

2030WaterSecure

Developing capacity to secure the 21st Century Water Risk



**A joint initiative of Water Future and the
United Nations University**

2030WaterSecure is an innovative vision to develop capacity by combining state-of-the-art water knowledge with modern, personalized communication tools in order to tackle the 21st century water challenges and facilitate effective implementation of the 2030 Water Agenda.

What is 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."

Working definition, UN-Water, 2013



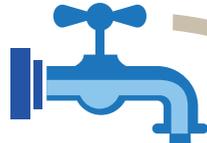
GOOD GOVERNANCE

Adequate legal regimes, institutions, infrastructure and capacity are in place.



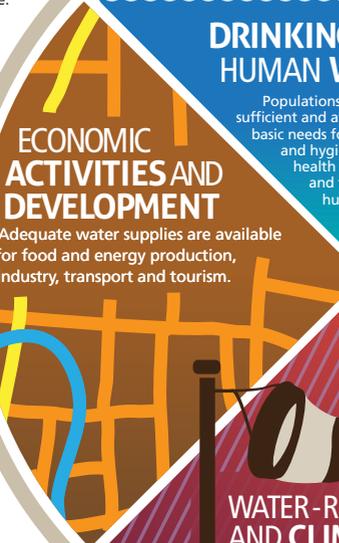
TRANSBOUNDARY COOPERATION

Sovereign states discuss and coordinate their actions to meet the varied and sometimes competing interests for mutual benefit.



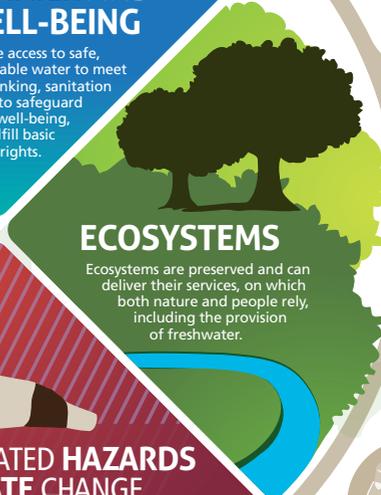
DRINKING WATER AND HUMAN WELL-BEING

Populations have access to safe, sufficient and affordable water to meet basic needs for drinking, sanitation and hygiene, to safeguard health and well-being, and to fulfill basic human rights.



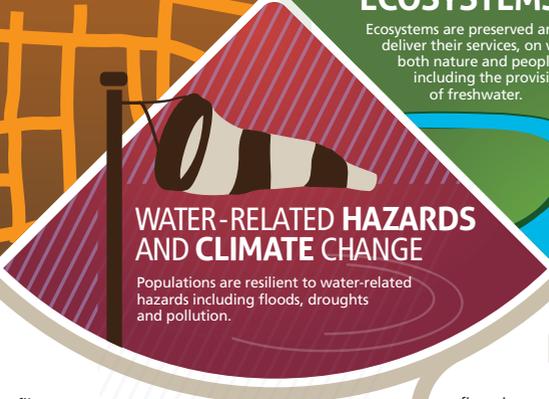
ECONOMIC ACTIVITIES AND DEVELOPMENT

Adequate water supplies are available for food and energy production, industry, transport and tourism.



ECOSYSTEMS

Ecosystems are preserved and can deliver their services, on which both nature and people rely, including the provision of freshwater.



WATER-RELATED HAZARDS AND CLIMATE CHANGE

Populations are resilient to water-related hazards including floods, droughts and pollution.



PEACE AND POLITICAL STABILITY

The negative effects of conflicts are avoided, including reduced water quality and/or quantity, compromised water infrastructure, human resources, related governance, and social or political systems.



FINANCING

Innovative sources of financing complement funding by the public sector, including investments from the private sector and micro-financing schemes.

Water is central to achieving a larger sense of security, sustainability, development and human well-being. UN-water supports the inclusion of water security in the post-2015 development agenda as part of the Sustainable Development Goals.



Achieving water security requires collaboration across sectors, communities, disciplines and political borders, to reduce the risk of potential conflicts over water resources, between sectors and between water users or states.



What is 2030WaterSecure?

Addressing 2030 Water Agenda



Recognizing that social harmony and economic stability are fundamental to the security of water quality and availability, 2030WaterSecure is designed by Water Future and the United Nations University for effective implementation of the 2030 Water Agenda.

Enhancing Capacity to reduce Water Risk



2030WaterSecure will deliver demand driven capacity development for individuals and institutions, based on the latest science and innovative approaches, to help reduce water security risk through co-learning of science and practice.

A comprehensive, personalized support



It is a state-of-the-art, personalized and comprehensive capacity development programme that aims to support water security by understanding water related risks in real time, assessing the current and future scenarios and implementing risk management strategies across sectors and scales.

Why do we need 2030WaterSecure?

Investments in physical infrastructure need to be accompanied by knowledge and capacity development for having higher impact in achieving Water Security. For every dollar invested in physical infrastructure, at least 70 cents should be invested in capacity development (Japan Water Forum 2006). Currently, investments in knowledge and capacity development needs to be closer to that proportion of investment in physical infrastructure for effective implementation of the 2030 Water Agenda.

2030WaterSecure aims to improve the knowledge flow from science to practice, bringing the scientific advances to application faster for 'smarter'¹ decision making in policy and practice.

Current investment in capacity development needs to increase to a minimum of USD 80 billion per year to meet requirements².

Expected impact of Capacity Development

2030WaterSecure products are designed according to a Theory of Change. A key element is the needs assessment, which identifies capacity gaps of implementing individuals and agencies. Yet, bringing scientific advances into practice requires more than just the transfer of the scientific knowledge. The capacity development activities will have a strong focus on case studies and on ensuring a two-way communication between science and practitioners in their development. 2030WaterSecure offers tailor made capacity development following a co-design approach.

¹ SMART here means specific, measurable, attainable, realistic and time-bound.

² This is based on recent estimates of World Bank on water infrastructure investment of \$114 billion dollars required per year to meet SDG 6 targets and an assumption of at least an additional 70 cents per dollar should be invested in capacity development (Japan Water Forum2006).

2030WaterSecure Products

An open access education towards behavioral change



An open access education will be designed to create awareness about water security and catalyse behavioral change in the general community. It will inform them about the role they can play in achieving the 2030 Water Agenda by taking new approaches to the use and management of water.

Interactive learning platform



An interactive learning platform with multiple online courses on specific dimensions of water security and key capacity development ideas designed for early and mid-level water practitioners to help them understand and map risks, assess scenarios and implement risk management.

Advanced Training Programme



An advanced training programme for practitioners for formulating policies and tracking progress on the Agenda 2030. This advanced capacity development will foster new and adaptive planning and water system design principles in understanding and assessing water security risk.

Unique Design

Engagement with different stakeholders

Courses are streamlined and tailor-made for specific audiences.

Co-learning process

A partnership of different stakeholders working together to understand and assess current water risks and implement policies and solutions for their mitigation.

Customized content

Demand-driven content development for specific use cases.

Relevant information

All the resources, methodologies and tools used to develop and deliver content are state-of-the-art and up-to-date.

State-of-the-art science

The content is developed by leading experts in water science and policy

Theory of Change

Content is based on a clear framework of design, monitoring and evaluation that allows practitioners to measure the change they set out to seek.

Authoritative message

Delivers modern and customized programme in capacity development to improve water security.



Value Added

Recognizes the importance of capacity development in water security

in increasing the economic rate of return on water development projects

Improves technical expertise of states

with a high degree of prior professional readiness

Democratization of water information

through training modules specifically designed for the general public

Generation of globally relevant educational and training

materials backed by state-of-the-art science, technology and expertise

Addressing the importance of water security

with leaders at different levels, from the general public to next-generation leaders and their ability to influence decision making

Creation of specialized capacity development programmes

to identify potential business opportunities

Supports local, state, national and international bodies

in developing confident, skilled and knowledgeable human capital



Who we are

Water Future of Future Earth is a global platform facilitating international scientific collaboration to drive solutions to the world's water problems. Water Future through its partnerships with a large number of researchers and stakeholders, works together to harvest and synthesize an authoritative scientific knowledge base to support achieving the Sustainable Development Goals (SDG) associated with water.

2030WaterSecure builds on decades of water research under Global Environmental Change Programs such as DIVERSITAS, the International Geosphere Biosphere Programme (IGBP), the International Human Dimensions Programme (IHDP), the World Climate Change Research Programme (WCRP), and more than a decade of water system research under the Global Water System Project (GWSP).

The United Nations University (UNU), established in 1973, is the academic and research arm of the United Nations. It is headquartered in Shibuya, Tokyo, Japan, with diplomatic status as a UN institution. Since 2010, UNU has been authorized by the United Nations General Assembly to grant degrees. It also provides a bridge between the UN and the international academic, policy-making and private sector communities. The United Nations University's Institute for Water, Environment and Health (UNU-INWEH) based in Hamilton, Ontario, Canada and which serves as the "UN think-tank on water", is collaborating with Water Future to design 2030WaterSecure.

UNU-INWEH is a leader in research and capacity building, with a strong focus on high-level policy development. UNU-INWEH's work bridges geographic scales of operations towards synthesizing science into policy guidance and for undertaking policy-relevant knowledge mobilization and enhancement.

2030WaterSecure Executive Team

Jens Liebe, International Centre for Technical and Vocational Education and Training of the United Nations Educational, Scientific and Cultural Organization (UNESCO-UNEVOC), Bonn, Germany

Vladimir Smakhtin, The United Nations University Institute for Water, Environment and Health (UNU-INWEH), Hamilton, Canada

Lars Ribbe, Institute for Technology and Resources Management in the Tropics and Subtropics, TH Köln, Germany

Mark Pascoe, International WaterCentre, Brisbane, Australia

Elena Lopez Gunn, University of Leeds, UK

Anik Bhaduri, Sustainable Water Future Programme (Water Future), Brisbane, Australia

Nidhi Nagabhatla, The United Nations University Institute for Water, Environment and Health (UNU-INWEH), Hamilton, Canada

2030WaterSecure@water-future.org