



## CBO-management of Slum Neighbourhood Sanitation Services

The Aynal's Bastee Case, Dhaka, Bangladesh

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### **Introduction**

Population Services & Training Centre (PSTC), a non-governmental organization based in Dhaka, Bangladesh, has been implementing a community based water supply, sanitation and hygiene promotion (WATSAM) project since October 1998 in the poor urban slums of Dhaka city. To date the project covers 22 slums of the city with the financial and technical support from WaterAid Bangladesh (WAB).

The aim of the programme is to develop a replicable model for water supply and sanitation services to the urban poor, based on devolution of management to the communities themselves. The specific objectives are to:

- Provide water and sanitation services in the slum neighbourhoods of Dhaka city
- Improve environmental sanitation and hygiene in the same community
- Create access to the Government of Bangladesh (GoB) water sector agency by the urban poor through advocacy and intermediation
- Encourage changes in the local institutional environment to facilitate the supply of water to the urban poor
- Help build capacity in the communities to operate, maintain and manage water supply and sanitation facilities
- Provide technical assistance to communities and the water utility agency to establish and maintain water connections and ancillary facilities

PSTC's experience shows that community based management system can be a highly effective strategy to help urban slum neighbourhoods gain access to water and sanitation and improve their hygienic practices. The project has brought about significant changes in power relationships between slum dwellers, landlords, the water utility and city authorities.

This case study documents the process through which PSTC facilitated a CBO managed sanitation programme in one of the slum neighbourhoods of Dhaka City i.e. Aynal's Bastee.

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## **Background**

Although the population growth rate of Bangladesh has been declining, from 2.5% in 1971 to 1.6% in 2001, the urban population increase has been rapidly growing<sup>3</sup>. The urban growth rate currently stands at 5-6% per annum. 28.5 million people (from a total of 136 million) live in urban areas, 10.5 million of whom live below the upper poverty line and in turn, 5.5 million of whom live below the lower poverty line<sup>4</sup>. Most of the urban poor live in slums and squatter settlements, with the largest concentration in Dhaka which has more than 3000 such settlements varying between 10 and 2500 households in size.<sup>5</sup> About one third of these settlements are more than 15 years old.<sup>6</sup>

These slums are characterized by high levels of deprivation. Basic services, including water and sanitation, are absent or grossly inadequate. About only 3% of urban poor in Dhaka city have legal tenure to the premises they occupy.<sup>7</sup> This legal status is important in relation to basic service provision, because access to water and sewerage, as well as gas and electricity, is contingent upon one's legal tenure of a plot. Consequently, the urban poor are excluded from public services. Most of the slum dwellers use unsanitary hanging latrines or resort to open defecation in ditches and roadside drains that remain clogged all the time. Women wait for darkness to respond to their natural call while children defecate all around creating a highly unsanitary and nauseating environment.

## **Stakeholders**

### **Community Residents and Users**

Aynal's Bastee is located in Ward No. 85 under Demra Thana (Police Station) of Dhaka City Corporation (DCC). The neighbourhood consists of a total of 350 households, with a population of 2000 residents. It was established in 1989 on the land of DCC.

Around 80% of the households of this slum are composed of migrants from various parts of the country and joined DCC as Cleaners. Of these migrants, 30% are women. Others took shelter here as they lost their houses and lands due to river erosion and also with a hope to make earnings. Over time, they have become permanently engaged as rickshaw pullers, garment workers and small vendors. On the whole, their economic status is very poor as the average monthly income of these individual income earners lies between Taka 4000 to Taka 5000 (US \$ 75).

Although the houses (very small and densely placed) of the slum were built by the DCC, no provision for sanitation facilities was made. Dwellers used hanging latrines<sup>8</sup>, the construction and installation of which cost them around Tk.200 to 300 (US \$ 4). However, people, especially the women, did not feel comfortable as other residents could watch them while defecating. They virtually had no access to many essential services including safe water and hygienic latrines. Therefore, suffering continuously from waterborne diseases by most residents had become a recurrent phenomenon.

### **DWASA**

Dhaka Water Supply and Sewerage Authority (DWASA) is the statutory body responsible for water supply, water borne sewerage and sub-surface drainage in Dhaka city. During the course of the programme, DWASA officials have shown commitment to meeting the needs of the Bastee's poor residents as its policy on connections was recently changed in favour of the temporary settlers.

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<sup>3</sup> The World Bank: World Development Report 2004, Washington DC, 2004. This is supported by the Bangladesh Population Census 2001 published by the Bangladesh Bureau of Statistics (BBS), July 2003.

<sup>4</sup> The BBS measures the incidence of poverty as the share of the population with monthly per capita consumption (including food and non-food goods) below a predefined poverty line. The same allowance for basic food items is assumed for both the upper and lower poverty lines. However, the lower line incorporates a minimal allowance for non-food goods, while the upper line makes a somewhat more generous additional allowance.

<sup>5</sup> Centre for Urban Studies (CUS), Dhaka, 1996

<sup>6</sup> CUS 1995 Ibid

<sup>7</sup> GOB Planning Commission/ADB Study of Urban Poverty in Bangladesh, 1996

<sup>8</sup> A hanging latrine is made of two planks laid over a hole, usually behind the house, that is then used as a designated spot for open defecation. It is considered another form of open defecation

## **DCC**

Dhaka City Corporation (DCC) is responsible for solid waste management and implementation of on-site sanitation in Dhaka city.

## **WaterAid Bangladesh**

WaterAid is an independent British Charity that works in 15 developing countries to bring about lasting improvements to water, sanitation and hygiene, using local skills and appropriate technologies. WaterAid Bangladesh is one of its country programmes operating in the country.

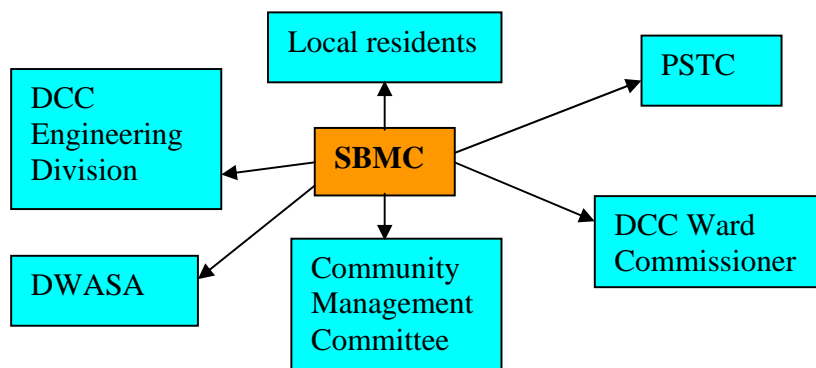
To date, WaterAid Bangladesh has financially and technically supported the construction of 3 Sanitation Blocks, 37 Communal latrine, 10 twin pit latrine and 1,026 individual slab latrine in the poor slums of both Dhaka and Chittagong City through its urban partners.

WaterAid also networks with the sector alliances and undertakes continuous advocacy work to change government policy on sanitation services in the informal settlements.

## **Stakeholder Map for Sanitation Block Installation and Effective Management**

Figure 1 below illustrates the number of stakeholders that a Sanitation Block Management Committee (SBMC) members in the Aynal's Slum needed to interact with while establishing the sanitation Blocks and managing them sustainably.

**Figure 1**



## ***Aynal's Baste: The pre-intervention context***

There were 20 to 25 hanging latrines in this slum which were poorly maintained. Some of them did not have any fence to shield the user from public view while some others were weakly grounded. Some did not have any roof while the others were slightly leaned over. The kids found it very risky to go to the latrines and use them. Therefore, all the kids of the slum used to defecate at random in the open.

Women residents in particular faced many problems. They could not use the latrines as male dwellers could clearly watch them while using the mostly shack latrines. Another reason that they found using the latrine so embarrassing was the piling up of faeces in open places visible to every one.

Very often, the bamboo pillars of the latrines broke as they got older and at times the latrine user fell down into the faeces. The old-aged women and the kids were also afraid of using the hanging latrines, especially at night, as some of them had also become victims of such incidents of falling down. Alternatively, they used to defecate in poly bags and household pots (made up of mud) and threw them here and there for disposal.

No sewerage existed in the slum and therefore, the flies, cats, dogs and chickens used to rear freely over the piles of faeces. As a result, there always prevailed a dirty and unhealthy environment in the slum.

**Box-1** Illustrates some of the major problems that Baste residents faced relating to poor environmental sanitation

### ***Box-1***

Major problems and their impacts:

- Prevalence of bad smell all the time
- Loss of prestige and dignity for the women
- The dwellers' feet gathered faeces in the slum
- Men and women used to wait in the same long queue to use the latrines and sometimes they engaged in quarrels for position with men dominating the queue and pushing women to the back of the line
- Spread of many diseases linked to poor environmental sanitation with children the most affected
- Overall environment of the slum was highly polluted

## ***The Project: PSTC's Sanitation Service Intervention in Aynal's Baste***

### **Approaching the community**

In 1998, PSTC initiated its WatSan programme activities in Aynal's Baste by following a new community-based approach that encouraged peoples' participation. The people of the Baste were approached by PSTC field staff members to build rapport, initiate dialogue and hold meetings focusing on WSS issues. The entire process of community's involvement was done following the 5R<sup>9</sup> approach of PSTC.

A cross section of Aynal's Baste residents was facilitated to meet together and actively participate in assessing and analyzing the existing environmental sanitation situation and to prioritize the issues to be addressed. Throughout this process, the issue of sanitation was identified by this cross section of residents as one of the top priority issues that needed to be addressed immediately.

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<sup>9</sup> 5 R stands for: R= Relation with the community, R= Root level organization development, R= Resource person development, R= Resource centre development & R= Right based communication with GO and NGOs

### **Raising community awareness**

Once the sanitation issue emerged as the top priority, PSTC facilitated the members of the cross section group to hold meetings with a group of other interested residents in order to form a **Reflection Group**. It was a gender-balanced group of 20 members (11 female and 9 male) each of whom has represented one particular household. The members of the reflection group are mostly adolescents and youths and are unemployed in majority of the cases. Although they are shouldering some of the household activities they do not find the opportunity cost of engaging in some group activities very high.

Some of the interested group members were then provided with hygiene training (a sort of Training of Trainers) by PSTC with a view to increase their knowledge and capacity. They, termed as **Resource Persons**, later volunteered to lead a good number of hygiene sessions which were held with the parents (mostly female as most of the male members were busy otherwise during that time) and children of the neighbourhood. The overall objective was to raise awareness among the residents regarding water, sanitation and hygiene. Based on many dialogues and interviews undertaken by the PSTC staff it was learnt that the parents were concerned about their children's frequent diseases and sicknesses. Thus, they found the sessions quite helpful for raising their awareness about how this problem can be tackled. The same feeling also motivated them to send their children to the hygiene sessions. It was also found that the children really enjoyed the highly interactive hygiene sessions.

Throughout the hygiene sessions, most of the neighbourhood residents began to understand the primary causes of their ill health and its impact on overall livelihoods<sup>10</sup>. They realized how lack of sanitary latrines and an unhygienic environment directly affected their health status. They began to realize why the neighbourhood women and children have long been suffering from urinary tract infections, abdominal pain and infections.

This process of realization started through facilitating the dwellers to conduct a Mind Mapping on future dreams. Once these dreams were listed out, they were facilitated to stimulate productive discussions on what could be done to reach these dreams. For instance, the poor residents drew a family map of the slum and identify issues around each family and about 4 to 5 of its neighbouring families. In addition, they also identified the overall issues of the slum.

Then the Reflection Group prioritized some of the key issues that must be addressed in order to improve the environmental sanitation of the slum. Following this, they conducted an exercise on the prioritized problems, a Problem Tree analysis, which included discussing, analyzing and then identifying the root cause(s) of each of the prioritized issues. Once the root causes were identified, they worked on developing an action plan where both the urgent and medium term activities were clearly outlined to address the respective issues. The responsible persons, identified in the plan, then started delivering his/her responsibilities.

Through these exercises, the poor residents collectively explored a set of environmental sanitation issues and the sub-issues related to them. Some of these included issues such as lack of water, open/hanging latrines, unhygienic practices, careless dumping of solid wastes, lack of outlets for waste water etc. that are responsible for degrading the sanitation environment of the slum. Here also, they have identified the environmental sanitation issue as the top most agenda to be addressed immediately.

### **Community mobilization and capacity building**

Once the sanitation issue had emerged as the top priority, PSTC facilitated the dwellers to hold meetings and form a **Community Management Committee (CMC)** to lead the overall development of the neighbourhood including water, sanitation and environmental hygiene.

In the case of Aynal's Bastee one CMC was formed comprising of 11 members from the slum where 6 were male and 5 female. It has a structure comprising of a Chair, a Secretary and a Treasurer. In this CMC, the Treasurer was a female resident.

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<sup>10</sup> It was found in this case that the female members of the neighborhood shared their hygiene learning and knowledge to their counterpart male members at the family level through peer consultation.

The CMC members acted as the overall guiding supervisors for the other committees formed to implement some particular projects e.g. Sanitation Block (SB), Water-Stand (WS) etc.

In this case, two **Sanitation Block Management Committees (SBMCs)**<sup>11</sup> were formed to lead the establishment of two SBs and manage their day-to-day operations. Each of the SBMCs was formed with 9 local members democratically nominated by the neighbourhood residents and regarding this, they also maintained the norms of gender sensitivity i.e. nominated 5 male and 4 female.

After the formation of SBMCs, members from both the CMC and the SBMCs attended a couple of meetings together and developed an institutional structure for smooth functioning of each of the SBMCs i.e. each SBMC must be led by a Chairperson, a Secretary and a Treasurer and the rest would act as the Members. It must be mentioned here that the SBMC of Aynal's lane have nominated one of the female members as its Treasurer.

The members of the committees formed at different levels were provided with various training e.g. hygiene, leadership, health and organization etc. so that they become aware of WSS activities and the potential role to be played by the dwellers. They identified the WSS issues, prioritized them, decided on what projects need to be undertaken and then designed them with an estimated budget. They also formed a purchase committee to procure materials for the project.

### **Rooted Advocacy**

In order to implement the sanitation blocks, the members of the CMC and the SBMCs have undertaken some lobbying activities with the facilitation support from PSTC. These included visits to the local ward commissioner<sup>12</sup> and the engineering division of DCC, discussing the matter with them and appealing for their kind approval for the allocation of 2 small pieces of land. In response, both the ward commissioner and the engineering division have welcomed the initiative, assured them of their support and approved the application, especially the ward commissioner, for allocation of land.

### **Technical aspects of the Sanitation Blocks**

According to the sanitation needs of the Aynal's Bastee and following their participatory and advocacy activities, the CMC members decided to construct 2 Sanitation Blocks in 2 lanes of the slum. The first one was constructed for the Aynal's lane in 2001 and the second one for Shawkot's lane in 2002. The cost of establishing the first SB was Tk.207, 956 (US \$ 3,585) and that of the second one was Tk.260, 000 (US \$ 4,483).

The physical size of each SB is 31' x 17' (9.45mx5.18m). The walls are made of brick and the roof of tin. There are also transparency sheets fitted into the roof so that users have adequate light. There are 8 toilets constructed in each SB. Each one is sized about 4' x 3.5' (1.22mx1.07m). Each SB is split into 2 parts for the convenience of the users. Each part contains of 4 toilets including 1 for the children. Therefore, a total of 2 toilets in each SB are allocated for the children. Each part also has 1 urinal point for male dwellers.

In each part, there also is 1 bathing space (surrounded by a brick wall) for the women, the size of which is 8' x 6' (2.44mx1.83m). Men continue to bathe in the open Water-Stands already established in the slum. The water tap points set up for this bathing is connected to one of the DWASA sub-lines. There is 1 DWASA pipeline connected to each of the SBs. From this pipeline, 4 sub-lines were connected to 4 water tap points for use inside of each SB. There are 6 water tap points in the slum which are connected with the DWASA pipeline and these were set up by the DCC. The dwellers use them for drinking water purposes.

### **Community Management of the Sanitation Blocks**

The CMC took the total amount of money needed for the establishment of the SBs from PSTC as an Interest Free WatSan Facility Loan for a period of 3 years. After the establishment of an SB, the CMC

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<sup>11</sup> Aynal's Bastee was physically split into 2 segments i.e. Aynal's lane and Shawkot's lane for the effectiveness of the project and the decision was taken by the residents. Therefore, 1 Sanitation Block was established for the dwellers living in Aynal's lane and the other one for the dwellers living in Shawkot's lane

<sup>12</sup> Ward Commissioners are locally elected DCC Representatives for the overall development of those wards.

repays the loan to PSTC through monthly instalments. The monthly repayment instalment for Aynal's lane was fixed at Tk.6, 450 (US\$ 111) whereas that of Shawkot's was set at Tk.7, 200 (US\$ 124).

A total of 1800 people from 300 households of the slum (150 from Aynal's lane and 150 from Shawkot's lane) have been using these two SBs. Of these households, 43 and 48 own their houses in the respective lanes and the rest are rented accommodation. Each of the house-owning HHs pays Tk.150 (US\$ 2.60) per month for repaying the WatSan Loan to PSTC. However, all 300 HHs, including rented ones, have been paying Tk.10 (US \$ 0.17) each month for the maintenance of the SBs and for paying THE caretakers' salary. To date, 82% of the WatSan loan is repaid by Aynal's SBMC and the figure for that of Shawkot's loan is 32%.

Each SBMC has appointed 2 caretakers for its SB. That implies a total of 4 caretakers were appointed to take care of the both the SBs, all of whom are women residents of the slum. These caretakers regularly clean and properly maintain the SBs. Each SB opens at 5am in the morning and closes at 12 o'clock midnight.



Picture 1: One Sanitation Block in Aynal's Bastee

Each caretaker has been paid Tk.300 (US \$ 5.17) per month. Their wages are paid by the respective SBMC which collects from users at a rate of Tk.10 per month. With the collection, the SBMC also buys cleaning materials such as Harpic cleaning agent, brushes, brooms, bleaching powder etc. for regular usage. The detail of the expenses and the collection are regularly recorded by SBMC and they present these records in monthly meetings called by the SBMC Secretary by issuing a notice through the Notice book. A Notice book, a Pass book, a Cash book, and a Registrar book are kept to maintain these records.

If any family fails to pay monthly installation (although such failure by not more than 2 to 3 families were sometimes experienced as the defaulters) then the SBMC Treasurer fills the money gap from his/her own pocket. Later she/he, within the next 1 to 2 months, settles it personally with those default families. It must be mentioned here that no serious conflict has arisen or been reported so far. Rules and regulations for dealing with conflicts have not as yet been drafted or adopted by the SBMC.

### **Support from PSTC**

The field staff of PSTC regularly visited the neighbourhood and the SBs and continued to help build community capacity to manage the services. For instance, meetings between the field staff and SBMC members were held each month to review progress and discuss matters such as maintenance, the cleaning of the blocks, repayment installation and conflict resolution among the residents/users.

PSTC also provided training courses for both CMC and SBMC members on hygiene and how to manage and maintain sanitation blocks.

### ***Impact of the SB project on the slum neighbourhood***

At present, all the residents of the Aynal's slum use sanitary latrines. Residents are more aware about their health status now and are practicing hygienic behaviours. For instance, from SBMC reports and field staff observations it is evident that residents now go to the latrine wearing sandals, they wash their hands with soap or ashes after using the latrines, latrines are maintained and used in a hygienic manner and children are now using the sanitary latrines etc. Where people, in particular newly arrived residents, are found not to be using hygienic behaviours, awareness raising efforts are made to address this problem.



*Picture 2: Poor women of the slum using the Sanitation Block*

As a result, it has been seen that residents are now less frequently suffering from diarrhoea and other water borne diseases. Now the residents do not report the need to visit the doctors quite as frequently. Therefore, less money is being spent for treatment of diseases and sicknesses. Their working capability has also been enhanced. They now feel to be living a better life.<sup>13</sup>

Another important outcome of the project is that the poor residents are able to access the DCC officials and the ward commissioner directly and have already developed working relationships with them. Moreover, both the DCC officials and the ward commissioner have experienced that how a little support from them can help the poor and informal urban settlers to install and use hygienic latrines and sustain these by themselves. They are also happy to see such an initiative that promotes an improved standard of environmental sanitation in the city.

### ***Lessons Learnt***

#### ***Low-income urban residents are willing and able to pay for sanitary latrines***

The community based SB project has demonstrated that even those on a very low income are willing to pay for the capital and recurring costs of a hygienic sanitation service. This counters official claims that providing sanitation services to the urban poor would require subsidies.

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<sup>13</sup> Farouk A. Chowdhury, an Economic Evaluation of WaterAid Bangladesh's Water and Sanitation programme in specified areas of Bangladesh, December 2002, DFID Bangladesh.

### ***Mediation is an effective strategy***

Without PSTC's advocacy and mediation, DCC officials and the ward commissioner would not have sanctioned the pieces of land in the slum for the establishment of sanitation blocks. This innovative role for NGOs has been one of the keys to the project's success.

### ***The co-operation of government functionaries and elected representatives is vital***

Clearly, a project like this depends on the commitment of senior managers and locally elected representatives in key sector agencies- in this case, DCC. This group of actors is very important both for developing the project strategy and timely implementation.

### ***Community ownership and management leads to sustainability of the project***

Great attention and effort provided to motivating the poor neighbourhood community, engaging them in the participatory processes right from the beginning and building its capacity in many areas has helped the community (via the CMC and SBMC) feel the ownership of what they were doing i.e. the Sanitation Block project. Effective management of the sanitation blocks and effective cost recovery by the SBMC demonstrated the fact that it is their project.

Now they themselves meet regularly to discuss around issues and to resolve them in a democratic way, collect the monthly contribution from the users, and are repaying the loan to PSTC through monthly instalments. They also discuss about the means of further improving their management skills. They also realize that although currently they have to make payments, , once the capital loan is repaid, they will own the SBs. They won't have to make loan repayments any longer. The monthly contribution will only be required in order to pay the caretakers' salary and for the purchase of cleaning materials and, sometimes, to cover the cost of minor repair costs of the SB's.

The residents and users have also enhanced their information, knowledge and skills base through participating in various trainings provided by PSTC. They can now regularly contact the local government bodies and representatives on their own and can raise other issues such as sewerage with a view to gaining a greater understanding about potential solutions.

Additionally, PSTC hopes to gradually transfer responsibilities to the SBMC and the respective neighbourhood people. These responsibilities include approaching and negotiating with DCC. Introducing the neighbourhood people to this agency helped to establish their right to sanitation services.

Residents of Aynal's Bastee use the SB's since their set-up. The members of all the 300 households of the slum have been using the two SB's for hygienic sanitation. There has not been any evidence of left out or excluded<sup>14</sup>. Thus, it can be said that 100% of the residents of the slum are being served by the project.

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<sup>14</sup> Farouk A. Chowdhury, an Economic Evaluation of WaterAid Bangladesh's Water and Sanitation programme in specified areas of Bangladesh, December 2002, DFID Bangladesh.