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Water Security & the Global Water Agenda

Summary for Decision-Makers

 The Analytical Brief *Water Security and the Global Water Agenda* proposes a working definition of water security developed from contributions made by the broad range of organizations, agencies, programmes and institutions that form UN-Water. This definition is intended to serve as a starting point for dialogue on water security in the UN system.

The brief, produced by the UN-Water Task Force on Water Security, aims to capture the dynamic and constantly evolving dimensions of water and water-related issues, and offers a holistic outlook for addressing water challenges through the umbrella of water security.

UN-Water proposes the following definition of water security:

“The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability.”



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Summary for Decision-Makers

This Analytical Brief serves as a starting point for dialogue on water security in the United Nations system. This Brief offers a working definition of water security developed from contributions made by the broad range of organizations, agencies, programmes and institutions that form UN-Water. Through this Brief, UN-Water aims to capture the constantly evolving dimensions of water-related issues, offering a holistic outlook on challenges under the umbrella of water security. It highlights the main challenges to be addressed, the role water security plays in policy agendas, and possible options for addressing water security challenges.

A working definition of water security provides a common framework for collaboration across the UN system. Water security is defined as the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability. This shared definition will facilitate the work of UN-Water and its Members and Partners.

Water security encapsulates complex and interconnected challenges and highlights water's centrality for achieving a larger sense of security, sustainability, development and human well-being. Many factors contribute to water security, ranging from biophysical to infrastructural, institutional, political, social and financial – many of which lie outside the water realm. In this respect, water security lies at the centre of many security areas, each of which is intricately linked to water. Addressing this goal therefore requires interdisciplinary collaboration across sectors, communities and political borders, so that the competition or potential conflicts over water resources, between sectors and between water users or states, is adequately managed in recognition of its security implications on tensions and conflicts.

Water security needs to be included in the formulation of the Sustainable Development Goals (SDGs). The SDG process must incorporate a goal and related targets for achieving water security, as this will address multiple priority development areas under consideration: conflict and fragility; environmental sustainability; growth and employment;

health, hunger, food and nutrition; inequities; energy; and of course, water. It is safe to state that investment in water security is a long-term pay-off for human development and economic growth, with immediate visible short-term gains.

Recognition of the human right to safe drinking water and sanitation by the United Nations General Assembly and the UN Human Rights Council is an important step towards ensuring water security at the individual and community levels. The UN resolution on the human right to water and sanitation is a catalyst for further policy discussion between stakeholders and across sectors, and in the development of programmes that make possible the full realization of the rights of individuals and communities. A human rights-based approach to water security addresses critical gaps and bottlenecks, and emphasizes the establishment of regulatory functions and mechanisms for efficiency, participation and accountability.

Innovative financial mechanisms need to be promoted that contribute towards the goal of achieving water security through a supportive policy environment. Traditionally, most of the financing for initiatives that help to achieve water security have come from the public sector. New and innovative sources of financing require a policy arena conducive to ensuring that investments are protected and can provide secure options for financing in the long term. Options include investments from the private sector, micro-financing schemes, particularly with local communities, and other innovative options for funding (e.g. crowdsourcing).

Successful transboundary water security can stimulate regional cooperation. Transboundary waters pose enormous challenges for achieving water security in systems, such as river or lake basins and aquifers, which are shared across political boundaries. In such cases, water-related challenges are compounded by the need to ensure coordination and dialogue between sovereign states, each with its own set of varied and sometimes competing interests. Numerous examples from across the globe demonstrate that shared waters provide opportunities for cooperation across nations and support political dialogue on broader issues such as regional economic integration, environmental conservation, and sustainable development. It is important to ensure that water security is achieved for all users, whether up- or downstream, and does not come at the expense of water insecurity for some.

Good water governance is essential to achieving water security, and requires well-designed and empowered institutions with supporting legislative and policy instruments. Achieving water security requires institutional, legal and regulatory support and capacity for change, adaptive management structures, new forms of relationships, and multilayered models capable of integrating complex natural and social dimensions. Governance structures must be adapted to local conditions and needs, applied at various levels so that they mutually reinforce and complement one another.

In conflict and disaster zones, threats to water security increase through inequitable and difficult access to water supply and related services, which may aggravate existing social fragility, tensions, violence, and conflict. Water security is precarious in conflict and disaster zones, and threats to water security are manifested through negative impacts on water resources and related ecosystems, both in quantity and quality. Conflicts and disasters can have cascading effects and far-reaching implications on water security, with political, social, economic and environmental consequences. Water security must be addressed as a first step in the aftermath of conflicts and disaster in order to restore livelihoods and revive social and economic development.



Water security will be compromised by the consequences of climate change, as the vast majority of its impacts will be on the water cycle, resulting in higher climatic and hydrological variability, with important consequences for societies. These effects on water security will differ regionally and will depend upon a number of factors, including geographic location and features, conditions of water availability and utilization, demographic changes, existing management and allocation systems, legal frameworks for water management, existing governance structures and institutions, and the resilience of ecosystems. Changes in the hydrological cycle will threaten existing water infrastructure, making societies more vulnerable to extreme water-related events and resulting in increased insecurity.

Ensuring that ecosystems are protected and conserved is central to achieving water security – both for people and for nature. Ecosystems are vital to sustaining the quantity and quality of water available within a watershed, on which both nature and people rely. Maintaining the integrity of ecosystems is essential for supporting the diverse needs of humans, including domestic, agricultural, energy and industrial water use, and for the sustainability of ecosystems, including protecting the water-provisioning services they provide.

Policy-makers need to identify existing capacities, as well as gaps, in order to properly address the water security challenge. Capacity development is a long-term process based on incentives, good governance, leadership, and knowledge management and transfer, which need to be continuously adapted according to stakeholders' feedback and needs. The UN system, and in particular UN-Water, can address gaps in capacity by emphasizing collaboration amongst agencies; fostering trans-sectoral coordination at the national level by encouraging the sharing of and access to capacity development resources; providing water education and training to support institutional challenges; and establishing a knowledge community to address water security challenges

Water security can only be achieved if it is supported by an enabling environment that establishes systemic and cross-cutting changes, including integrated policies targeting synergies across sectors, while managing the demand for water by all users and stakeholders. Efforts to achieve water security through multi-sectoral, coordinated policies and inter-disciplinary approaches will have multiple positive effects by addressing water challenges holistically, taking into account the needs of various sectors, such as energy and agriculture, that will require increasing water resources to satisfy population growth and growing demands. Such an environment will reflect the interconnectedness between sectors while respecting the needs for water by individuals and communities.