

# Water and Sanitation Program

An international partnership to help the poor gain sustained access to improved water supply and sanitation services

## New Approaches to Promoting Sanitation in Rural Bangladesh

#### **South Asia Region**

#### **SUMMARY**

In 1997, the Government of Bangladesh, through its Department of Public Health Engineering (DPHE), with assistance from UNICEF, embarked on a year-and-a-half process to develop a more systematic approach to promoting sanitation in rural areas.

To this end, a social marketing agency was contracted to develop a comprehensive multimedia, multilevel communication strategy. Various communication materials were developed, including innovative marketing tools for private sector producers of low-cost sanitary rings and slabs to generate consumer demand. DPHE and UNICEF revamped their approach to social mobilization, including instituting the use of NGOs to facilitate field-level activities.

This approach is of significance as it signals a shift in Government strategy and an increased recognition of the role of the private sector. Implementation of the new communication and social mobilization strategy will begin in mid-2000.



A private producer of sanitary latrines advertises his products with the help of a colorful signboard provided by DPHE and UNICEF as part of a new marketing plan to promote sanitation in Bangladesh.



## Historical Overview

The Department of Public Health Engineering (DPHE) of the Government of Bangladesh and UNICEF began collaborating in the water and sanitation sector in rural Bangladesh in 1972. Much of the early work centered around rural water supply using low-cost tubewell technology.

During the early 1980s, UNICEF assisted DPHE to pilot small, Government-run centers to manufacture and distribute concrete slabs, rings and other components for water seal latrines. The slabs were initially given away free. The project was later modified to sell both rings and slabs at a subsidized rate.

By the late 1980s, the Government began promoting lower cost options as well, including simple dug pits with a squatting platform made of bamboo that people could build on their own.

By 1990, household access to sanitary latrines had risen to 16 per cent, a notable achievement from 1 per cent coverage in 1971 (DANIDA, 1999). Still, much more would need to be done to reach the Government's goal of 80 per cent sanitation coverage by 2000.

DPHE and UNICEF began to put more emphasis on behavioral change and social mobilization, as well as limited support to encourage the private sector. The budget allocation for social mobilization increased from 0.6 per cent in 1988 to 15 per cent by 1992.

In 1992, a three-year intensive social mobilization program was launched by DPHE/UNICEF in 20 diarrhoea-prone thanas<sup>1</sup>. The activities were organized through NGO Forum, an umbrella organization of non-governmental organizations in the water and sanitation sector. Almost 500 people were hired under the project, mostly to go door-to-door to convince people to construct pit or water seal latrines. Numerous group

discussions were organized in villages and local committees were formed to plan ways to achieve 100 per cent coverage. Flip charts, diagrams and videos were all used to promote sanitation.

The results were encouraging. In a survey of seven selected thanas, the use of sanitary latrines (pit and water seal) increased to 91 per cent (Shamsuddin, 1995). The project concluded that further advances could be made if intensive social mobilization was extended to all thanas in the country. However, despite the success of the pilot, the plan was dropped because the cost was prohibitive.

Concurrently, UNICEF began to emphasize collaboration with other Government institutions such as the health and education departments, as well as religious leaders, Girl Guides and Boy Scouts, to mobilize communities and families at the village level. However, implementation was sluggish. DPHE was slow to recruit staff for the specific task of coordinating and mobilizing the different partners. Field-level engineers and tubewell mechanics were often overloaded with work related to water supply, leaving little attention and priority for non-engineering work (DANIDA, 1999).

Other high-profile events marked this period. In 1994, the Prime Minister launched the first annual National Sanitation Week, raising the political stake in sanitation. These weeks were meant to stimulate widespread media coverage and public interest, and generate a popular movement for sanitation.

However, it was difficult to sustain momentum for the rest of the year once the week was over. Donor support for the week was also withdrawn, and after 1998, sanitation week was abandoned.

Social mobilization did continue during 1997-1999 in 32 of the country's 64 districts in a less intensive way. A series of workshops were held to involve different levels of Government, and efforts were made to include NGOs more directly in implementation. However, the entire momentum for social mobilization was lost in 1998 when severe flooding ground sanitation activities to a halt.

# The Rise of the Private Sector

A concurrent development in the past decade has been the increase in the number of private latrine component producers. Despite competition from the subsidized public and NGO sectors, private producers began to enter the market in significant numbers.

There are approximately 3,000 private 'sani marts' in Bangladesh, triple the 900 production centers run by DPHE. (The exact number of private producers is difficult to establish for various reasons. There is a risk of double counting as producers pack up and move in response to consumer demand. Numbers fluctuate due to the seasonal demand for latrines. Sales drop significantly during the rainy season. The Government also maintains no formal certification process and the sector remains unregulated.)

In addition to the Government and private sectors, an estimated 625 NGO-sponsored production centers sell latrines to their members.

It is interesting to note that the increase in the number of private producers in the 1990s coincides with the intensive social mobilization activities conducted by DPHE and UNICEF, suggesting a possible demonstration effect. However, it is difficult to establish a direct causal link. Other development agencies and NGOs were also promoting sanitation during this time. Other factors which may have triggered growth in the sector could include rising income levels for some segments of the rural population. Rural poverty declined in Bangladesh in the 1990s. The number of very poor people in rural areas decreased from 46 per cent to 40 per cent between 1991 and 1996 (World Bank, 1998).

<sup>&</sup>lt;sup>1</sup> An administrative unit of approximately 250,000 people. There are 460 thanas in Bangladesh. Below the thana is the union, an administrative unit of approximately 25,000 people.

While most Government-run centers continued to reach 80 per cent of their sales targets, some areas experienced significant drops in sales, particularly in Dhaka (67 per cent) and Chittagong divisions (68 per cent) (UNICEF, 1994). In 1993, DPHE cut production to reduce its stockpile of unsold rings and slabs. By 1996, UNICEF stopped providing DPHE with free cement for the Government production centers. It has been suggested that UNICEF might have ended its subsidy even earlier to enhance the growth of the private sector (DANIDA, 1999).

Evaluations indicate that customers often prefer latrines produced by private producers despite the lack of subsidy. They tend to be cheaper because the designs are simpler. Transportation costs also drive up the cost of Government latrines as more than half of DPHE's production centers are located at the relatively distant thana headquarters. Private producers also offer a wider variety of products, are less bureaucratic than the Government centers in filling orders, and can be more flexible on payment terms (including offering informal credit arrangements).

During 1997-99, DPHE-UNICEF provided limited support to the private sector. Approximately 800 private producers were trained in ways to improve the quality of their products and how to mobilize consumers.

# The Need for Change

DPHE and UNICEF achieved many of their physical targets in rural water supply and sanitation over the past three decades. Approximately 700,000 tubewells were installed and another 330,000 were rehabilitated, contributing to a significant increase in access to safe water<sup>2</sup>. DPHE's production centers have sold some 2.3 million sanitary latrines.

The program has been less successful in ensuring equitable distribution of



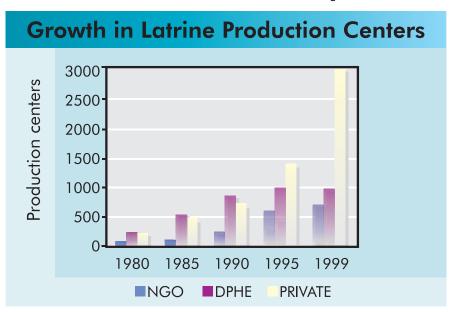
A private producer of sanitary latrines hangs buntings with sanitation messages to attract customers to his shop in rural Bangladesh (Gaurpara, Manikaani).

services to all sections of the population, and changes in behavior with regard to water use and sanitary practice.

Some pertinent facts, together with important shifts in development practice, have led to a growing awareness that new approaches and ideas are needed to

market sanitation in Bangladesh. Four issues are important to note.

1. Latrine coverage in rural areas stalled. The 1990s began with substantial increases in the number of latrines being constructed. As the decade continued, those advances began to crumble. Latrine



<sup>&</sup>lt;sup>2</sup> Due to arsenic contamination, safe water access is estimated to have dropped from 97 per cent to 80 per cent nationwide (UNICEF, 1999a).



"Hanging latrines" continue to be used by 41 per cent of the rural population.

coverage in rural Bangladesh dropped from its high of 44 per cent in 1996 and remains stagnant at about 37 per cent.

2. Diarrhoea and dysentery continue to be the major causes of sickness (18 per 1,000 illnesses) and 15 per cent of all deaths in Bangladesh (UNICEF, 1999). While DPHE and UNICEF have successfully promoted latrines, the program did not significantly change sanitary practices relating to handwashing and the safe disposal of children's feces. Most people in rural Bangladesh also continue to bathe and wash utensils and clothes in ponds, rivers and canals that are often grossly polluted.

**3.** There were weaknesses in the approach to social mobilization:

If While sanitation coverage did increase during the 1990s, there is general consensus that social mobilization had little impact in changing hygiene behavior. In part this was because many of the social mobilization activities were conducted too far from the grassroots. There was an over-emphasis on training, orientations and meetings with officials and local elites for whom mobilization of villagers was not a priority

II The weakest link in the institutional chain was the Union Watsan Committees established in 1994-95, against the advice of DPHE and UNICEF field staff. These committees were made responsible for overall planning and implementation of water and sanitation activities in the union, under the direction of a DPHE

engineer. That approach proved to be ineffective. The unwieldy assortment of some 40 Government workers, prominent citizens and elected *Union Parishad*<sup>3</sup> members rarely met. The committees were too large, members took little interest in promotional activities and there was no accountability

If While there was an admirable use of a wide variety of communication materials, these were often strongly biased towards health benefits, without a clear segmentation of the target audience. Standardization and uniformity were missing, and the materials were often used in an *ad hoc* fashion without a systematic and reinforcing media plan.

4. However, the approach also had strengths:

☐ The role of NGOs as facilitators for social mobilization began to emerge more clearly from the experiences of the 1990s. Their role in social development provided useful skills in social change which DPHE could not be expected to have.

#### Sanitary Latrine Coverage in Bangladesh (water seal or pit latrine) 100 80 Coverage (%) 60 40 20 **'90** 194 **'95** 196 **'97** '98 199 Years ■ Urban ■ Rural

### **New Approaches**

Based on the lessons learned from the previous three decades, UNICEF and DPHE embarked on an extensive year-and-a-half process to build a new approach to sanitation promotion. A multi-million dollar, comprehensive water supply and school sanitation program was designed, to be supported by social mobilization and a communication campaign implemented across more than half the country over five years.

The UK Department for International Development (DFID) indicated its interest in funding the new DPHE-UNICEF

<sup>&</sup>lt;sup>3</sup> The Union Parishad is the lowest tier of elected Government in Bangladesh. It comprises a chairperson and members elected from 12 wards.

program. DFID provided advice and encouragement to make the program more demand-driven and responsive to consumer needs, particularly for school sanitation, social mobilization and communication.

The proposals for social mobilization and communication were combined and renamed Hygiene Awareness and Product Information Campaign (HAPIC). DFID, UNICEF and DPHE agreed that it was important to create a stronger link between raising awareness about sanitation and hygiene, and making information available for consumers on technologies and services available from DPHE, NGOs and the private sector. DFID also suggested greater involvement by NGOs and a staged approach to implementation.

Based on lessons learned, HAPIC was fine-tuned to:

It create a more flexible and responsive institutional framework for social mobilization

¤ promote the marketing ability of the private sector and ensure a supply of sanitary latrine hardware closer to villages at the union level

¤ generate consumer demand and foster behavioral development through a more professional, marketing-oriented communication strategy which acknowledged more than just health benefits.

### **Key Innovations**

#### Institutional

The newly-designed HAPIC has several key innovations which makes it distinct from past approaches to social mobilization and communication. The most significant change revolves around the management role of DPHE. As in the past, DPHE will assume responsibility for overall management of the project, with technical assistance from UNICEF. However, there is a significant difference. Field-level activities are likely to be facilitated by one of Bangladesh's larger

NGOs. This 'facilitating agency' will be hired through a competitive bidding process, involving DPHE, UNICEF and the donor.

The agency will assist DPHE in the day-to-day coordination of a wide variety of social mobilization and communication activities by working closely with various allies and partners. This includes the Government departments of health, education and religion, as well as civil society, such as community-based organizations, youth clubs and community groups.

The facilitating agency will also coordinate the activities of its own field staff dedicated to the project, or work in collaboration with smaller NGOs in the project area. It is envisaged that one NGO worker per ward would be responsible for motivating households to build latrines. These workers would fan out across all wards in each union in seven districts in the first year, using newly designed communication materials.

Interpersonal communication materials will be developed for these 'front line' workers. Ideas being considered include providing NGO workers with a toy model latrine set, including water seal and homemade pit latrines. Interested consumers would then be directed to the nearest Government or private 'sani mart'.

DPHE's management role is being strengthened by dedicating one staff member at the district level to be responsible for HAPIC. An assistant engineer will be hired to coordinate all activities, including the work of the facilitating agency. DPHE will hire a professional training agency to give specialized training to coordinators and DPHE staff related to the project to develop their technical, social and management competencies.

Union-level activities will no longer focus around the Union Watsan Committee. Instead, DPHE-UNICEF activities will be coordinated through the elected members of the *Union Parishad* 

(UP). This strategy ensures more equitable gender participation in social mobilization activities as one-third of UP seats is reserved for women.

## Qualitative differences in communication

DPHE and UNICEF began rethinking their approach to communication in 1997, well before the end of the old social mobilization program. Prototypes for a comprehensive multimedia, multilevel communication strategy were developed during 1998 and 1999 with DANIDA funding. Thompson Social, a full-service social marketing agency, was hired to develop a strategy following an international bidding process involving advertising agencies from both Bangladesh and India.

The strategy aims to deliver synergistic, reinforcing messages directly to the family through a variety of channels targeting various sectoral partners, including front-line workers from health, education, NGOs, and religious institutions. Germ theory was included, but so were privacy, convenience and other issues which are known to trigger demand for latrines.

A comprehensive media plan was developed to create synergy between interpersonal communication and mass media (television, radio, folk and outdoor media). This reflects a wealth of global experience in public health communication that shows that while mass media can raise awareness, it is face-to-face contact that is most effective in helping people to change their behavior.

Particular attention was paid to the behavioral development of children. Supplementary materials in the forms of books, comics, games and rhymes were developed for Classes I-V to promote good hygiene habits in children. Handheld picture cards were developed for health workers to use with women while children were being immunized or weighed. Correct and incorrect behavior was shown on the front of the card, with instructions and questions for the health

worker to ask, printed on the back. Posters and a personal diary were designed for *imams* to encourage them to give weekly sermons on the importance of sanitation, using references from Islam's holy texts.

Development of the strategy followed standard norms for professional approaches to social marketing. Formative research was conducted to understand what makes people decide to build and use latrines. This was supplemented by a series of consultations in 1998-99 with various stakeholders working in the sector to approve the materials and to develop guidelines for using them in the field. Materials were rigorously pre-tested through in-depth interviews and focus group discussions. An independent evaluation of the communication materials used in a small pilot in four thanas of two districts in 1999 showed that they were effective in raising awareness and encouraging people to buy and use latrines (OMQ, 1999).

National television and radio commercials have been designed to supplement what consumers hear at the doorstep through inter-personal communication. The mass media materials revolve around an animated cartoon character named

Kalim Chacha (Uncle Kalim). This character evolved through market testing with consumers to find an appropriate, effective communicator for sanitation within the social and cultural context of Bangladesh.

Kalim Chacha is an elderly figure who commands respect in the community. He is portrayed as wise and knowledgeable, yet able to encourage people to take up sanitary latrines through a mixture of humor and good sense. Several of the television spots and radio commercials direct potential customers to the nearest Government or private 'sanitary mart'.

In addition to pre-testing, the materials were subjected to an independent assessment. There were critical concerns that the materials did not target women adequately, particularly the television spots. These concerns led to another round of revisions to ensure women were portrayed as active agents in decision-making.

The communication materials for NGO workers and the private latrine producers were also revised to make them even more explicit in terms of the alternate latrine options available to consumers, and where they could go for services.



A private producer explains to a new customer how to install a sanitary latrine, using a handout prepared by DPHE and UNICEF as part of a new marketing plan to promote sanitation in Bangladesh.

#### **Private sector producers**

As HAPIC generates more demand for sanitation, the project will need to ensure an adequate supply of latrine parts as close to the village as possible. Most Government centers are located at the thana headquarters. Support is therefore being extended to private producers to set up shop at the union level, which is the next tier below the thana.

To encourage them and improve their capabilities, technical support, credit and marketing support are essential. The program will provide private producers with training on production quality and establish linkages to local credit institutions. These incentives will be tied to an entrepreneur's commitment to establish a center in more remote areas. The project goal is to facilitate the growth of an additional thousand private marts over the five-year period.

The strategy also provides marketing tools to private latrine producers. These communication materials were designed to convert informal work sites into marketing centers, and attract customers by promoting sanitation through a variety of products at affordable prices.

Materials include shop signs, buntings, roadside publicity and a tin plate poster that shows people how to construct a latrine. Prices are left blank for the individual producer to fill in. A give-away leaflet explains the various options available to consumers, as well as promoting some of the non-health benefits of having a sanitary latrine.

During pre-testing, private producers expressed enthusiasm for the marketing aids and felt they would be helpful in attracting customers. Producers and potential customers questioned during the pre-test were able to explain the contents despite not being able to read. This was important as formative research indicated that many private producers and customers could not read or write. Only 47 per cent of the rural population in Bangladesh is literate (BBS, 1998).

# Strengths of the New Approach...

The HAPIC model was simulated in four unions in two districts of Bangladesh during April to June 1999. The purpose of the simulation was to conduct a process test of the new working relationship between DPHE, UNICEF and NGOs, and to pre-test the communication materials in the field.

A series of social mobilization activities were carried out, including local planning by the members of the *Union Parishad*, training for health workers, *imams*, NGO volunteers and private latrine producers on mobilization and communication, courtyard meetings, school debates and home visits. Two large NGOs under DPHE's management facilitated all activities. The new communication materials were also pre-tested again, only this time in actual use in the field, including at private latrine centers.

An independent evaluation by ORG Marg Quest, a research agency contracted by UNICEF, was positive. It concluded that the working relationship between the Government and NGOs was effective in mobilizing a large cross-section of the population. Government officials stated that NGOs were the most effective agents for facilitating mobilization, given their time constraints and the competing needs of other Government programs.

Evaluators also found that the new approach had built-in sustainability. As the UP members are elected Government officials and intimately involved in local-level HAPIC planning, they have a vested interest in ensuring the activities are effectively implemented.

Physical observations by the evaluators confirmed that nearly all activities planned were conducted. Seven private latrine centers used the marketing materials, and producers interviewed stated that it helped them generate business (OMQ,

1999). However, real proof of the effectiveness of the new approach will not be available until the full program starts in mid-2000.

## ...and Limitations

The HAPIC simulation, as well as various assessments by DFID, UNICEF and DPHE, point to some potential risks of the new approach to promoting sanitation in Bangladesh.

II The HAPIC model depends on a high degree of cooperation from a variety of Government and non-government partners. While this cooperation can be built up for a short burst of activity, it could prove difficult to sustain over time. It is also labor and resource-intensive. Success will depend on the effectiveness of the facilitating agency and continued willingness by DPHE and other Government departments to make sanitation a priority.

Activities will be phased in over time, giving DPHE and UNICEF more opportunity to learn as they go and to make changes to the strategy as problems emerge

☐ DPHE remains strongly oriented to hardware provision and lacks the necessary human resource capacity for managing a systematic approach to promoting behavioral change. Organizationally, there is little upward mobility for DPHE staff with a social sciences background as senior posts are reserved for engineers, and there was reluctance on the part of the donor to fund new staff positions as DPHE already has a very large staff. Contracting out the majority of the responsibility to a facilitating agency also does not necessarily contribute to the long-term changes required for DPHE to move away from its traditional role of hardware service provider

I DPHE's efforts to promote

sanitation through its production centers filled an early supply vacuum. It also provided an important model to the private sector. Today, private production outstrips the Government supply. This would suggest DPHE's new role is to regulate and monitor the sector, while facilitating the growth of the private sector in remote areas. However, DPHE, while not adverse to the role of the private sector, feels changes should be adopted slowly. It will continue to support Government sanitation production centers, using its own resources, in parallel with the new approach. This is partly in recognition of its obligation to the almost 2,000 employees engaged in this activity

It he new approach by DPHE and UNICEF is fundamentally lacking in credit provision. Despite the fact that it is an identified need, no credit is provided to private producers for start-up capital, although they will be given advertising materials.

The program also has no credit provisions for the poor to buy latrines. It may be possible for DPHE and UNICEF to try to make allowances for this gap by ensuring that the large, national NGO recruited for the job of facilitating local-level social mobilization can, directly or indirectly, provide credit support to producers and consumers, and this possibility may be explored

# The communication strategy will need to evolve over time, and become more targeted to facilitate behavioral change in "late acceptors" of sanitary latrines. The present materials are broader in focus, appealing to the 41 per cent of the rural population who display a latent demand for improved sanitation by using "hanging latrines". These are simple superstructures, without a pit, that usually hang over a water body. While these provide privacy for users, they still pollute the environment. Concentrating on the remaining 27 per cent of the population who defecate in the open will require more intensive, and costly, interpersonal approaches to communication.



A newly-installed shop sign for a private producer of sanitary latrines in Gaupara, Bangladesh, captures the attention of a future prospective customer.

### **Implications**

The evolution in DPHE's and UNICEF's new approach to marketing sanitation is best viewed within the context of a dynamic 30-year working relationship between a multilateral and a Government agency.

The new approach does not completely abandon old ways of promoting sanitation in Bangladesh. However, UNICEF continues to see its role as a support agency to DPHE as one which will build the Government's capacity in the sector, and therefore contribute to

long-term sustainable development. In that sense, the new project to promote sanitation is best viewed as a shift in degree, with innovative attempts to foster consumer demand and facilitate private sector supply. It is not a reversal of Government-led planning in the sector, but rather a way of improving it.

The challenge to both organizations this decade will be to continue to shift away from a supply-driven orientation, foster a new role for DPHE as a facilitator and regulator, and strengthen the public sector's vital role in ensuring equitable access to sanitation.

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