ISSUE BRIEF

United Nations Development Programme

ENVIRONMENT AND ENERGY

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WATER IS FUNDAMENTAL TO SUSTAINABLE DEVELOPMENT

Some 780 million people lacked access to improved sources of drinking water in 2010, while 2.5 billion lacked access to improved sanitation. Achieving universal access to improved water and sanitation services remains a key development challenge in many countries, with major implications for health (water-borne diseases) and food security (irrigation), as well as for hydropower and other industrial sectors, biodiversity, and ecosystem services. At the same time, growing numbers of countries are facing climate change-related increases in precipitation variability, leading to increased flood and drought risks, and more threats to low-lying coastal areas. Addressing these challenges is central to prospects for national transitions to sustainable development.

Integrated water resources management is key to sustainable water use

Sustainable development requires sustainable, integrated management of water resources. Population and economic growth combined with increasing urbanization is boosting global demands for water, both directly and indirectly (via the expansion of food, energy, and other industrial production that require water inputs). By 2025 the volumes of water withdrawn from surface and underground fresh water sources is projected to increase by 50% and 18% in the developing and developed world, respectively.

Integrated approaches to water resource management—that span the entirety of the water cycle, which sustainably balance water resources across their many competing uses and over time, and which strengthen economic incentives for conservation without denying poor communities the social imperative of access to affordable water and sanitation services—are essential to meeting these challenges.

This was recognized at the 1992 Earth Summit, and codified in Agenda 21. However, the integration of water into national, regional, and global development agendas is often incomplete, and investment finance for national and local water programmes are often inadequate. In addition to placing energy and food security at risk, these shortfalls increase public health costs and slow the pace of poverty reduction. In an era of increasing competition for water resources and climate-related water risks, inadequate attention to water resources management, development and use could exacerbate social and geopolitical tensions and in worst-case scenarios, cause irreversible environmental damage.

Sustainable development requires integrated water resources management, which:

- Spans the entirety of the water cycle,
- Balances water resources across their many competing uses and over time,
- Strengthens economic incentives for water conservation . . .
- . . . While also ensuring that human rights and social needs for access to affordable water and sanitation services are met.

A water governance crisis?

In addition to being a health and dignity issue, progress toward meeting the water and sanitation targets set forth in the Millennium Development Goals can mean a major leap forward for sustainable development. In particular:

- Improvements in access to improved water and sanitation sources are essential to achieving all of the Millennium Development Goals.
- Investments in maintaining and expanding water supply infrastructure yields an average economic return of $4.4 for every $1 invested.
- Investments in maintaining and expanding sanitation infrastructure yields an average economic return of $9.1 for every $1 invested.

Development progress is more closely linked to improved access to clean water and modern sanitation services than to many other development drivers UNDP has examined, including spending on health or education, and access to energy services.

The socio-economic consequences of inadequate access to improved water and sanitation services are substantial: annual

GDP losses associated with inadequate access to water have been assessed at 6.4%, 5.2% and 7.2% in India, Ghana, and Cambodia, respectively.

While there are regional/local and long-term concerns about the absolute availability of water resources, the water and sanitation crisis is primarily a crisis of poverty, political will, inequality and power—in short, of profound failures in water governance. Much remains to be done to apply the principles of integrated water resource management in practice.

On the other hand, since 1992 80% of countries have embarked on legal and institutional reforms to improve the enabling environment for water resources management based on application of integrated approaches stated in Agenda 21 and affirmed in the Johannesburg Plan of Implementation. This has already led to better water resources management practices and demonstrated important social and economic benefits. UNDP is committed to supporting further improvements in these processes.

As the world prepares for 'Rio+20', key water governance issues going forward include:

- The setting of realistic national targets for the extension of improved water and sanitation services, reconciling the right to water with development possibilities;
- Supporting countries in adopting integrated approaches to water resources management that are coordinated with the development of infrastructure to achieve growth and sustainable development goals;
- Enhanced support for water conservation technologies, particularly in agriculture (the sector responsible for 70% of global water consumption)—'more crop per drop'; and
- The expanded use of more rigorous, evidence-based, reporting systems to measure progress toward these objectives.

How UNDP is helping

The integrated approach to water resources management, as defined in Agenda 21, remains relevant today. It should play a key role in supporting national transitions to sustainable development. UNDP works with governments, and with representatives of civil society, the private sector, and other national and international partners to strengthen water governance and build capacity to apply integrated water resources management approaches at local, national, regional, and global levels.

UNDP's Cap-Net international capacity building network for integrated water management comprises 19 geographic and 3 thematic capacity building networks in Africa, Latin America, South Asia, South-East Asia, and the Arab region, including more than 300 member institutions.

The right to water and sanitation

The General Assembly,

. . . Deeply concerned that approximately 884 million people lack access to safe drinking water and that more than 2.6 billion do not have access to basic sanitation, and alarmed that approximately 1.5 million children under 5 years of age die and 443 million school days are lost each year as a result of water- and sanitation-related diseases,

Acknowledging the importance of equitable access to safe and clean drinking water and sanitation as an integral component of the realization of all human rights,

Reaffirming the responsibility of States for the promotion and protection of all human rights, which are universal, indivisible, interdependent and interrelated, and must be treated globally, in a fair and equal manner, on the same footing and with the same emphasis . . .

1. Recognizes the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights;

2. Calls upon States and international organizations to provide financial resources, capacity-building and technology transfer, through international assistance and cooperation, in particular to developing countries, in order to scale up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all . . .

UN General Assembly Resolution 64/292, 28 July 2010.

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