

Promoting sanitation in Bangladesh

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A community-level survey was made in Bangladesh to assess the effectiveness of a health promotion campaign on sanitation. The data collected showed that the mobilization of schoolchildren to promote the construction and use of sanitary latrines had a significant impact on local practices. Poorer families appeared to be more responsive to the idea of building their own sanitary latrines than those who were slightly better off, who sometimes saw the home-made latrine as a symbol of low status. In several cases the woman of the household did the construction work rather than the man, and this aspect of women's participation could usefully be emphasized in future campaigns.

During the International Drinking Water Supply and Sanitation Decade (1981–1990), Bangladesh achieved a great deal, and more than 80% of its population now live within 150 metres of a tube-well which supplies drinking-water. However, the country is still severely lacking in sanitation facilities. Only an estimated 26% of rural households possess a sanitary latrine. To assess the situation and find ways of improving it, the writers visited Banaripara, a subdistrict (*thana*) of the Barisal district. This *thana* is one of the areas in which the government, with the assistance of UNICEF, has carried out a special integrated sanitation programme. Barisal has a population of about 170 000, living in eight 'unions'. The Directorate of Public Health Engineering and UNICEF launched the programme in July 1990. The objectives were to make people aware of the benefits of sanitation

and motivate them to build 'ring-slab' (a cement squatting slab) and 'home-made' latrines themselves. A home-made latrine in this case consists of a hand-dug pit covered by a platform made of wood, bamboo or other locally available material, with an opening, and a lid to cover the hole.

An integrated promotion programme

The district administration of Barisal actively participated and began its activities in all of their *thanas* in August 1990. The *thana* and union chairmen involved were invited to meetings at the district office in order to initiate the programme. To stimulate mass motivation and awareness, "courtyard meetings" were arranged at all levels in the *thanas*. In these meetings a group of field workers from the family planning, social services, agriculture, public health, and education departments of the government discussed sanitation, immunization and family planning with 20–25 families.

Attempts were made to involve the local high schools, religious schools (*madrasas*), religious leaders (imams) and other local leaders in the

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sanitation activities. A one-day orientation seminar was organized with about 200 representatives from these local institutions at the Directorate's *thana* office. During the seminar the benefits of sanitation and appropriate methods of promoting it in the community were discussed. The function and construction of two types of sanitary latrine were demonstrated.

In November 1990 the District Commissioner of Barisal district announced that the school which achieved the highest sanitation coverage in its catchment area would be rewarded with a contribution towards its development fund. This encouraged the local schools and *madrasas* to arrange meetings with their pupils and other people from their catchment areas to promote sanitation and demonstrate the construction of latrines. Teachers asked their pupils to build sanitary latrines for their homes. They also formed groups of eighth grade pupils and went into their local communities to promote the programme. These activities went on until the end of 1991. One boys' high school, one girls' high school and one *madrasa* won awards.

In early 1991 the District Commissioner issued an open letter to the local people and institutions asking them to help each other to build sanitary latrines. The letter reminded them of the benefits of sanitation and of the law by which the owners of unsanitary latrines could be fined. As the sanitation programme proceeded, the *thana* office of the Directorate began a sanitation monitoring system. They prepared a latrine progress report form and distributed it among the high schools and *madrasas*, to be filled in for their catchment areas at regular intervals. The staff of the *thana* office then randomly selected sites and checked their condition. Where necessary, warnings were issued, and if these went unheeded, unsanitary latrines were destroyed.

Assessing the impact

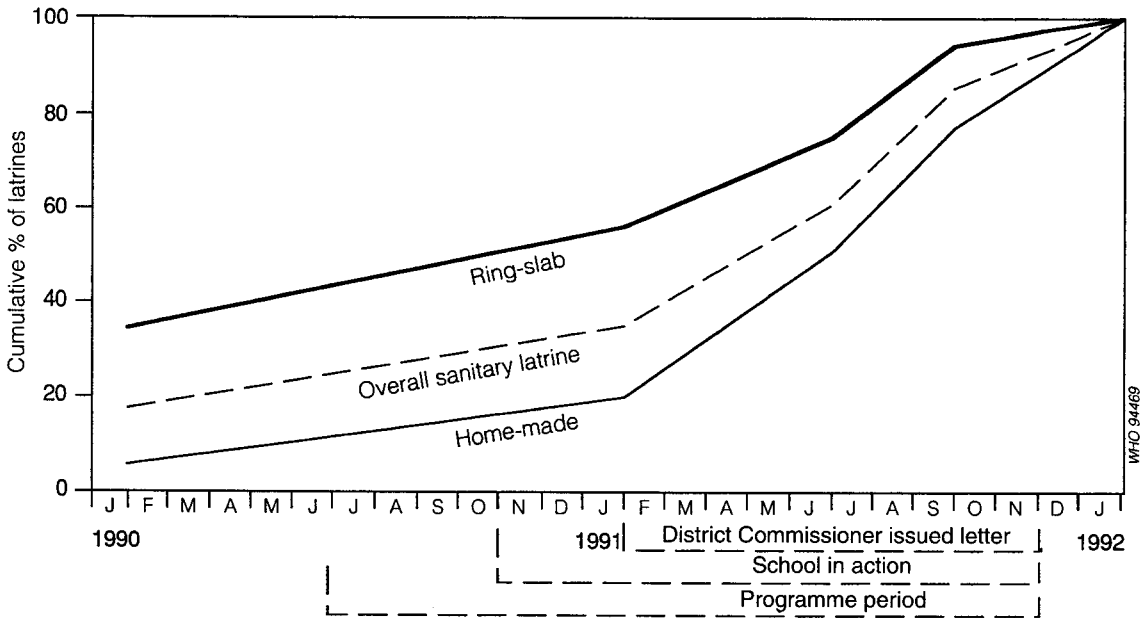
To make the best use possible of our limited time and resources, we decided to conduct a random survey of 210 households in 30 villages. We visited the three or four most accessible villages in each of the eight unions. In these villages we collected information at one household in every tenth district (*bari*), or where the *baris* were quite far apart, every fifth one. Information was collected by interviewing a member of the household, preferably a housewife, and checking on the condition and use of the latrine used by that household. We accepted the information from respondents who said they were sharing a latrine with their relatives, because we did not have time to verify this.

We also discussed the impact of the sanitation programme with key informants including village doctors, local politicians, schoolteachers, health workers, religious leaders, a rice mill owner, people whose hanging latrine (basically a plank jutting over an open waterway or drain) had been destroyed, children we met in the community, and individuals at the local Directorate office. We asked for their comments and suggestions for future improvements.

Of the 210 households, 73% appeared to be using sanitary latrines (ring-slab and home-made) and the rest unsanitary ones. Of the sanitary latrines, 90 (59%) were home-made and 63 (41%) ring-slab. The platforms of the home-made latrines were almost all made of bamboo and branches from common trees, and in most cases were not very solidly built.

Almost all of those (91%) who had built latrines during the programme said that the need to do so had been communicated to them by school or *madrasa* pupils. In many cases (21%), the necessary know-how was obtained from neighbours. We found practi-

Progressive installation of latrines and the phasing of the interventions



cally no mention of local leaders or imams promoting sanitation.

About 18% of the families were using sanitary latrines that had been built before the time of the programme. Although these data are imprecise since the respondents could not usually recall exact dates, they give us an idea of the baseline conditions and progress of the programme. An increase in coverage was observed from the beginning of the programme, and the rate of increase went up significantly when the schools got involved (see figure). It is encouraging to see that the building of home-made latrines was still in progress although the programme had ended two months before our visit.

As the local schools played a major role in the programme, we were surprised to find that

none of the three we visited had an adequate number of sanitary latrines. In one there was no sanitary facility for girls, and the one existing latrine for boys was locked and said to be for the use of teachers only. Publicity material (leaflets, charts and posters) was displayed in the headmaster's office but not in the classrooms. We were told that this was because they were not given enough material and they did not want to risk damaging or losing it by displaying it in the classrooms.

About 59% of the women interviewed had had some formal schooling, which is above average for the country as a whole. The association between the use of sanitary latrines and schooling was most pronounced in the case of women with over 5 years of schooling, but schooling was not found to affect the type of latrine used.

About 72% of the families lived in houses with walls on all sides made of bamboo, tin or brick (referred to as “better housing”). The remaining 28% lived in houses without walls on all sides, or made of material cheaper than bamboo or tin (“poor housing”). No significant differences were found between the use of sanitary latrines in families with poor housing or better housing. Of those who built ring-slab latrines, the majority (59%) lived in tin or brick houses. This suggests that socio-economic status may be a determinant of the type of latrine used. Some of the families with better housing told us that they were using an unsanitary latrine because they planned to buy ring-slab latrines soon and they did not think that home-made latrines were suitable for their status.

In response to a question on the benefits of sanitary latrines, all those interviewed were able to state one or more benefits. The four main benefits cited were:

- they prevent chickens and animals from spreading human faeces (56%);
- they protect people from diarrhoeal and other diseases (49%);
- they reduce bad smells (36%);
- they are convenient (36%).

About 52% of the respondents reported that these were their own views, but 89% agreed that schoolchildren had talked to them about the benefits and construction of latrines. Most of the respondents (79%) could explain that a sanitary or hygienic latrine should confine human waste in a way which prevents pollution of the surroundings.

About half the users of sanitary latrines were worried about building a new one after the current one had filled up, and 26% worried about whether the materials of their home-made platforms (mostly branches) would last for more than one rainy season.

Implications

Although this was only a quick survey and there were no baseline or control data, it provided evidence that the sanitation promotion efforts had had a positive impact on knowledge and awareness, and increased the use of sanitary latrines. Households using sanitary latrines were far above the national average (73% rather than 26%), and many of these had been recently installed. The majority of people knew what was meant by sanitary or hygienic disposal of human waste. The use of sanitary latrines increased substantially after the schools’ involvement, and the involvement of the government administration at the district level also contributed significantly to the programme. Properly interpreted, our findings should be helpful in framing guidelines for replicable, feasible, and sustainable community sanitation projects.

Increasing use of home-made latrines indicates that they provide a useful technical option for those who want to improve their standard of hygiene. Their use is related to both affordability and the further development of appropriate technology. However, to determine the effectiveness and sustainability of this approach, more detailed studies are required. Users’ views on operation and maintenance should be a part of these studies.

We are doubtful about the effectiveness of the one-day seminar with so many participants from different organizations. It may not provide enough time for the participants to understand the programme and discuss their strategies. The local schools and other public institutions should build adequate numbers of latrines for their own use before promoting sanitation or threatening people with the law requiring sanitary latrines. Schools and other institutions can provide an important demonstration for the community. The involvement of schools has implications for public sector

and institutional development as well as for cost-effective replication.

Imams, local political leaders, and village doctors were supposed to be active participants in the programme, but they were inadequately advised on what they were supposed to do, so they hardly participated. Community health workers were promoting sanitation but it was on a limited scale and insufficiently coordinated with the programme. The involvement of all of them should be planned, to improve the effectiveness of the integrated approach to sanitation.

In this programme women were not encouraged to take the lead in sanitation promotion or to build their own latrines, but some did build latrines as their husbands were busy at work. More systematic involvement of women might have improved the effectiveness of the programme.

The lack of significant associations between the use of sanitary latrines and education or living conditions made us wonder whether the programme was forced more onto the families of lower socioeconomic status, or whether it was more difficult to motivate the others. This is paradoxical because children who go to school tend to be from families of higher socioeconomic status. Ways of involving children who do not go to school should be sought. The local staff said that they experienced more difficulty in convincing better-off families to use latrines because they preferred to do something which would reflect their status more creditably.

The schoolchildren threatened the users of unsanitary latrines and destroyed their latrines, but a less destructive and coercive approach might have been more appropriate. Most people were aware of the benefits of sanitation and knew how to construct low-cost latrines. We do not know how this

coercive approach would affect traditional behaviour or the sustainability of the programme. However, sewage disposal is a public health and community issue, not just an individual problem, so government and local involvement is important.

We also discussed the impact of the sanitation programme with village doctors, local politicians, schoolteachers, health workers, religious leaders, a rice mill owner, people whose hanging latrine had been destroyed, children we met in the community, and individuals at the local Directorate office.

Our data indicated that the users accepted sanitation messages which related to events that could be easily seen, like animals spreading human waste, more than the health-related messages. This may have implications for future health education messages. Actual coverage in terms of sanitary latrines per household may vary from our observed values. Within our time limitations it was not possible to do a probability survey or make a comparative assessment. It was not our objective to evaluate the project, which would have required more time and resources, and therefore our analysis is of limited value because of the small sample size. However, it does tell us something about the existing situation, and it suggests that integrated promotional efforts could increase sanitation coverage significantly. ■

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