

Scaling up: Safe water, adequate sanitation and improved hygiene practices

Clean water and safe toilets have the potential to transform children’s lives. More than any other group, young children are vulnerable to the risks posed by contaminated water, poor sanitation and inadequate hygiene. Unsafe drinking water, inadequate availability of water for washing and cooking, and lack of access to sanitation together contribute to about 88 per cent of deaths from diarrhoeal diseases, or more than 1.5 million each year.

Better sanitation alone could reduce diarrhoea-related morbidity by more than a third; improved sanitation combined with better hygiene behaviours could reduce it by two thirds. Hand washing with soap or ashes would prevent 0.5 million to 1.4 million deaths per year. Improved household practices include consistent use of a toilet or latrine by each person in the household, safe disposal of young children’s faeces, hand washing with soap or ash after defecation and before eating, and the installation of safe water sources in households and communities. Providing communities with the knowledge and resources to implement these basic household practices is a vital first step towards improving sanitation and hygiene.

Nicaragua and Peru: Promoting better hygiene to reduce diarrhoea

Like South Asia, Latin America and the Caribbean has experienced significant progress in the areas of water and sanitation, with 16 of the region’s 33 countries on track to meet their MDG targets. Yet persistent disparities remain, especially between urban and rural areas.

In 2002, the joint Environmental Health Project-Pan American Health Organization ‘Hygiene Behavior Change Project’ initiated community-based strategies for the region suffering a combined total of 15,000 deaths and 75,000 hospitalizations due to rotavirus diarrhoea every year, despite enjoying a sound infrastructure of latrines and piped water. In Peru, reported cases of diarrhoea after implementation fell to 9 per cent, while in Nicaragua there were almost no reported cases of diarrhoea among children aged three and none in children aged four and five. Many of the hygiene practices promoted as part of the interventions in both countries, such as better hand washing and safe use and storage of water, showed statistically significant improvements from pre-intervention to midterm.

Mozambique: The child-to-child sanitation committees

Children can often serve as powerful advocates for change in their communities. In Mozambique, the child-to-child sanitation committees serve as a basis for child-centred hygiene education programmes in school and also aim to operate as an entry point to local communities for the adoption of hygiene practices at the household level through child-to-child and child-to-parent channels. A child-to-child sanitation committee consists of a group of 15 girls and boys trained in participatory hygiene education, including the dissemination of information on routes and barriers for water and sanitation-related disease transmission, appropriate hand washing with soap (or ashes), and proper use of latrines. The inclusion of girls in the committees is especially important because girls’ school attendance is affected by inadequate water and sanitation facilities and by time spent travelling long distances to drinking-water sources. In combination with youth participatory strategies, these efforts helped increase the enrolment rates of girls 15–20 per cent nationwide since 2002–2003.

To get the other children’s attention, the committees use focus group discussions, posters, expressive songs, theatre, dance, interviews, drawings and competitions. Following this approach, child-to-child sanitation committees have been established and are operational in 251 schools.

Southern Sudan: Community-based water and sanitation in complex environments

It is often assumed that community-based approaches are difficult if not impossible to implement in areas that have been affected by armed conflict, natural disasters or other complex emergencies. Yet evidence from South Sudan suggests that when they are successfully implemented, community-based approaches can play a crucial role in difficult environments. In South Sudan, a water and sanitation project involves local water teams who specialize in hand drilling. Each team has 10 members, usually selected from the local communities; of these, seven are usually drillers and three are responsible for handpump maintenance, including a team supervisor. Hand drilling provides a low-tech, low-cost approach of providing access to water. The rigs can be dismantled and transported between sites by the communities themselves. Their portability allows them to be transported even over difficult terrain and, critically, enables the drilling

to continue during the wet season. Furthermore, the low cost and portability of the rigs is essential in insecure areas. By working together with communities, this project has successfully extended tube wells across large areas of northern Bahr el Ghazal.

Bangladesh and India: Community-led ‘total sanitation’

Although investment in toilet construction is an important prerequisite of increasing sanitation coverage, evidence from South Asia suggests it is not always sufficient in order to achieve improved public health outcomes. Studies of state-wide sector assessments in India, for example, show that most people continue to defecate in the open not due to a lack of access to toilets but primarily because they see no reason to change their behaviour, as awareness of associated health risks is limited or ignored. In fact, usage of toilets is highest where households recognize the need for a toilet and therefore build one of their own.

In Rajshahi district, Bangladesh, a unique community mobilization approach was piloted in 2001 to achieve 100 per cent sanitation coverage. Community-led ‘total sanitation’ is based on the principle of triggering collective behaviour change. This approach helps communities understand the negative effects of poor sanitation and empowers them to collectively find solutions. In Rajshahi, this approach led the community to achieve a total ban on open defecation within the village. The ban was achieved without any external subsidy and was based entirely on community mobilization. Communities used their own resources, established action committees, developed innovative low-cost technologies and monitored progress.

The Rajshahi initiative represented a paradigm shift in promoting improved sanitation practices through a community-focused strategy, but scale-up in the area was limited to a village-by-village approach. The Rajshahi experience generated interest in India, however, leading to visits from policymakers, including representatives from the State Government of Maharashtra. Building on the Bangladeshi experience, the State Government of Maharashtra formulated a strategy to end open defecation in the state. The key features of this strategy were to bring local governments to the fore, provide fiscal support to the poor, and put in place strong monitoring and evaluation systems. The campaign included a strong emphasis on information, education and communication activities and exposure visits to the best-performing villages. As a result, between 2002 and 2006,

Maharashtra went from having not even one open defecation-free village to having more than 3,800, with more than 5 million households now living in an environment free of open defecation.

Maharashtra’s success in turn led to a revision of national sanitation guidelines in India and to establishment of the *Nirmal Gram Puraskar*, or ‘Clean Village Prize’, introduced by the Government of India in 2004. The scheme offers cash rewards to local governments that achieve 100 per cent sanitation. The response has been tremendous: In February 2005, *38 gram panchayats* (the lowest tier of elected rural local government) received the prize; by February 2006, the number went up to *760 gram panchayats* and *9 block panchayats* (an intermediate tier of elected rural government).

Ghana: Bridging the urban-rural divide

Among the largest disparities in safe water and basic sanitation are those between urban and rural populations. Globally, access to improved drinking-water sources is 95 per cent in urban areas, compared with 73 per cent in rural areas. The urban-rural divide in drinking water is at its widest in sub-Saharan Africa, where 81 per cent of people in urban areas are served, compared with 41 per cent in rural areas.

In Ghana, coverage of rural water and sanitation was, until recently, behind the average for sub-Saharan Africa but is currently expanding at a rate of about 200,000 people, or more than 1 per cent of the population, a year. The change has been dramatic and reflects a sweeping reform programme introduced by the government in the early 1990s in order to address the inefficiencies of a top-down system that was unresponsive and failed to deliver, especially in rural areas. As a result of the reform process, responsibilities for water supplies were transferred to local governments and rural communities, and new political structures for water governance have been developed. Village structures are now part of the new system. To apply for capital grants, communities must form village water committees and draw up plans detailing how they will manage their systems, contribute the cash equivalent of 5 per cent of the capital costs and meet maintenance costs. This participatory approach has resulted in a dramatic increase in access to water, from 55 per cent in 1990 to 75 per cent in 2004, and access is currently accelerating.

See References, page 108.