



Water Resources Management

FRAMING PAPER



The Future We Want, adopted at Rio+20, underscored the pivotal role of water for sustainable development, reaffirmed the need for an integrated approach to water resources management and highlighted the role of ecosystems for achieving a water-secure world¹. Livelihoods are directly linked to water resources, such as for drinking water, sanitation, hygiene, fishing, farming, navigation, industry and livestock care. Water resources are of critical importance for socio-economic development and for maintaining healthy ecosystems, which in turn play an essential role in terms of benefits and services for humans such as food and energy production, flood control and recycling and purifying available water supplies. Through both technical solutions and political commitment, water resources management aims at optimizing the benefits obtained from water resources, including both surface water and groundwater, and to sustainably meet competing needs of multiple users.



Source: Healthy Waterways

- Water-related hazards account for 90% of all natural hazards, and their frequency and intensity is generally rising.
- Water withdrawals are predicted to increase by 50 percent by 2025 in developing countries, and 18 percent in developed countries (UNEP)
- Over 1.4 billion people currently live in river basins where the use of water exceeds minimum recharge levels, leading to the desiccation of rivers and depletion of groundwater (UNDP)
- By 2025, 1.8 billion people will be living in countries or regions with absolute water scarcity, and two-thirds of the world population could be under stress conditions (FAO)
- Half of the world's wetlands have been lost since 1900 (WWAP)
- Sixty percent of the world's 276 international river basins lack any type of cooperative management framework (WWAP)

The results of a global survey of 130 national governments on the state of water resources management² show that while increasing attention is given to improving water resources management, significant challenges remain. For example, in recent years progress towards sustainable water resources management has slowed or even regressed in both developing and developed countries. Moreover, much remains to be done in terms of designing, financing and implementing an integrated approach to water resource management as outlined in the 2002 Johannesburg Plan of Implementation where it is agreed that all countries should develop integrated water resources management (IWRM) plans, a process of setting up water rights and allocation systems, legal frameworks, institutions, participatory processes to better manage water resources.

¹ "The Future We Want," paragraphs 119-124, outcome document to the Rio+20 United Nations Conference on Sustainable Development. Available online at: <http://www.uncsd2012.org/thefuturewewant.html>

² "UN-Water Report on Integrated Approaches in the Development, Management and Use of Water Resources." Available from UN-Water: <http://www.unwater.org/rio2012/report/index.html>



The pressures on water resources that more and more countries are experiencing will continue to increase over the coming years. Feeding a world of 8 billion people will require a much more efficient use of water for agriculture. The demands on water for energy, for cooling, extraction and production, will more than double. Higher rates of urbanization will increase demand for drinking water and industrial use with consequent higher waste disposal and treatment, also requiring greater energy use. Ecosystems, upon which we all depend including for water security in terms of quantity and quality, are degrading very fast due to human activities. To add to these challenges, the impact of climate change and associated increased variability, primarily felt through changes in water availability, will threaten human well-being, economies and put further strain on the environmental flows required to maintain aquatic ecosystems. Frequencies and intensities of floods and droughts and other water-related extreme events are on the rise. These challenges are compounded by the additional level of complexity considering more than half of global freshwater, 276 international watercourses, crosses international political boundaries where often no treaty exists to manage these transboundary waters. These basins account for 40% of the global population and 60% of global freshwater.

Water resources management not only provides challenges, but opportunities as well. Wise water management offers improved livelihoods, including through job creation, a safer environment for people and economic activity and better overall health and well-being. Other potential sources for drinking water and economic uses are increasingly being explored through reuse, recycling and use of alternative resources.

Fundamental questions remain about how to address issues of water resources management in the context of the other themes in the post-2015 global consultation on sustainable development. Water is at the core of sustainable development and underpins most of the other thematic areas. Without proper management of water resources, food and energy security, health, education, environmental sustainability and other crucial elements of human development are put at risk. This is also the case for ensuring access to drinking water supply, sanitation and hygiene and wastewater management, the other two streams of the Thematic Consultation on Water.

The ability of countries to address the mounting challenges and to ensure water to meet household, agricultural and industrial needs, while preserving environmental integrity, depends upon strong political commitment, clear policies, better management and governance of water resources, cooperation and communication between sectors and nations and more efficient, innovative and responsible use of water. Fundamental to this is integrated planning and management across competing uses and users to ensure a transparent and equitable process so that no one gets left behind.

Key Questions:

- How do water-related challenges and risks directly and indirectly affect you?
- What should be the priorities for water resources management in a future sustainable growth and development agenda?
- What would you like to have been achieved by 2030 in terms of water resources management?
- How do we preserve water resources for future generations given the competing demands (i.e., agriculture, nature, transport, industry, domestic consumption, tourism, energy, etc.)? Who decides this?
- What key actions should be taken in your country to ensure water security for all uses including the environment?
- What can non-state actors and non-water professionals contribute to better water management?

