



## Water – The Source of Life

### THE CHALLENGE

The global water agenda centres on two critical issues: access to safe drinking water and integrated water resources management.

Earth's finite water resources are increasingly at risk due to weak institutions, inefficient management, contamination of water supplies and degradation of ecosystems. Continued population growth, urbanization, industrialization and intensification of agriculture place heavy demands on water resources. Lack of capacity, finance and political will are major obstacles to improving the existing water management structures.

Worldwide, some 1.1 billion people lack access to safe drinking water and contaminated water is responsible for an estimated 7 per cent of all deaths and diseases, with 3-4 million people dying each year from water-borne diseases. Beyond the disease burden, women and children in developing countries are particularly affected by a lack of access to safe water, as the task of hauling water, often over long distances in rural areas, normally falls to them.

With population growth, meeting the water Millennium Development Goal will require providing access for an additional 1.6 billion people by 2015.

Water losses and leakages in urban water supply systems remain high in both developed and developing countries. Average loss of water ranges from 35 to 42 per cent for large cities in Africa, Asia, and Latin America. Inadequate maintenance of pumps and deteriorating distribution systems are major contributing factors.

Water quality remains a major challenge, even for those with access to piped water. In Africa, about 36 per cent of drinking water samples do not meet national quality standards, compared with 22 per cent in Asia, and 18 per cent in Latin America and the Caribbean.

### GOALS AGREED AT THE JOHANNESBURG SUMMIT

At the World Summit on Sustainable Development in 2002, world leaders reaffirmed their Millennium Declaration pledge **to halve the proportion of people who are unable to reach, or to afford, safe drinking water by 2015.**

Governments also agreed **to develop integrated water resources management and water efficiency plans by 2005** to stop the unsustainable exploitation of freshwater resources.

The UN General Assembly has declared 2005-2015 the **International Decade for Action – Water for Life**, reflecting its continuing commitment on this issue.

### HOW ARE WE DOING?

Many countries have been strengthening their integrated water resource management practices while decentralizing some aspects of water management and increasing the participation of local users or water user associations. In many cases, this has resulted in improved water allocation and greater efficiency of use.

Some countries are improving water supply financing through increased cost recovery from those who can afford to pay, with subsidies for those who cannot.

From 1990 to 2000, the number of people with access to improved drinking water increased by about 900 million, from 78 to 82 per cent of the global population.

In *Africa*, scarcity of freshwater seems less responsible for lack of progress than deficient water management. Next to Oceania, sub-Saharan Africa has the lowest access to improved drinking water supply (58 per cent of the population in 2000, with some countries below 25 per cent), and the under-5 mortality rate has shown the smallest decrease of any region over the 1990s. Further exacerbating the crisis in Africa are factors such as large populations of the displaced and refugees, armed conflict or reconstruction, and the HIV/AIDS pandemic.

In *Asia*, access to safe drinking water is still inadequate in most areas, although South Asia has shown the greatest gains in access in the past decade, from 72 to 85 per cent of the population.

In the *Middle East*, progress has been made in expanding water distribution networks, but there are still difficulties in providing universal access to potable water, particularly in rural areas.

In *Latin America and the Caribbean*, average service levels are relatively high – 80 per cent for improved drinking water and 59 per cent for sanitation. At the



same time there are wide disparities in the provision of safe drinking water and sanitation between rural and urban areas.

While the rural-urban access gap narrowed over the 1990s, these disparities remain significant in all developing regions. In 2000, more than 80 per cent of those without access to improved drinking water lived in rural areas. In sub-Saharan Africa only 45 per cent of the rural population has access, compared with 83 per cent of the urban population.

These disparities persist despite the generally less expensive investments required to provide rural households with improved access – usually by borehole or well – compared to urban connections to piped networks through municipal water supplies.

In addition there are, and will be, huge needs in urban informal settlements because almost all global population growth is projected to occur in developing country cities. Innovative and low-cost solutions must be implemented in those areas in coordination with a holistic urban planning approach.

### WHAT NEEDS TO BE DONE?

To meet today's challenges and ensure continuing water supplies for future generations, sustainable practices must be adopted that are based on integrated water management.

#### *The main steps required for adopting sustainable solutions include:*

- **practicing integrated water resources management** – including improving information management systems and monitoring; capacity building at all levels; and coordinated action and participation by all players;
- **allocating sufficient financial resources** – an estimated \$26 billion annually will be needed over the next 11 years to provide safe water to an additional 1.6 billion people by 2015;
- **maximizing economic and social benefits from available water resources** by increasing water productivity; investing in maintenance of pumps and delivery systems; ensuring both cost recovery and equity through appropriate tariff structures; involving both women and men in water management; and improving water administration and governance;

- **safeguarding water quality** by strengthening and enforcing pollution controls and water-quality monitoring; protecting water ecosystems; providing incentives to industry to reduce pollution; and enforcing relevant laws and regulations;
- **intensifying agricultural water productivity** ("more crop per drop") by adopting more efficient water conservation and irrigation practices in agriculture.

### Snapshots of Success...

The city of Murcia, **SPAIN**, was faced with a high level of unaccounted-for-water of 44 per cent. By implementing a new water management system it is now able to account for all water users and uses and has reduced unaccounted-for-water by almost half. The resulting water savings have allowed 19,000 new connections in the city, giving 100 per cent coverage.

The Punjab Rural Supply Project in **PAKISTAN** has brought water to 325 poor and remote villages and transformed the lives of 800,000 people. Water-related diseases have been reduced by 90 per cent, household income has increased by 24 per cent and school enrolments have increased by 80 per cent. Both women and men were involved in the planning, design and implementation of projects.

In **INDIA**, access to improved drinking water nearly tripled between 1980 and 2000, due largely to strong political commitment reflected in increased financial support and innovative partnerships among NGOs, government and communities.

In **CHILE**, almost universal coverage has been achieved in household connections to piped water supply and sewers. The service is generally of high quality, the water companies are financially sound, and targeted subsidies help to ensure access by low-income groups.