

FACTS ABOUT...

Water

The Problem

While fresh, clean water is taken for granted in many places, it is a scarce resource in others, due to either scarcity of water or contamination of water sources.

Some 1.1 billion people, or 18 per cent of the world's population, lack access to safe drinking water, and over 2.4 billion people lack access to adequate sanitation. More than 2.2 million people in developing countries, most of them children, die each year from diseases associated with lack of access to safe drinking water, inadequate sanitation and poor hygiene. And a large proportion of people in developing countries suffer from diseases caused either directly or indirectly by the consumption of contaminated water or food or by disease-carrying organisms that breed in water. With adequate supplies of safe drinking water and sanitation, the incidence of some illnesses and death could drop by as much as 75 per cent.

Lack of safe drinking water is due to both lack of investment in water systems and inadequate maintenance of the systems. About half the water in drinking water supply systems in the developing world is lost to leakage, illegal hook-ups and vandalism. In some countries, drinking water is highly subsidized for those connected to the system, generally more affluent people, while poor people not connected to the system rely on expensive private sellers or have to rely on unsafe sources.

Water issues have major gender implications. Often in developing countries, it is women who have the job of hauling water. On average, they must walk a distance of 6 kilometers each day, carrying the equivalent of a piece of airport luggage, or 20 kilograms. Women and girls also tend to suffer the most as a result of the lack of sanitation facilities.

Most freshwater—about 70 per cent globally—is used for agriculture. However, most irrigation systems are inefficient, losing about 60 per cent of the water to evaporation or return flow to rivers and groundwater aquifers. Inefficient irrigation not only wastes water, but also causes environmental and health risks, including loss of productive agricultural land to waterlogging, a major problem in some areas of South Asia, and standing surface water which promotes the transmission of malaria.

Water withdrawals in some areas have had dramatic environmental impacts. In areas in the United States, China and India, groundwater is being consumed faster than it is being replenished, and groundwater tables are steadily falling. Some rivers, such as the Colorado River in the western United States and the Yellow River in China, often run dry before they reach the sea.

As the lifeline for survival and development, freshwater supplies have sometimes become the source of conflict and dispute—but are also a source of cooperation among people who share water resources. Negotiations over the allocation and management of water resources have become more common, as the demand for precious water has increased.

Key Statistics

- Although 70 per cent of the world's surface is covered by water, only 2.5 per cent of the water is freshwater, while 97.5 per cent is salt water. Nearly 70 per cent of the freshwater is frozen in ice caps, and most of the remainder is present as soil moisture, or lies in deep underground aquifers as inaccessible groundwater. Less than 1 per cent of the world's freshwater resources is accessible for human use.
- Areas of water scarcity and stress are increasing, particularly in North Africa and West Asia. Over the next two decades, it is expected that the world will need 17 per cent more water to grow food for increasing populations in developing countries, and that total water use will increase by 40 per cent. One third of the countries in water-stressed regions could face severe water shortages in this century, and by 2025, two-thirds of the world's population is likely to live in countries with moderate or severe water shortages.
- Freshwater resources are very unevenly distributed. The arid and the semi-arid zones of the world, which constitute 40 per cent of the landmass, have only 2 per cent of global run-off.



- Irrigated agriculture accounts for about 70 per cent of water withdrawals, and up to 90 per cent in the dry tropics. Water withdrawals for irrigation have increased by over 60 per cent since 1960.
- At the present rate of investment, universal access to safe drinking water cannot reasonably be anticipated before 2050 in Africa, 2025 in Asia and 2040 in Latin America and the Caribbean. Overall, for these three regions, which comprise 82.5 per cent of the world's population, access during the 1990s increased from 72 to 78 per cent of the total population, whereas for sanitation it increased from 42 to 52 per cent.
- In developing countries, between 90 and 95 per cent of sewage and 70 per cent of industrial wastes are dumped untreated into waters where they pollute the usable water supply.
- About 94 per cent of city dwellers had access to safe water at the end of 2000, while the rate for rural dwellers was only 71 per cent. For sanitation, the difference was even greater, as 85 per cent of the urban population were covered, but in rural areas, only 36 per cent of the population had proper sanitation.
- During the 1990s, about 835 million people in developing countries gained access to improved drinking water, and about 784 million gained access to sanitation facilities. With the increase in migration to urban areas, the number of urban dwellers lacking access to safe drinking water supplies increased by about 61 million.

What Needs to Be Done

Governments, ministers and water experts meeting at the International Conference on Freshwater (Bonn, Germany, December 2001) estimated that, in order to reach the Millennium Development Goal to halve the proportion of people worldwide without access to freshwater by 2015, and to add the goal of halving the

number of people without access to sanitation by 2015, the following would be needed:

- An additional 1.6 billion people will need access to adequate drinking water infrastructure and services.
- 2.2 billion people will need improved sanitation systems and hygiene awareness.
- A global investment in all forms of water-related infrastructure of up to \$180 billion is needed. Present investment levels amount to an estimated \$70-80 billion. However, to meet people's needs for drinking water and sanitation, the investment required is closer to \$23 billion a year, considerably higher than the present level of \$16 billion annually.

There are proposals on the table for the Johannesburg Summit for actions to meet the Millennium Goal of improving access to safe drinking water and to establish a similar goal for improved sanitation systems.

Proposals are also under consideration for the Johannesburg Summit on ways to mobilize international and domestic financial resources at all levels for water and sanitation infrastructure and services, transfer of technology and knowledge and capacity-building, ensuring that such infrastructure and services meet the needs of the poor and are gender-sensitive. Other proposals are to improve the efficient use of water resources and adopt allocating mechanisms that balance the requirement of preserving or restoring ecological integrity, with human domestic, industrial and agricultural needs.

Additionally, preparations are underway for the International Year of Freshwater in 2003, which will sharpen public awareness of the need for action, and a new international campaign called WASH — Water, Sanitation and Hygiene for all — has been launched to mobilize political support and action around the world.