



## WATER, ENVIRONMENT AND MANAGEMENT

### Social mobilization for sanitation

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#### INTRODUCTION

Eighty five percent of the rural population of Bangladesh have access to tubewell within 150 metres and 92 percent drink tubewell water. The burden of girls and women who represent 80 percent of the water collectors has substantially eased. However, against a highly faecal-polluted environment aggravated by high population density, and hot and humid climate conducive to disease transmission, the reduction in diarrhoeal incidence has been marginal. To trigger health impact of a water and sanitation package, the sanitation coverage in Bangladesh is being accelerated through social mobilization in order to reach a high sanitation coverage. The programme focus is on the promotion of sanitary latrine, which is the essence of this paper, in combination with proper handwashing and the use of tubewell water for all domestic needs.

#### SOCIAL MOBILIZATION FOR SANITATION

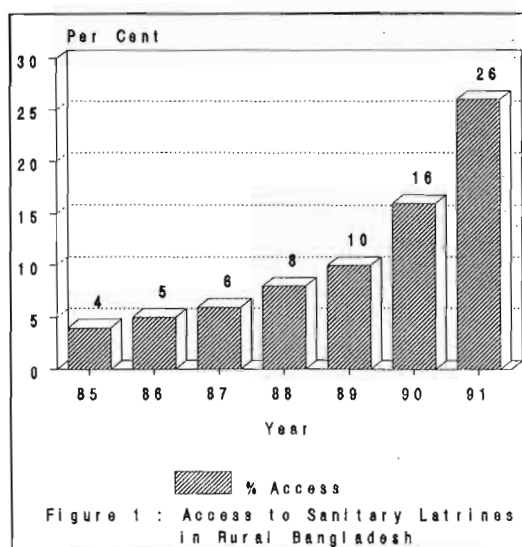
The concept of social mobilization was applied on an experimental scale to sanitation promotion in 1987 as part of an Integrated Approach to water and sanitation. The scheme was implemented in 2 of the 460 upazilas in the country by the Department of Public Health Engineering (DPHE), which is the nodal agency for water and sanitation.

To qualify for a tubewell which is largely subsidized by the Government, each of at least 10 user families had to construct and use a sanitary latrine. In practice, this "conditionality" was not strictly adhered to, as the average number of latrines per tubewell was 3.8. DPHE was also not prepared to slow down the pace of the tubewell installation

programme. However, this strategy initiated a positive change in DPHE's outlook on sanitation which has earlier been largely neglected. To motivate community leaders, seminars were conducted at the respective upazila and the union level (an upazila has on average 10 unions). Organized by the DPHE with the support of the local administration, Health and Education officials, the seminars mobilized local leaders, extension officers from various government departments, school teachers, religious leaders, NGOs etc. It was the first time that the DPHE formally collaborated with other partners.

The Integrated Approach (IA), including the organization of seminars, was expanded to 250 upazilas in 1991 and will cover the whole country by 1995. However, the promotion of latrine usage with new tubewell installation, excluding the seminars, was adopted nationwide by DPHE, and the ratio of latrine per tubewell reached 8.3 in 1991.

The Integrated Approach contributed largely to a dramatic increase in latrine coverage and use in the last two years as revealed by a national survey (Mitra, 1992) conducted in late 1991. In 1991, 26 percent of the rural families have a sanitary latrine, compared to 10 percent in 1989 and 16 percent in 1990 (Figure 1). 91 percent use the facilities daily; usage by women is marginally more than by men with about 10 percent usage by children under five. In addition, 33 percent of the rural population have insanitary "hanging" latrines where the excreta are deposited directly on the ground or into water courses. The remaining 41% do not have latrine of any sort and resort to open defecation.



Privacy and convenience are major factors for latrine usage, particularly for girls and women. These are now being used in communication package or sanitation promotion alongside health benefit. In fact, privacy and convenience are also the reasons for families to empty filled up pits or shift to new latrine pits rather than revert to open defecation.

The social mobilization strategy is now being strengthened, including advocacy at the national level, the forging of alliances with other partners and the promotion of affordable and socially acceptable technologies. The national conference held in February 1992 on social mobilization for sanitation inaugurated by the Prime Minister, who launched a sanitation logo, strengthened the political commitment. Similar conferences are being scheduled at sub-national levels to sensitize and bring more committed partners on board.



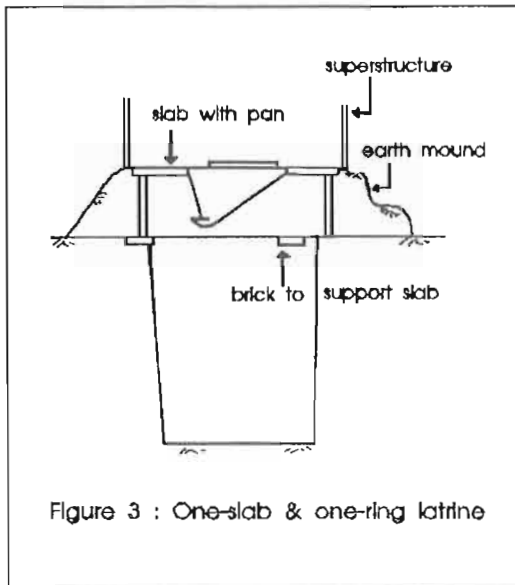
Figure 2 : Sanitation Logo

## APPROPRIATE TECHNOLOGIES.

As 50 percent of the population live below the poverty level, widespread use of sanitary latrines is naturally determined largely by the acceptance and affordability of the latrine technology by the people, once they are motivated.

Until a couple of years ago, the waterseal latrine was promoted by DPHE-UNICEF as the only hygienic latrine. It consists of a reinforced concrete slab incorporating the concrete waterseal pan, and five concrete rings each of diameter 0.8 m. for pit lining. The production cost of one slab and 5 rings is TK 600 (US\$ 16 at 1992 prices) but sold by DPHE at the subsidized rate of Tk 250. The latrine coverage remained low due to a combination of inadequate awareness and inability of many families to afford the latrine sets. To bring the waterseal latrine within the reach of more families, the option of one slab placed on one ring 0.3 metre high set at ground level for flood protection has been widely promoted by DPHE-UNICEF since 1990. This design as shown in Figure 3 is suitable for stable soil formation where lining is not required; for weaker soils, cheaper alternative lining using local materials is encouraged. DPHE sells the one slab and one ring set at a subsidized rate of TK 100, and have provisions to sell extra rings at production cost.

A recent study of the users of the one-slab and one-ring waterseal latrine (WHO, 1992) whose pits have been filled up showed that 17% of them went back to open defecation. In addition 25% of the families continued using the facilities but made a side opening in the ring to allow the excreta to discharge in ditches. The short pit life (less than one year as over 65% of the pit depth was less than 1.2 metres) and inadequate knowledge of the need to shift the ring and slab to a new pit are factors which contribute to improper use and these are being addressed.



Against a background of widespread poverty, the do-it-yourself (homemade) latrine was introduced as another viable option. It consists of a pit dug in the ground to a depth of at least 2 metres covered by a bamboo or wooden slab with an opening. Thus, the pit life is generally in excess of five years. A lid is placed on the opening when the latrine is not in use. The building materials can be obtained in the backyard of many families. To protect against flood waters in certain localities, the squatting slab is built up on earth mounds. About 30 percent of the families (Mitra, 1992) which opted for the do-it-yourself latrines claimed that they did not spend any money for their latrines; 20 percent spent less than TK 100 (US\$ 2.5). Of the rural families who do not have a latrine, 80 percent stated that poverty and lack of money were the main reason for not building a latrine. Hence, for these families, the do-it-yourself latrines would be the first step to a hygienic latrine.

The simple pit is proving to be both socially acceptable, economically affordable and technically appropriate. Although smell is the major negative factor, it is largely minimized by digging deep pits and the use of a lid over the pit hole. About 60 percent of the sanitary latrines are of the do-it-yourself type.

More durable but low cost latrines, such as the SANPLAT (Brandberg 1985) concrete slab are also being explored to provide a wider options within the low cost range.

The families are encouraged to build the latrine superstructures according to their affordability. The enclosures ranged from simple bamboo frames clad with palm leaves or bamboo mats to a lesser number of brick superstructures.

### ACHIEVING HIGH SANITARY LATRINE USAGE.

An intensive mobilization campaign launched in mid 1990 by the Deputy commissioner of Barisal District in southern Bangladesh in collaboration with DPHE raised the latrine construction and usage to over 70 percent in 3 upazilas (total population about 0.5 million) within a period of 18 months. The IA seminars, which enlisted the participation of the local administration and different government departments proved to be an effective advocacy tool, and, in particular, prompted the dynamic Deputy Commissioner to initiate intensive sanitation campaigns. "Courtyard meetings" were arranged at upazila, union and village levels where groups of field workers from Family Planning, Social Services, Agriculture, Public Health and Education departments discussed sanitation, family planning and immunization with groups of 25-30 families. In addition, the High schools played a significant role in mobilizing teachers and students to build latrines in their own homes as a first step. Subsequently, groups of 5 students, sometimes accompanied by teachers, undertook visits to the local community within the school catchment. The directives of the Deputy Commissioner to dismantle all hanging latrines and stop open defecation combined with peer pressure also contributed to the change of attitude in the community. About 50 percent of the latrines were of the do-it-yourself types. While no significant difference was found in the usage pattern between the poor and better-off families, the concrete waterseal was more popular among the better-off who also provided better superstructures.

Many families belonging to the upazilas of Barisal district where sanitary latrine usage is high, claimed that the high incidence of diarrhoea that earlier prevailed is reduced since people are using sanitary latrines. The data cannot be directly verified as no such statistics are recorded by the Health department on a union or village basis. However, a research

study in Bangladesh (Aziz, 1990) has shown that a combined high coverage of water and sanitation supported by hygiene education yielded a diarrhoeal reduction of 25 percent. Hence high coverage of water, sanitation and hygiene are necessary, along with other interventions, for significant health impact.

Apart from health consideration, the added attractiveness of high coverage is the peer pressure that is generated for latrine usage when the majority of the families in the community have latrines. This was evident in Barisal where families have constructed latrines since their neighbours have done so.

### STRATEGIES FOR THE 1990's

The programme aims at reaching a sanitary latrine coverage of 45 percent by 1995 and the main strategies being adopted are:

1. Social mobilization, with emphasis on the forging of alliances with government and non-government agencies to reach the communities through effective communication channels. This approach also distributes the task to more partners to accomplish.
2. The promotion of socially acceptable and affordable technologies. The do-it-yourself latrine is seen as the backbone to an accelerated and sustained sanitation coverage and a first step for many families to the more sophisticated and durable concrete waterseal latrine.
3. Concentration on selected geographical areas, particularly diarrhoeal-prone upazilas, to achieve high coverage before expansion of activities to larger areas.
4. Long term sustainability by minimizing subsidies to the community. The subsidy being provided through the sale of the concrete waterseal latrines by DPHE, whose production is limited, will be phased out by 1995. The costs of do-it-yourself types or concrete waterseal latrines bought from the private sector, are totally met by the families.
5. In addition, the gradual phasing out of government subsidies, limiting the production capacity of DPHE, and the greater demand that would be generated by the new sanitation thrust would promote the growth of the private sector.
6. Continuous monitoring and feedback from the field through field visits and sample in-depth studies in order to adjust the programme, as necessary, to ensure sustained behavioural change.

### CONCLUSION

The Integrated Approach, which has lately been reinforced with a more comprehensive social mobilization drive, has increased significantly the level of sanitation awareness across the country. In this context, the simple hygiene do-it-yourself pit latrine has been the basis for the rapid acceleration of rural sanitation in Bangladesh in the last two years. This technology has proved to be socially acceptable and hygienic, and is compatible with the high level of poverty. It is seen not only as the first step for many poor families to the more sophisticated waterseal latrine, but the backbone to the sanitation revolution, with the support of an intensive social mobilization drive at all levels.

### REFERENCES

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