



SANITATION: Essential for better health

The challenge

Providing access to sanitation remains one of the biggest challenges for many developing countries. In 2002, 2.6 billion people – just over half of the developing world – lacked access to improved sanitation. Of these, 932 million live in South Asia, 756 million in East Asia and 478 million in Africa.

The challenges of providing adequate sanitation are greatest in urban slums and the rapidly growing informal settlements located on the outskirts of cities. There, sanitation coverage is extremely low, and insecurity of tenure hampers public investment in sanitation infrastructure.

Diseases related to inadequate water and sanitation remain among the biggest killers in the developing world, especially of children. Lack of sanitation and poor hygiene are responsible for the transmission of diarrhoea, cholera, typhoid and many parasitic infections. In 2002, 1.8 million people, overwhelmingly children, died from diarrhoeal diseases.

The harm wrought by poor sanitation extends well beyond the health impacts. Health risks and epidemics from water-borne diseases greatly reduce human productivity, tourism and food exports. In total, the economic costs of poor sanitation outweigh the investment needed to address the problem.

At the 2002 World Summit on Sustainable Development in Johannesburg, governments committed to halve by 2015 the proportion of people without access to basic sanitation. To meet this target, taking into account population growth, an additional 1.9 billion people will need to be served – 1 billion in urban areas and 900 million in rural areas. If the 1990-2002 trends continue, however, the world will miss the 2015 sanitation target by more than 500 million people. Even with the additional people served, close to 2.4 billion people would still be without improved sanitation in 2015, almost as many as there are today.

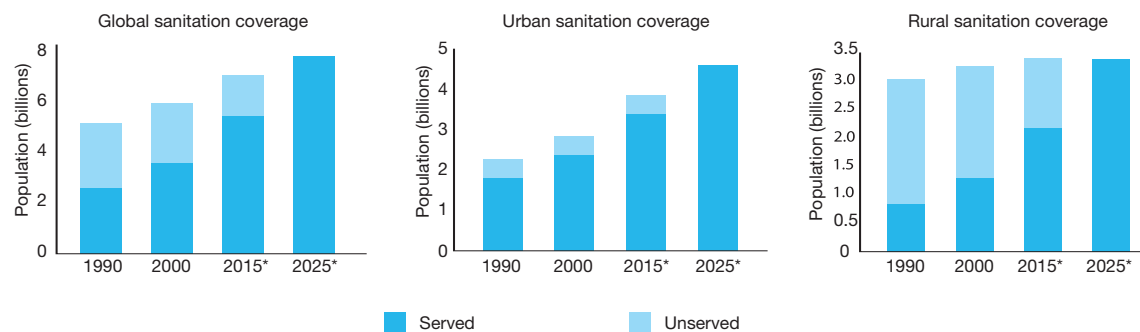
Sanitation Costs vs. Benefits

Estimates of the total cost of meeting the 2015 sanitation target in developing countries amount to an additional \$10-20 billion per year, based on hygiene promotion and low-cost facilities.

Estimated investment requirements for wastewater treatment using conventional treatment plants total over \$50 billion, but wider use of simpler treatment methods would lower those costs.

The economic, social and environmental benefits from improved sanitation and hygiene range from \$3 to \$34 per \$1 invested, mainly as a result of reduced mortality and illness, as well as higher productivity. The fact that the benefits extend well beyond the individual household level points to a need for significant public investment in sanitation facilities.





Actual and target sanitation coverage

The 2002 World Summit on Sustainable Development (WSSD) set the target of halving, by 2015, the proportion of people who do not have access to basic sanitation. Given the projected growth of the world population, this target implies that an additional 1.9 billion people will require access to improved sanitation by 2015 (in other words 125 million people each year, or 342,000 people each day).

* targeted

Source: WHO/UNICEF Joint Monitoring Programme, 2002. Updated in September 2002.

Snapshots of Success...

In **Mumbai, India**, where 6.7 million slum dwellers lack household sanitation facilities, programmes to promote communal toilet facilities have improved sanitation in densely crowded settlements and other congested public areas, such as markets and bus and train stations. A community toilet block programme for example, is based on a partnership between the municipality and communities, where the municipality provides the initial capital while community groups take full charge of operation and management. Communities recover costs through user charges designed to be affordable for all. So far 400 toilet blocks have been constructed, covering a quarter of the slums in Mumbai.

CSD-13: Policies under consideration

At the Commission on Sustainable Development's twelfth session (CSD-12), government ministers, delegates and non-governmental representatives assessed progress towards meeting the sanitation goal, highlighting obstacles and constraints and sharing best practice examples.

The Commission's thirteenth session (CSD-13), to be held at the United Nations in New York from 11 to 22 April 2005, will be the first policy-setting session since the Johannesburg Summit. Government delegates will decide on concrete policy options and possible actions to be taken to achieve the sanitation and other targets.

The basis for discussions at CSD-13 will be the Chair's Summary of the Interactive Discussions at the Intergovernmental Preparatory Meeting, 28 February to 4 March 2005 (www.un.org/esa/sustdev/csd/csd13/ipm_chairstext2.pdf), together with a report issued by the United Nations Secretary-General (E/CN.17/2005/3) which focuses on policy options and possible actions to achieve the sanitation goal. Some of the key policy options from the report are summarized here.

Snapshots of Success...

Lesotho increased sanitation coverage from 20 per cent in 1981 to 53 per cent in 2001 by promoting a standard technology (ventilated improved pit latrines or “VIP latrines”) through community participation, education, private-sector involvement and builder training. Many women were trained as latrine-builders, and the additional income earned improved their status and contributed to poverty alleviation.

The **Women Leaders for WASH** initiative, which arose from the Global WASH Forum in Senegal in December 2004, brings together dedicated women leaders from around the world who act as advocates for water, sanitation and hygiene issues. Convened by Ministers of Norway and Uganda, many of the women leaders are ministers of environment or water resources in their own countries. They thus have an important role as implementers of programmes to meet the objective of the International “Water for Life” Decade: 2005-2015 to provide a greater focus on women as managers of water to help achieve the internationally agreed water- and sanitation-related goals. The initiative is supported by the Water Supply and Sanitation Collaborative Council.

In **Egypt**, a pilot project is reusing wastewater from nearby urban communities to grow timber in the desert. In **Mauritius**, a series of sewer networks and wastewater treatment plants allow for the safe reuse of wastewater for irrigation, mainly for sugarcane production. In **Mexico**, wastewater from a low-tech, low-cost treatment plant in Tijuana irrigates a large green area surrounding the facility, called Ecoparque, reducing the high level of untreated effluent that previously flowed into the Tijuana River.

Hygiene education

The promotion of culturally-sensitive hygiene education is an important complement to increased access to sanitation, and critical to reducing the occurrence of water-borne diseases in developing countries. Providing gender-segregated sanitation facilities in schools can increase the effectiveness of hygiene education and also female school attendance. Public awareness campaigns on the linkages between sanitation, hygiene and health can be effective in changing behaviour. The formation of local “sanitation clubs” that promote health and hygiene can also be encouraged.

Involvement of women in decision-making

The inclusion of women as well as men in decision-making on water and sanitation supply is critical. Women play a crucial role in influencing the hygiene behaviour of young children, and men can also serve as role models in sustaining changes in habits. The effective use of water and sanitation facilities will depend on the involvement of both women and men in selecting the location and technology of such facilities.

Not “wasting” wastewater

An increasing number of countries, particularly in water-scarce regions, are beginning to view wastewater as a resource to be reused, rather than simply discharged. With proper procedures, treated wastewater can be reused in agriculture, although generally not directly on food crops. Reuse of treated urban wastewater is widely practised in many countries.

Snapshots of Success...

In **India**, less than one third of the 140 million rural dwellings have access to sanitation facilities. The Government's 'Total Sanitation Campaign' provides financial incentives for local authorities who achieve 100 per cent sanitation coverage in schools and households and maintain a clean environment. In 2004, as a result of the campaign, more than 100,000 latrines were constructed in schools, households and rural health centres.

In **Zimbabwe**, Community Health Clubs support members in making small, inexpensive hygiene improvements such as installing hand-washing facilities and adopting safe methods of excreta disposal. More than 350 clubs have been established, benefiting 20,000 members.

In **Thailand**, for the past 40 years, rural sanitation has been integrated into the country's five-year economic and social development plans. By 1999, 92 per cent of the rural population had access to safe drinking water, and 98 per cent of rural families had built and were using sanitary latrines. As latrine coverage has increased, mortality related to gastrointestinal diseases has decreased by more than 90 per cent. The programme's success depended largely upon capacity building: intensive training of project personnel and technical staff at local and national levels; and social mobilization and community health education conducted by mobile units and village volunteers.

Investment at the household level

Many successes in expanding sanitation coverage have been achieved in the absence of large public funding. Small private entrepreneurs play a significant role in Africa and East Asia. With only modest investments in the 1990s, especially in rural areas, the additional number of people served with sanitation was large, partly due to investments made by households in low-cost technologies. Sanitation and hygiene are, in large part, the result of private household decisions, and policies to promote improved sanitation must seek to influence preferences and resource allocation at the household level.