A sanitation revolution in Bangladesh?

by Bjorn Brandberg

There is a possibility of full sanitation coverage in Bangladesh before the end of the decade. This may have effects on the donors' attitudes to low-cost sanitation programmes worldwide.

WILL ONE OF the poorest countries in the world become a leader, showing other countries how to run a successful low-cost sanitation programme? Will Bangladesh give new momentum to the 'appropriate sanitation for all' campaign, and put improved sanitation back on the agenda for international donor assistance and development aid? If it is possible in Bangladesh, then it should also be possible in other developing countries.

Remarkable progress

In spite of its reputation as a disaster-prone country with many 'hopeless' aid programmes, remarkable things are happening in Bangladesh. The national water-supply programme is in its final phase, and 85 per cent of families have a safe water supply within 150m, usually a borehole with a handpump.

The national immunization programme (EPI Plus) has achieved 80 per cent coverage within five years. And, finally, the sanitation programme has a growth rate of over 60 per cent per year, so full coverage should be achieved within the decade. If present trends continue, full sanitation coverage may even be achieved within a few years. The success of the sanitation programme has been a result of three factors:

- *Advocacy* A successful advocacy programme has made sanitation coverage a high priority on the political agenda.
- *Integrated approach* An integrated approach to institutional responsibilities has forged partnerships between various institutions for promotion and social mobilization.
- *Technologies* A flexible approach to appropriate sanitation technologies has made sanitary latrines affordable to people of all income levels.

But the risk that people will return to unsanitary defecation habits is serious and needs to be addressed now.

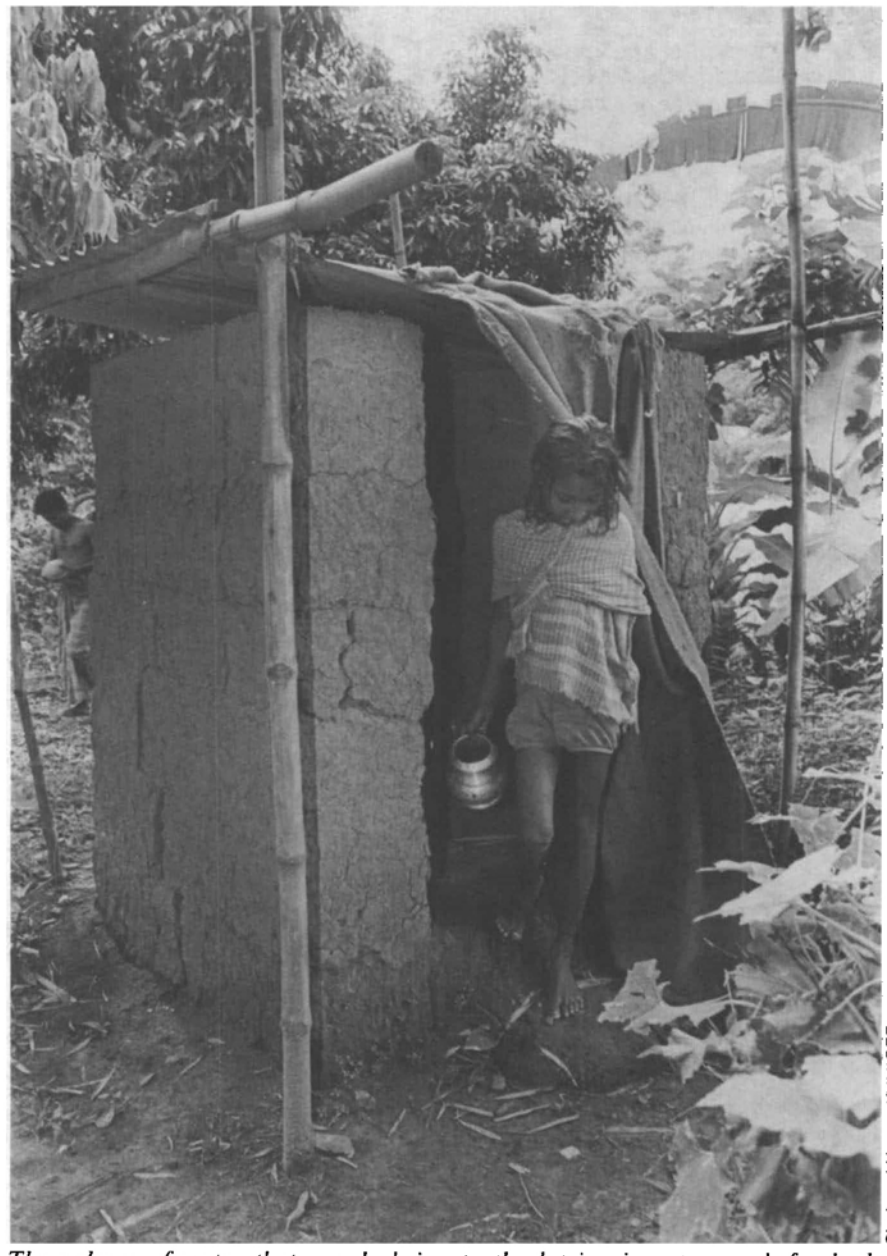
The problem

In Bangladesh people have traditionally used 'hanging latrines', bamboo or brick structures raised over either the ground, ponds, or water courses, which leave faecal matter exposed to people, especially children, and domestic animals. With the highest population density in the world, the capacity of nature to take care of the faecal matter has long been exceeded, and domestic animals have become carriers of disease. Diarrhoea is a silent disaster in Bangladesh, with over 300 000 children dying every year — more deaths every year than the 1991 cyclone and the Gulf War put together.

It was to overcome the problem of diarrhoea and other sanitation-related diseases that the water and sanitation programme I have described was launched many years ago. It has had remarkable success in providing safe water to the people, but sanitation and disease control are still lagging behind, confirming that safe water alone has little or no influence on health.

Pour-flush latrines

Too much effort has been spent on the introduction of subsidized water-sealed pour-flush latrines lined with concrete rings. These have become popular, but they do not work very well and they are too expensive for the rural majority. An attempt to cut costs



Shehzad Noorani/UNICEF

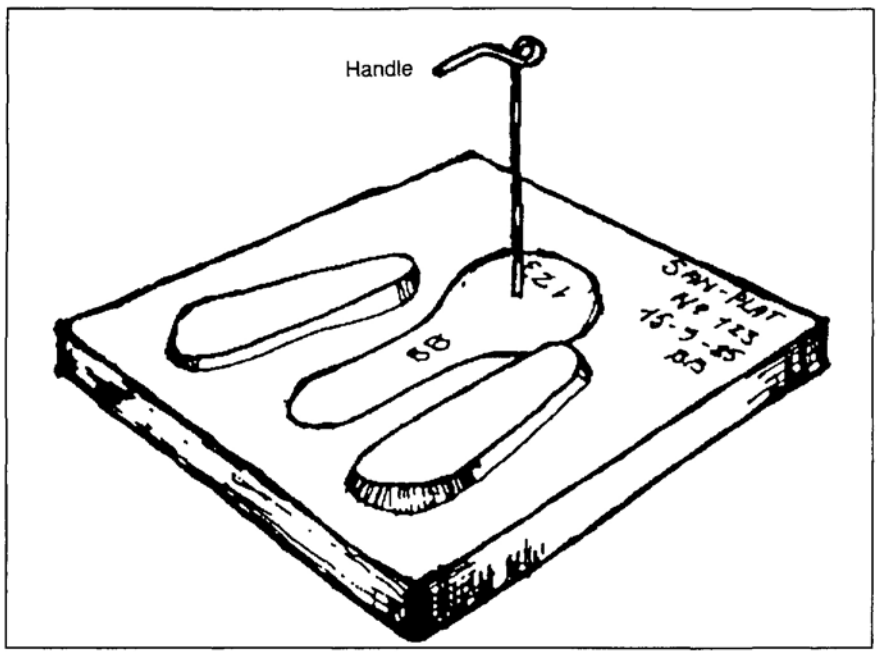
The volume of water that people bring to the latrine is not enough for both washing and flushing.

Shehzad Noorani/UNICEF

Today the coverage of sanitary latrines is 25 per cent, and it is growing by 60 per cent per year.

has been made by reducing the number of rings from five to one, but the principal problems remain:

- In 1992 47 per cent of the water-seals had been broken by their owners, because they appear to be cleaner and clog less often that way.
- The volume of water that people bring to the latrine may be enough for anal and hand washing, but too little is left for flushing the toilet. This results in a conflict between water for washing and water for flushing.
- In spite of the heavy subsidies (around 70 per cent) that drain the resources of the programme, the construction cost is still too high for the majority of the rural population.
- The privatization of the ring and slab production has been seriously hampered by the heavy subsidy, as expectations have become unrealistic.
- In spite of there being more than 1000 production sites, the local transport of rings and slabs continues to be a major problem.



The sanplat is a small sanitary platform with foot-rests and a drop-hole. The drop-hole has a removable cover, with a built-in handle.

Manuals and moulds for sanplat latrines are sold on a non-profit basis by:

LCS Promotions, Flo 18,
S-46796 Grästorp, Sweden.
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Home-made sanitary latrines

The problems of the water-sealed latrines have been recognized by the programme management, and significant improvements in the programme were achieved when the construction of simple pit-latrines was promoted, and when the destruction of the unsanitary traditional hanging latrines was encouraged. The homemade pit latrines dispose of the faecal matter safely, and they have been accepted by the population as a substitute for the traditional latrines.

A recently conducted national survey of water and sanitation indicates, however, that a majority of the owners of homemade latrines have some kind of complaint, but it is usually about the superstructure and not the functioning of the latrine. This is probably because the water-sealed latrines look more 'developed' than the homemade ones.

Sanplat latrines

To satisfy the need for an intermediate solution to the latrine problem, the 'sanplat' latrine will be introduced.

The sanplat is a small sanitary platform designed to improve the hygiene and safety of traditional pit-latrines. It is expected to have a big market in Bangladesh, as it looks more 'developed' while satisfying basic sanitary standards without the problems of the pour-flush latrines.

There are currently three private contractors producing the sanplats on an experimental basis.

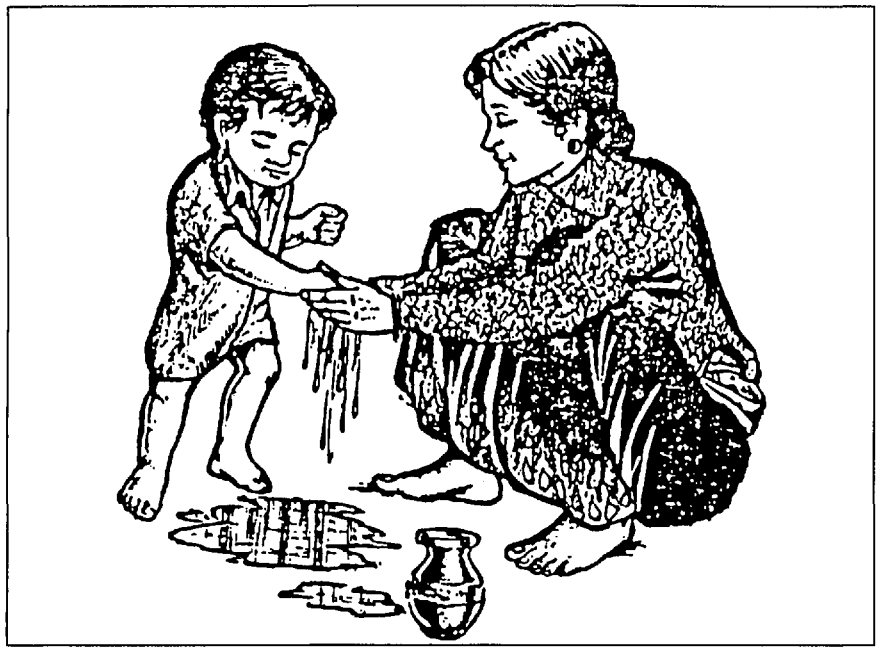
In the mid-eighties the coverage of sanitary latrines was only some 4 per cent. Today it is over 25 per cent and growing by over 60 per cent per year. This is a result not only of the appropriateness of the technology, but also of a promotion programme based on three distinct components: advocacy, social mobilization, and programme communication. The division of the promotion programme into these well-defined components has made the mechanisms of effective promotion easier to understand and use.

There could be some problems in siting the latrines, as there are a large number of groundwater sources. The flat land, in combination with the fine ground material will, however, provide an excellent filter, reasonably safeguarding the bacterial water quality. In the longer term there may be problems with the nitrification of the groundwater, particularly in areas of high population density. This possible problem is considered to be secondary to the present one, where the drastic pollution of the surface claims the lives of 300 000 people every year. In the future drinking-water may need to be collected from protected wells.

Hygiene education

Safer water and adequate sanitation are the first two steps on the road to controlling diarrhoeal diseases in Bangladesh. The national survey uncovered a third: hygiene education. Only when these three factors are combined do they result in a considerable health impact where diarrhoeal diseases are a major problem. Given the success already achieved in providing water, sanitation, and immunization services, there are good reasons for optimism concerning the health education aspects.

Campaigns for adequate sanitation in Bangladesh are making remarkable progress. Their success depends on them remaining a high priority, and maintaining both institutional co-operation and a flexible approach to technology. What is possible in Bangladesh should be possible in other developing countries as well. Sanitation and hygiene education should return to the development agenda. ●



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