in Mumbai

A survey by Mahila Milan/National Slum Dwellers Federation of 151 settlements in Mumbai with 1 million people found that there were 3,433 seats provided by toilets built by the municipality (one for every 1,488 persons), and 80 per cent were not working. Most toilets had broken doors, and many had overflowing septic tanks, latrines clogged with excrement and sites covered with garbage.

10. NSDF, Mahila Milan and SPARC (1997), *Toilet Talk*, SPARC, Mumbai.

The Alliance's early experiences with community-designed and managed toilets in Mumbai illustrates the difficulties in developing a new model. The toilet developed at Chamba Bazaar faced problems when the authorities refused to provide a water connection, and the children's toilets suddenly disappeared as someone extended their house. The P D'Mello road toilet, the first municipally contracted community built toilet, could not get a connection to the nearby sewer mains because of official opposition to the connection crossing a road. This project pioneered the design that separated men from women (giving women far more privacy, thereby encouraging many more to use the toilet). It also recognized the need for a large internal water tank.

With World Bank funding for sanitation in Mumbai approved, there was a recognition that some of this had to be used to improve sanitation in low-income areas. The municipal corporation was keen that the Alliance construct community toilets – even if this was not in the original loan agreement. SPARC was invited, after a tendering process, by the additional municipal commissioner to participate in a programme to construct 320 blocks, or 6,400 seats. By now, SPARC had experience with community-built toilet blocks in five cities, and was already in discussion with government officials on how to support community-driven and managed sanitation. What the Alliance suggested was simple; the city should pay for the capital cost of toilet construction (which would be no more than the cost of contractor-built toilets that the municipality was used to funding), and the communities would manage and maintain the toilets themselves and generate the funds to do so. But the World Bank team had other ideas, and wanted the inhabitants of slums to get organized and bid against each other to get the funds to build the toilet blocks. The Bank also wanted NGOs and contractors to bid for these tenders at three stages:

- NGOs and contractors publicizing the scheme among slum dwellers, and then organizing these communities so that they could bid for the construction contracts;
- NGOs and contractors, with the help and approval of community groups, designing toilets and collecting funds to allow for toilet maintenance; and
- NGOs and contractors building the toilets.

Each of these stages was seen as independent of the others – and the rule was that if an agency applied for one of these stages, it was not allowed to take up work in another stage. The Alliance felt that this was completely inappropriate, as it failed to recognize that community-driven processes should link the three stages; it did not agree to take part.

b. Work in Kanpur

A survey in 1993 by the Kanpur Slum Dwellers Federation found that 471,156 people were living in 228 slums, of which 66 per cent had no toilets and 21 per cent had inadequate toilets. The first toilet-building programme was at Sangam Talkies Railway settlement, which was first settled in the mid-1960s and had 165 houses strung along a portion of defunct railway track. With the help of Federation members from Mumbai, a ten-seat toilet was designed.. It was then built, and maintenance and running costs were covered through a "pay-and-use" system – ten rupees a month per family for those in the community, one rupee a day per use by outsiders. This made it possible to employ someone full-time to clean the stalls, keep the water tank filled and collect fees from outsiders.

The Kanpur Slum Dwellers Federation and Mahila Milan also built a small two-seat public toilet in a settlement called Burma Shell, one of Kanpur's railway slums (named after the oil refinery whose high walls the settlement was built against), but the railway authorities demolished it. They then built a ten-seat block on municipal land at the end of the settlement. The toilet was connected to the municipal sewer line and had a water storage tank, hand-washing sink, two bathing enclosures and ten toilet stalls.

Another ten-seat toilet block was built in Shiv Katra, a slum with around 1,200 inhabitants on the edge of Kanpur. Shiv Katra had a mix of well off and extremely poor households, and before the toilet block was built, many inhabitants had to squat on military land nearby or travel three kilometres to the nearest public toilet. After a long negotiation, the community's 600 strong Mahila Milan collective was able to get enough land for a ten-seat toilet with room for a Mahila Milan office, a caretaker's room and a courtyard for outdoor meetings. The toilet block was built within the compound of an overhead water tank on land owned by the Kanpur Water Authority. The same pay-and-use system generated funds for maintenance and to pay the women who looked after the toilets and filled the water tank. The women managing the construction recognized that the toilet had to have a constant water supply to ensure it could be kept clean, so water was drawn from three sources: a municipal tap (with water a few hours a day); a hand pump (as a supplementary source when needed for washing, bathing and toilets); and a large internal water storage tank

c. Work in Bangalore

Despite the fact that Bangalore is one of India's most prosperous cities, half of the city's population live in slums and most have no piped water, toilets or drains.¹¹ Bangalore's outskirts are dotted with enormous resettlement colonies set up by the slum clearance board over the past 20 years. Tens of thousands of poor families evicted from different parts of the city have been dumped in these colonies, and conditions here are often far worse than in the older and more crowded slums towards the centre of the city. Large areas of the city have no sewers, and most sewage and wastewater drains into open drains. This makes it more difficult and expensive to build community toilets because there is no connection to sewers and often no water mains to draw on.

The first community-built toilet block was in Doddigunte, with work beginning in 1994. This is a large and fairly recent settlement of 375 houses at the city limits. It is a "declared slum", and most people have identity cards from the slum clearance board. Only a few hand pumps serve the 2,000 inhabitants and, although a sewer line runs along one side of the settlement, there were no toilets. People were defecating in nearby fields but, as development in surrounding areas was intensifying, it was getting increasingly difficult to do so, especially for women as they sought private places to squat.

With 20,000 rupees start-up money from SPARC, a group of residents started building a communal toilet. But as soon as digging began, the landowner complained, forcing the work to stop. A year later, with help from the Karnataka Slum Dwellers Federation, work began again, but this time there was opposition from neighbours across the street who disliked the idea of slum dwellers getting toilets. The police were called and worked stopped

11. See reference 5; also Schenk, Hans (editor) (2001), *Living in India's Slums: A Case Study of Bangalore*, IDPAD, Manohar, New Delhi.

12. A "no objection" certificate is generally the easiest way to get official recognition that what you are doing, or planning to do, is not illegal. It requires the least commitment by the government, makes no change in the status quo, and costs the government no money. But it can represent a vital first step towards official approval for community-driven solutions.

again. The team then went to the city's deputy commissioner of development, who granted them a "no objection" certificate.⁽¹²⁾ Work resumed, but the construction process ran into trouble because there was insufficient downward slope in the long connection to the sewer line. The pipe had to be laid again. The toilet block costs 40,000 rupees: 20,000 for building the foundation, walls, doors and roof; 12,000 for pipes, sewer connections and the construction of chambers; and 8,000 for re-doing the pipe to the correct level. This is the equivalent of around UK£ 53 or US\$ 85 per seat.

The second community-built toilet was a modest four-seat toilet in Basha Compound, serving 30 houses. The four pour-flush latrines drained into a small brick-lined soakpit and then into a drain, as there were no sewers to connect to. The toilets were entirely community-built, with the enthusiastic involvement of women who dug, mixed concrete and carried bricks. The construction took ten days and cost 3,000 rupees (at current exchange rates, UK£ 10 or US\$ 16 per toilet).

V. THE LARGER PROGRAMMES IN MUMBAI AND PUNE

a. The community toilet programme in Pune

IN PUNE, A partnership between the municipal government, NGOs and community-based organizations built more than 400 community toilet blocks between 1999 and 2001, which have greatly improved sanitation for more than half a million people. They have also demonstrated the potential of municipal–community partnerships to improve conditions for low-income groups.

Pune has 2.8 million inhabitants, two-fifths of whom live in over 500 slums. Various local government bodies, such as slum boards, housing authorities, development authorities and municipal corporations, are meant to provide and maintain public toilets in these settlements. But provision is far below what is needed; indeed, for much of the 1990s, the city authorities failed to use much of the budget allocated for public toilets. In 1999, the municipal commissioner in Pune, Ratnakar Gaikwad, sought to greatly increase the scale of public toilet construction and to ensure that more appropriate toilets got built. Advertisements were placed in newspapers, inviting NGOs to make bids for toilet construction. Between 1992 and 1999, only 22 toilet blocks had been constructed. The new programme planned to build 220 blocks during 1999/2000 and another 220 during 2000/2001. The contracts were not only for building toilets but also for maintenance. In awarding contracts, priority was given to settlements with more than 500 inhabitants and no toilet facilities and, after these, to areas where facilities were so dilapidated that they needed replacement.

NGOs were expected to quote at less than the cost estimated by the corporation. The 15 per cent implementation fee that had been charged by the agency in the past was not permitted. Bids from eight NGOs were accepted after a review of their track records. SPARC was one of the NGOs that received contracts, working with the National Slum Dwellers Federation and Mahila Milan. The Alliance of these three institutions had been working in Pune for five years, supporting a vibrant savings and credit movement among women slum dwellers, including experiments with community toilets. Now the Alliance became one of the principal contractors and constructed 114 toilet blocks (with a total of more than 2,000 toilet

seats and 500 children's toilet seats). The Alliance designed and costed the project, the city provided the capital costs, and the communities developed the capacity for management and maintenance.

Between 1999 and 2001, more toilets were constructed and more money spent than in the previous 30 years. More than 400 toilet blocks were built with over 10,000 seats, at a cost of around 400 million rupees (around UK£ 5.3 million or UK£ 53.30 per toilet seat). Assuming that each toilet seat was used by 50 persons each day, over 500,000 people benefited at a capital cost of UK£ 10.70 per person served. This programme helped to reconfigure the relationships between the city government and civil society; NGOs and communities were not "clients" or "supplicants", but partners. The city government recognized the capacity of community organizations to develop their own solutions, supported by local NGOs. The division of roles was also clear; city authorities changed their role from being a toilet provider to setting standards, funding the capital cost of construction, and providing water and electricity. The NGOs and community organizations designed, built and maintained the toilet blocks. This programme was unusual for India for its transparency and accountability; there were no deals struck behind closed doors. There was constant communication between senior government officials and community leaders. Weekly meetings brought all stakeholders together to review progress and identify problems. All aspects of costing and financing were publicly available. Access by community organizers to senior officials kept in check the petty corruption that characterizes so many communities' relationships with local government agencies, as more junior government staff and local politicians demand illegal payments.

One factor that constrained community participation was the municipal commissioner's desire to complete the programme while he was still in office. In addition, some NGOs with contracts were actually thinly disguised fronts for contractors; their poor performance in part undermined the legitimacy of genuine organizations. Other NGOs struggled to develop more participatory engagements with community organizations, but lacked roots firmly based in the urban poor communities. Despite these limitations, in many places inhabitants had the central role in the design and construction of these toilets. Some women community leaders took on contracts themselves and managed the whole construction process, supported by engineers and architects from SPARC. It took a while for the (usually) illiterate women in each community to develop the confidence to manage this process. As one leader, Savita Sonawane noted, "*In the beginning, we did not know what a drawing or a plinth was. We did not understand what a foundation was or how to do the plastering. But as we went along, we learnt more and more and now we can build toilets with our eyes closed.*"

Over time, these women's groups learned how to deal with local government bureaucracies, and this gave them the confidence to deal with other government officials. These groups also kept a close watch on costs. But there were many prejudices against community management that had to be overcome. For instance, when a group of women began to negotiate with shop keepers to obtain materials to build the toilets at the lowest price, they were not taken seriously and had to fetch their husbands. Some government staff did not want to work with organized women's groups because they felt unable to ask these groups for the bribes they usually received from contractors. In the first phase of the programme, about half the toilet blocks were built by slum communities; in the second phase, the number rose to three-quarters.



Photo 2: The community-designed Chikhalwadi toilet block in Mumbai under construction. Credit: Homeless International

b. Community toilets in Mumbai

In November 1998, the World Bank and the Mumbai Municipal Corporation invited the Alliance back because their initial approach was not working. One reason for this change was evidence from Pune that the new models suggested by the Alliance were possible. One of the additional commissioners in Mumbai had visited Pune in early 1998.

The Alliance suggested that a toilet block be built to develop tools and procedures for the larger programme that was planned. A toilet block was constructed at Chickhalwadi for demonstration, and the World Bank and the municipal corporation designed a tendering strategy that gave NGOs equal status with contractors. This meant that the World Bank had to change its requirement that NGOs only got projects costing less than US\$ 10,000. Then, in 2000, SPARC won the tender to build 320 toilet blocks with 6,400 seats in 20 wards.

SPARC set up a project management unit supervised by Nirman, a new non-profit company formed by the Alliance to undertake projects because of the growing scale of the Alliance's involvement. On behalf of Nirman, UTI Bank provided the municipal corporation with the performance guarantee needed to sign the contract, and the project began soon after. The target was to complete the 320 toilet blocks by March 2003. When it became apparent that this deadline could not be met, the World Bank argued against any extension. The Alliance argued that for a project that had taken eight years to design, it was overly ambitious to expect completion in two years! Moreover, this project showed a new way of providing sanitation to very low-income city dwellers. Eventually, the deadline was extended to December 2003. As of July 2003, 180 toilet blocks had been completed and another 110 were underway.

Various difficulties working with the municipal corporation needed addressing, in large part because it was unused to working with NGOs. Constant delays in obtaining permissions to build toilets meant, in turn, that the actual building time was much longer. Managing paperwork, regulations and bills proved extremely complicated, and the Alliance suffered serious delays in receiving payments (which inevitably slows down or disrupts construction schedules). Because of these delays, SPARC had to provide much of the funding up front. Many toilet blocks also took longer to construct than anticipated because they used the same site as old and abandoned toilets, which had to be demolished.

VI. THE INNOVATIONS IN COMMUNITY TOILETS

THE ALLIANCE DEVELOPED various innovations in the design, construction and management of toilet blocks, learning from the experience of the blocks constructed between 1994 and 1998. Unlike the previous municipal models, they were bright and well ventilated, with grilles high up on the wall between back-to-back stalls, gaps at the top of the doors and on side walls, and better quality construction, which made cleaning and maintenance easier. They had large water storage tanks to ensure enough water for hand-washing and maintenance (unlike many of the earlier public toilets that had irregular and inadequate water supplies, which made personal hygiene and toilet-cleaning difficult or impossible). Each of the new toilet blocks had separate entrances and facilities for men and women, which gave women more privacy than the previous model, where men's and women's toilets faced each other and often resulted in harassment.

Another innovation was special provision for children's toilets, an integral element in these programmes. Children always lose out to adults when there are queues for a toilet; in addition, many young children are frightened of using conventional latrines, which are dark and often smelly, with large pits into which children fear that they will fall. Mothers, also frightened that children will fall into toilets, often encourage them to



Photo 3: Community-designed children's toilets in Byanapalli settlement, Bangalore. Credit: Homeless International

defecate in the open. Children under the age of seven comprise a significant proportion of the slum population – often one-quarter of the total. The children's toilets were specially designed to include smaller squat plates, handles to prevent overbalancing, and smaller pit openings into a shallow trench that is flushed regularly. Many toilet blocks also included toilets designed for easier use by the elderly and the disabled.

Toilet blocks also included a room where the caretaker and family could live – which meant lower management and maintenance costs (as the accommodation formed part of the payment). Despite all the attempts in India to liberate scavenging castes from the jobs of cleaning toilets, the reality is that these jobs are still done by *dalits* or specific communities within such caste groupings. With living space within the toilet blocks, and a minimum wage for caretakers, the toilets are maintained and these households have a secure home and a livelihood.

Toilet blocks were also built in central locations, not isolated on the periphery; this helps to ensure that sites are kept clean and are informally monitored. In some blocks with sufficient space, a community hall was built; in others, a meeting space was created on a terrace on top. Small fees, charged for the use of these spaces, help to cover maintenance costs, and their use pressures caretakers into keeping the complex clean. Even with these innovations, toilet blocks cost 5 per cent less than the municipal corporation's costing. Outsiders may see this linking of community toilets and meeting spaces as an aberration, but such a space serves many ends. In dense settlements, it may be the only potential meeting place. The social interaction also begins to transform the way people relate to the toilet struc-

ture, generating a desire to keep it clean. This change in attitude is supported by the celebration of a toilet festival as each block opens, where the contribution of all can be acknowledged – both people from government agencies and from communities. The management committees gradually formalize the maintenance and management of the toilets which, in turn, helps to develop formal structures within the community. Since these committees have to deal with both their community and with government agencies, their confidence and networking skills increase. The establishment of these new relationships also demonstrates to community leaders how their community structures could change if they were able to access the government resources that are available to invest in housing.

Other innovations were introduced in many toilet blocks:

- **Better design for heavy use, with better provision for queuing.** In conventional toilet blocks, men and women are in the same queue and there is much acrimonious jostling and queue-jumping; men often push past women. In the Federation blocks, there are separate queues and space for people to wait outside each toilet stall.
- **Doors that swing both ways,** making it much easier to enter with a bucket of water. Conventional models have inward-swinging doors which force users to press against the (often) dirty inside walls to open the door and get out.
- **Toilet plumbing inside an enclosure.** This makes exterior walls cheaper to build and presents a clean public face (rather than the dirty backsides of toilets stalls, with often rusty leaking plumbing) . It also means more privacy for the users.
- **Back-to-back toilets** feeding directly into a single central pipe with a single inspection chamber, which cuts costs.
- **No middlemen involved in construction,** so no contractor profits to be paid.
- **Pour-flush toilets** that require half a bucket of water for flushing. A water seal reduces smells but does not require costly venting or flushing hardware, and dirty or poor quality water can be used.

a. Big pipes and little pipes

When toilet blocks are connected to the city water supply and sewers, this cuts unit costs, as no pumps are needed to tap groundwater or septic tanks to accommodate sewage. This makes evident the division of tasks between “big pipes” and “little pipes”. City-wide infrastructure includes big pipes (trunk mains, main sewers and drains) which carry and treat water and sewage; generally, only city authorities can manage these since they involve “big” politics and “big” budgets (although they may contract out the construction and/or management to private companies). But toilets and drainage lines within settlements need small pipes, and communities can easily design, build and manage these themselves. The Federation’s suggestion to city governments is that they need not waste money and effort on little pipe items, which communities can handle for themselves, but should concentrate on the big pipe items. If the city can deliver sewers and water supply to the settlements, communities can take over from there.

b. Funding maintenance

There has been considerable debate on funding management and maintenance. The Alliance promoted a system whereby each family buys a

pass for 20 rupees a month – far less costly than the one rupee per use charge by other public toilets. Although it is difficult to envisage how toilet blocks can be maintained without such payment, some politicians sought to gain political capital by opposing new projects that charged anything. This has depressed collection rates in some toilet blocks.

VII. WHY DID THE ALLIANCE TAKE ON COMMUNITY TOILET BLOCKS?

TO BRING COMMUNITIES together. Toilets can bring people together; everyone uses them and has opinions about them. A toilet project is small enough to be planned and built within a small budget and time frame but big enough to start many things happening, including involving women, allowing people to work together, to tap skills in the community, to manage money and, finally, to enjoy defecating in private. If you have squatted along an open drain all your life, it is hard to imagine toilets being clean places. If they are clean and well-cared for, they become points of congregation. The next step is the realization that slums do not have to be dirty places, but can be beautiful communities in which to live.

To test new pro-poor policies. Given the lack of provision for sanitation in cities, this was an important chance to advocate for and test new pro-poor policies.

To expand livelihood options. This was the first time that many poor communities were involved on this scale. Although the poor are constantly involved in informal petty construction, there is never space and resources for their more formal participation. The construction and management of the toilet blocks expanded their livelihood options and developed their skills.

To expand the Federation. Most of the slums in which the toilets were built were non-federated. Working in these areas greatly expanded the base of the Federation and trained them to work in different settings.

To strengthen the relationship with the municipal authorities. Municipal authorities have learned much about developing minimum sanitation from the community toilet blocks. The large-scale programmes in Pune and Mumbai encouraged staff and politicians from other municipalities to visit and to learn how to initiate and manage such a process. These programmes also encouraged federations in other cities to negotiate with their municipal authorities to work on this issue.

In Mumbai and Pune, the subject of sanitation for the slums entered the public domain, as municipal commissioners and other dignitaries were invited to inaugurate the new community-built toilet blocks. This also created a chance for dialogue over other issues such as water, electricity, paved roads and secure tenure. The traditional relationship of politicians as patrons and voters as clients underwent a transformation. Whereas previously, a toilet block was the “gift” of a local councillor, member of the legislative assembly or member of parliament, now citizens saw toilet blocks as their right. Their involvement built their strength and confidence to negotiate with local municipal officials on other issues. As pressures build from below, the administrative and political processes are compelled to respond. The culture of silence and subservience begins to give way to a more substantively democratic process.

Changing national policies. The Alliance also seeks to change attitudes and policies at the level of the national government. It worked with the

United Nations Human Settlements Programme to launch a good governance campaign in 2000, and the National Slum Dwellers Federation demanded that sanitation be seen as an indicator of good governance, especially women and children's access to it. Good governance is also about choices regarding investment priorities. The Indian government has now introduced a new programme – the Nirmal Bharat Abhiyan – where a 50 per cent subsidy for the construction of community toilets is available to local bodies and public authorities. This was influenced by the community toilets built in Pune and Mumbai.

VIII. NOTES ON THE ART OF GENTLE NEGOTIATION

A NECESSARY STEP in building these kinds of sanitation partnerships is convincing reluctant and often suspicious government agencies to stop seeing poor communities as problems and start seeing them as contributors to good solutions to city-wide problems. That means negotiation. The increasingly confident negotiating skills of Slum Dweller Federations/Mahila Milan in different cities have elicited commitments to sanitation in slum settlements from a lot of officials in the municipal corporations and state governments. Here are a few of their negotiating strategies.

Start small and keep pressing. Mahila Milan in Kanpur and Bangalore started small – negotiating for the corporations to provide hand pumps and water taps in slums. Through those negotiations, they gradually gained the confidence, persistence and visibility to press for the next level – community toilets. Starting with small initiatives can show both government and communities that change is possible. Convince officials that they can use their limited powers to make a little change. First, they might only give limited consent, but later, when they see things change even in small ways, that consent might become support. Support is the first step in the creation of a genuine partnership.

Paint beautiful pictures. Sometimes, grassroots activism involves a great deal of scolding and finger-pointing: "Isn't this awful!" "Isn't that shameful!" If you're serious about exploring new ways of bringing the poor and the state together to solve the city's problems, this approach is of limited use. People in power are more likely to retreat into their bureaucratic shells when they are pelted with "awfuls" and "shamefuls". A better approach is to kindle their imaginations by describing possibilities in ways that make clear how they can contribute.

Know more than they do. When community organizations enter into negotiations prepared with enumeration reports with data on all households in the settlement, with toilet construction costs worked out and tested, with knowledge of city infrastructure grids, and with examples of community-state partnerships in other cities, it becomes harder for government officials to argue against their proposals.

Cut an attractive deal. The Slum Dweller Federations/Mahila Milan around India have developed skills of persuasion in showing local governments that an unconventional toilet-building partnership with a well-organized community organization is a realistic, even attractive, proposition for solving big problems that stymie municipalities up and down the sub-continent. A sharp city administrator would have difficulty in ignoring these features:

- sharing costs with a community reduces the city's sanitation cost burden;
- when communities build toilets, the city's construction burden is eliminated;
- when communities maintain the toilets, the city's maintenance costs are eliminated;
- community-built toilets often cost less than those the city builds, so a city's infrastructure budgets can be spread further, increasing service delivery.

IX. COMMUNITY TOILETS ADD TO THE REPERTOIRE OF THE POOR

A LARGE COMMUNITY toilet block building programme gives a big push to communities to undertake projects and to create an environment that makes room for experimentation. Externally supported interventions like this do not set new standards, but alter and influence the circumstances which allow communities to develop standards of their own.

Making room for communities to learn by experimenting and by making mistakes. Solutions to complicated problems do not happen quickly, and generally come from trial and error. Learning for any individual generally means having to do something more than once and making mistakes before finally getting it right. This is also true for poor communities, where solutions are a lot more complicated. To those mistrustful of community involvement in urban improvement, mistakes only confirm entrenched attitudes that poor people are ignorant or lazy. Built into many community participation programmes is an "only one chance" clause, which does not allow the learning and training capital produced by mistakes to be reinvested in new processes. Instead, it stops participation at the first sign of error. Poor communities are unable to experiment because they have no margin within their limited resources to absorb mistakes. This is one of the crises of poverty, and this is why these toilet projects make room for, and even encourage, mistakes.

The toilets are not theoretical ideas on paper, but real buildings, built in real slum settlements. They are all visited, discussed and analyzed within the Federation/Mahila Milan network, and outside it. Their mistakes and successes are widely discussed and considered, and they catalyze the projects that follow. The people who build them take their experiences to other settlements, other cities, and become trainers themselves. In this way, the evolution and refinement of ideas occur in practice, in different situations.

People on the move: training others and breaking isolation. People in communities that have built their own toilets are the best teachers for others interested in doing the same. Whether or not their project was successful, their experience can give a head start to other communities who do not have to start from scratch every time. In order for skills to be refined and spread around, it is important that as many people as possible visit the toilets, participate in their building, and return to their own settlements stocked with new ideas. In this way, the learning potential of these experiences is maximized, and their successes and failures are discussed and digested by many others.

Each new toilet that is built is better than the last one. With the widespread dissemination of experiences, each time it gets easier and smoother, the "circle of preparation" shrinks and the number of people able and willing to get things done grows considerably. Each time a

toilet block is built, it is also cause for a festival to celebrate its opening, and each festival draws a larger crowd. The ability of the Federation/Mahila Milan network to link people and help them take control makes this whole process possible. These toilet constructions did not emerge entirely and spontaneously from the communities in which they were built. The lack of toilets is one of the most frequent and urgently articulated problems of slum dwellers, but it is important to understand all these projects as involving a potent, external intervention – somebody coming in from the outside, shaking things up, asking questions, posing challenges, and intentionally pushing forward what is required for communities to plan and carry out solutions to their own sanitation problems. In this case, the outside group is the NSDF/Mahila Milan/SPARC Alliance.

No two toilet blocks are alike. The toilet projects all work along the lines of some of the Federation's fundamental ideas about building the capacities of communities (Box 1), but all toilet blocks are different as they represent tailor-made responses to particular local needs and realities, reflecting different political climates, different negotiating strategies, different degrees of official support, different materials markets, different skill levels, different site realities, different access to sewer and water mains, and different community dynamics.

Don't waste time waiting for ideal conditions. None of these toilet blocks are perfect. Most were built under circumstances that could be considered impossible. But every toilet block represents a vital investment in learning and human capacity. These are the building blocks of large-scale change, much more than perfect designs or innovative engineering. One of the Federation's principles is that you should never allow your work to be held up while you wait for something else to be ready or some other condition to be in place. You have to get going – since the situation will never be perfect, no matter how long you wait.

Sagira, one of the senior members of the Byculla Mahila Milan and veteran trainer of dozens of community toilet and house construction projects all over India, makes an analogy with the process of making salt from seawater. You stir and stir and stir and stir, until you're so tired of stirring. Just when you think nothing will ever happen, and there is no use carrying on with this infernal stirring, the salt crystals begin to form. They will not form without all that stirring. In the same way, solutions to complex problems do not happen overnight, but need the same sustained, faithful nurturing and pushing

Starting with sanitation rather than land tenure. The Alliance originally developed to fight the insecurity which communities of the poor are presently locked into. Local governments will not allocate land to the poor, so their houses and neighbourhoods encroach on lands publicly or privately owned and designated for other uses, such as parks, railway lines or airport perimeters. Communities living on land to which they have no acknowledged right become perpetual supplicants, who have to comply with the demands of the landowners. The informality of their settlements means that they cannot demand the same rights as legal landowners and homeowners from city administrations – including provision for water, sanitation and electricity. Instead, they have to resort to informal feudal linkages for "protection", and often pay more for services than "formal" citizens. They also face the indirect costs related to the health problems that arise from a lack of a safe water supply and inadequate sanitation.

Box 1: The tools that build community capacity

Daily savings. Community-managed savings and credit groups in which each member saves each day underpin the whole Federation/Mahila Milan structure. They are seen as the glue that holds the Federation together. There is no minimum amount that the savers have to contribute each day. Women are particularly attracted to this, as these groups provide crisis credit and can develop into savings accounts that help fund housing improvement or new housing and loan facilities for income generation. The daily contact between each saver and the community representative who collects the savings also acts as a constant source of information on what people's difficulties are and how they can be addressed. When people want access to credit, the savings collector has personal knowledge of family circumstances and can vouch for them. The savings are usually managed at local "area resource centres", which serve also as a key focus for community discussion, and for planning and managing community initiatives. Savings groups often work together to develop their plans for new housing or other initiatives.

Surveys and maps. Community-managed household, settlement and city surveys are important in helping communities to look at themselves, to strengthen their organization and to create a capacity to articulate their knowledge of themselves to government agencies and others with whom they interact. The Alliance helps communities to undertake surveys at various levels, including listing of all settlements, household enumeration and intra-household surveys. The Alliance also builds their skills in mapping services, settlements, resources, problems, etc., so that they get a visual representation of how their present physical situation relates to them. These maps are also particularly useful in developing plans for improvements with external agencies. The information-gathering process often begins with a hut count when a community is visited for the first time, and many men and women from the Federation and Mahila Milan hold meetings with residents and talk about their work and why they have come. Questionnaires and other survey methodologies are discussed with communities and modified as necessary, and all data is fed back to them to be checked and, where needed, modified. Detailed hut counts, with each hut given a number and marked on detailed maps, have proven particularly important in managing resettlement. The repeated interaction with a community through hut counts, household surveys and settlement profiles also establishes a rapport with them and creates a knowledge base that the community own and control.

Pilot projects. Pilot projects are universally accepted as experimental learning tools that can be used to test possible solutions, strategies and management systems. Pilot projects start when a particular community wants to address one of its problems. Once completed, the experience can be reviewed, and the community and others (including government agencies) calculate what it would cost to scale it up. Pilot projects also help set precedents that are used to promote changes in policies, practices or standards.

Exchanges. Since 1988, there has been a constant process of exchange between communities. Community members, beginning with the pavement dwellers, travelled first to other settlements in their own city and later to other cities in India to visit other communities. They shared their knowledge, finding people interested in acquiring their skills and understanding. Although most exchanges are within cities or between cities, there have also been many international exchanges, with community organizers from India visiting many other countries (including South Africa, Thailand, Cambodia, Laos, Uganda, Zimbabwe and Kenya) and community organizers from these countries visiting India.

For organizations of the poor, the demand for sanitation is strategic: city government and civil society can easily see the relationship between the sanitation needs of the poor and their own health and well-being. The demand for sanitation is less threatening than any demand for land tenure. Of all the basic services that the poor have begun to demand, sanitation, in recent years, has begun to be less contested than others. This is especially so when the sensibilities of upwardly mobile middle-class citizens are affected by seeing people defecate in the open. It takes longer to make the connection between housing and the sense of security that the urban poor need for their well-being and quality of life.

Why the poor make good sanitation partners. In the projects described here, there was a fundamental change in roles, as urban poor communities in different cities took part in designing, building and managing their own toilets and then invited the city to come and inspect what they had built. The poor no longer have to beg the city administration for basic services. They own the process, and tell the city how they would like it to progress. Behind this dramatic transformation are some clear ideas.

Providing basic services to any large city works like a vast field of shared responsibility and involves many people: officials setting priorities, engineers drafting plans, contractors doing civil work, water and sewage departments overseeing maintenance, and special interests seeking some advantage within the process. At the edge of this field of decisions are all the people who need water taps and toilets. It has been assumed that these people, particularly the poor, cannot be involved in infrastructure decisions because they lack the necessary technical expertise. But the technicalities of toilets, water supply and sewerage are not beyond them. Poor people can analyze their own sanitation needs, and plan, construct and maintain their own toilets.

Developing standards that are realistic for poor communities. When city governments build toilet blocks, they use the same old standard designs – expensive, difficult to maintain and mostly doomed to failure. Despite this uninspiring track record, the standard models are duplicated again and again, partly because nobody has a better idea. Fresh, workable standards for community improvement are badly needed. But they can only emerge from a reality which poor people understand better than bureaucrats, and can only be developed through practice. These toilet projects are a search for better standards – standards for financing, designing, constructing and maintaining toilets that are replicable and that work within the realities of poor communities. Some ideas they test catch on, others do not. It is from this fertile process of experimentation that new standards emerge.

The distinction between public toilets and community toilets. This distinction is important because building a toilet, like any amenity, changes people's perceptions of their own settlement. Public toilets serve the needs of whoever happens to be passing by, whether a local or a stranger. A community toilet belongs to, and is controlled by, a community – not the city, not the government and certainly not a passing stranger. To build a community toilet is to acknowledge that a community exists, and that inside that community live women, men and children who have legitimate needs. Within the murky politics of land and tenure in Indian cities, the construction of a community toilet can be a powerful manoeuvre, especially if it is built by the community itself.

Why community toilets rather than individual toilets? Because they can provide everyone, even the poorest, with sanitation. And the costs of provision for everyone can be afforded. Those who are better-off can, and will, gradually build individual facilities for themselves. In this way, the pressure on community toilets will probably diminish over time, but everyone will continue to have access.

Why community-managed and controlled? Because the toilet blocks produce a possibility of change that helps develop new leaders, new relationships within communities and new relationships with external agencies. Communities organizations usually emerge to address negative issues: to fight eviction and demolition, to cope with extortion. This produces leadership that brokers relationships with those with power,

including “patrons” and those who informally need to be bribed or given favours. Many community leaders have similar relationships with the community – their linkages to the political and administrative wings of government are often negative and exploitative of themselves and their communities. For real change to occur, there needs to be different leadership and different relationships within the community and with the outside world. Yet, unless there is some need, and the possibility for change exists, it is extremely difficult to motivate the poor and their nascent leadership to explore this path. Using a federation structure, possibilities for communities to conceptualize, design and manage vital assets become visible and this, in turn, raises the possibility of the poor, and women in particular, being able to participate in an exploration of new roles with their communities.

Why community construction? Because the construction of toilet blocks is something that with some assistance, anyone can do. Community involvement in design and construction provides insights into maintenance needs. When the criteria of quality are explained to community leaders (such as the basic mixing of concrete, materials for plumbing), they will supervise the construction, leading to a better quality toilet. But the most important aspect has to do with linking livelihoods and producing entrepreneurial behaviour among the poor. Most slum people continually face barriers to getting better paid jobs. By taking the opportunity to become contractors (sometimes as individuals and sometimes as collectives), they develop new skills and enhance the possibilities of better jobs in the future. The upgrading of slums will continue into the future, so it is vital to invest in the capacity and skills of the poor to be not only the builders, but also the managers, of such projects.

Why flush toilets that are linked to city sewers? Many sanitation “experts” claim that flush toilets are unsustainable because of their demand for water and their production of large volumes of sewage. Yet, most slum dwellers seek this solution, along with access to sewers, because it remains the tried and tested solution. Until other methods are shown to work for entire communities, the urban poor have neither the resources nor the patience to explore other options. Alternatives will have to demonstrate viability to city governments through extensive pilot projects. It should be noted that the Alliance’s pour-flush toilets use much less water than conventional flush toilets – and often use dirty water.

X. CONCLUSIONS

EXPOSURE AS THE key. Urban poor communities can and must be centrally involved in improving their own lives and the general conditions of the city in which they live. Communities that have taken steps to change things, to transform their own lives and settlements in various ways, provide powerful examples for other communities, and become the best catalysts for other, larger transformations. They can also change the attitudes of city administrators, and the strategies for delivering services and amenities to the poor. Exposure to work of this kind is the first step in breaking down the crippling belief that poor people are too marginalized to change things themselves.

Show how things can be done better. The community toilet blocks are one among various kinds of initiatives supported by the Alliance around India. Different groups undertake different processes in different cities or

city neighbourhoods, focusing on developing new housing or upgrading existing housing or community-managed resettlement or sanitation. All are underpinned by representative local organizations, including community-managed savings and credit schemes. The Federation helps each group to carry its initiatives through to a conclusion. Once a solution has been developed, and its relevance to other locations becomes apparent, the group who implemented it becomes a training resource, and can begin to assist other groups.

Accept different degrees of involvement from government. Bringing sanitation to all poor communities in Indian cities is a job poor people cannot do alone. The community toilet projects all represent, to varying degrees, partnerships that begin to break the conventional approach to service delivery. They also bring communities and governments together to work in new ways. Bangalore Municipal Corporation, for example, has been a tentative partner, only going so far as to allow the toilets to be built, while the Kanpur municipal government went three steps further, providing land, water connections and helping to pay for one of the toilets. In Pune and Mumbai, the corporations paid the capital costs and provided land, water and electricity on a large scale.

Women at the centre of changing settlements. The lack of sanitation affects everyone, but women suffer the worst consequences, and it is usually they who take responsibility for sanitation for children. By drawing them into the development of toilet blocks from the outset, the Alliance makes the space and opportunity for women to become the trustees of resources within communities. Understanding and participating in construction enhances their ability to manage and maintain and, eventually, these women can go out and train others. The community construction of toilets also develops skills they can use later in house-building projects.

People are the best experts. A long-established myth is that experts with advanced degrees are needed to plan improvements in slums. But the realities of life in India's slums are best understood by slum dwellers themselves. If experts had a better track record, their expertise might have more credibility – but the deplorable state of infrastructure in Kanpur or Bangalore suggests there are serious holes in this “expertise”.

The slums in India are home for most of those who actually build cities: masons, pipe layers, cement mixers, brick carriers, shuttering designers, stone cutters, trench diggers and metal fabricators. The poor, as they construct their own homes and neighbourhoods, are already the designers and implementers of India's most far-reaching systems of housing and service delivery. The systems they use are not ideal, are largely “illegal”, and often inequitable, but they reach down to the poorest groups and cover far more ground and affect far more lives than any government programme could ever achieve. Officials, with their rules and procedures, are apt to view the informal processes by which the poor create their own homes as misbehaviour, and seek ways to control or punish what is actually a reasonable and ordered response to urgent needs, where no “legal” alternatives exist.