



UNITED NATIONS
UNIVERSITY

UNU-INWEH

International Network
on Water, Environment
and Health

WATER

for Human and
Ecosystem Wellbeing



The world is in the midst of a global water crisis – where lack of adequate freshwater supplies and poor management threaten the health of both humans and ecosystems. This crisis directly blocks efforts to alleviate poverty and to meet the Millennium Development Goals. Each year, two million people are killed due to diseases caused by poor water quality and inadequate sanitation, and the health of millions more is harmed. These water problems will continue growing as world population climbs and climate change alters global water distribution patterns.

A critical factor contributing to the water crisis is the lack of indigenous capacity – educational, managerial, technological and institutional – for effective water management in many developing countries. Despite some progress, many barriers remain, including the fragmented, intermittent, donor-driven, project-based approach that has been found to be ineffective, and even damaging.

UNU-INWEH contributes to the resolution of this global challenge through a unique programme of applied research and education. It conceives, develops and manages water initiatives that help developing countries build their capacity for lasting improvements in human and ecosystem health, and overall reduction in poverty.



What UNU-INWEH Does



UNU-INWEH is a member of the United Nations University worldwide family of organizations. It is autonomous, neutral and non-governmental, as guaranteed by the UNU Charter. The Government of Canada provides core funding and McMaster University hosts the main office in Hamilton, Canada. A regional office operates in Dubai, United Arab Emirates.

UNU-INWEH, as a specialized capacity development institution of the United Nations, has become a trusted, authoritative partner for developing countries. It functions as an on-the-ground knowledge broker and as a networked organization focused on



action. Teams of experts are assembled from different disciplines and countries with the precise skills needed to address urgent challenges, be they safe water supply and sanitation, or managing water in threatened ecosystems like river basins, coastal zones and drylands.

UNU-INWEH performs two core functions: **capacity development** and **policy-science bridging**.

The capacity development efforts help developing countries to implement Integrated Water Resources Management (IWRM) through:

- Cross-cutting, adult education programmes directed at water practitioners
- Ecosystem-specific “networks of best practice” for knowledge sharing and comparative research
- Fostering of water-related “centers of excellence”

To advance better water policy development and governance, UNU-INWEH bridges science and policy through applied research to fill critical knowledge gaps. Where local capacity is weak, UNU-INWEH helps its partners to:

- Diagnose problems through focused, applied research
- Acquire, interpret and manage water information
- Frame policy needs, often through “think-tank” collaboration within projects, or through international policy-oriented networks

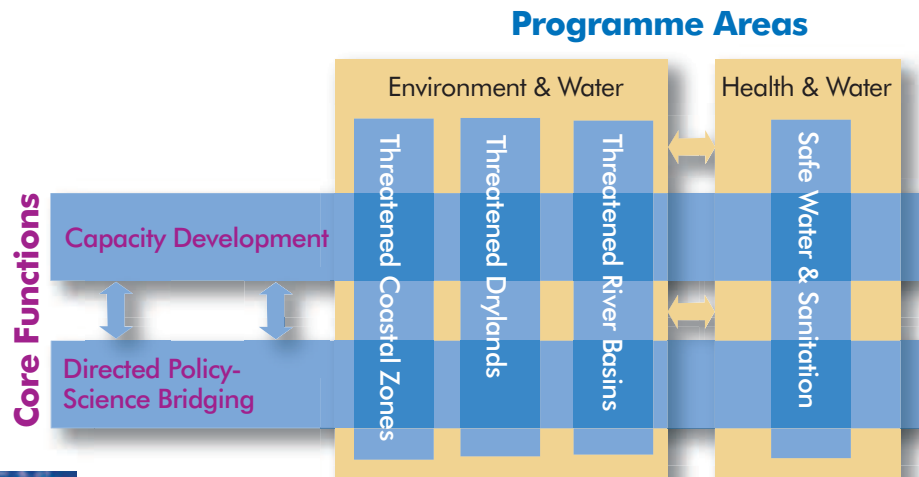


UNU-INWEH's CORE SERVICES TO DEVELOPING COUNTRIES:

- Seed funding to conceive and plan water-related initiatives
- Delivery of targeted capacity development programmes and projects
- Training in Integrated Water Resources Management
- Policy-relevant research and its application
- Strategic planning and policy development using an integrated, ecosystem-based approach
- Collection and sharing of unbiased research information and experience

THEMATIC PROGRAMME AREAS:

The two core functions of capacity development and policy-science bridging are applied across four thematic programme areas – river basins, coastal zones, drylands, and safe water and sanitation – to create an integrated programme matrix:



PROGRAMME

Themes

THREATENED RIVER BASIN ECOSYSTEMS

UNU-INWEH contributes to improved and integrated river basin management with particular emphasis on data-information-knowledge systems, and on policy support for integrated and holistic approaches. Capacity building efforts are focused on distance learning programmes in Integrated Water Resources Management, directed at decision makers and practitioners.

THREATENED COASTAL ZONE ECOSYSTEMS

UNU-INWEH focuses on capacity development efforts to address critical gaps in coastal science, achieved through diffusion of research and promotion of human and institutional capacity. The research and policy bridging function is directed to coral reefs and mangroves, two particularly threatened ecosystems in developing countries.



THREATENED DRYLAND ECOSYSTEMS

UNU-INWEH assists developing countries in dry regions to manage their water, land and biodiversity resources sustainably. The scientific focus is on rehabilitation of degraded drylands in rural environments and global land degradation assessment programmes linked to capacity development.

SAFE WATER AND SANITATION

UNU-INWEH addresses challenges in the provision of safe drinking water and sanitation in rural areas of developing countries. The focus is on toxic pollution management, global assessment of capacity needs in the health and water area, and identification of innovative approaches to service provision in rural settings – particularly in conjunction with renewable energy provision.



RECENT PROGRAMME HIGHLIGHTS

River Basins:

- Completed: a major capacity-building and applied science initiative for Scientific Monitoring of Lake Victoria, Africa

Coastal Zones:

- Ongoing: a major research and capacity-building component of a global Coral Reef Ecosystem Health and Sustainability Initiative
- Established: an ongoing professional network for Environmental Monitoring and Governance in the East Asian Hydrosphere

Drylands:

- Lead authorship: The Desertification Synthesis for the Millennium Ecosystem Assessment
- Created: global network for Sustainable Management of Marginal Drylands

Safe Water and Sanitation:

- Formulated: A global analysis on Safe Drinking Water and Sanitation for All commissioned for the proposed Leaders' G-20 Forum
- Accomplished: a demonstration field study in Syria on Effects of Nitrate on Drinking Water Sources (Blue Baby Syndrome) in dryland environments



WVLC

**UN Water Virtual
Learning Centre**

With the launch of the UN “Water Virtual Learning Centre,” UNU-INWEH, together with UN DESA, now offers an adult distance-education programme on IWRM. This unique programme comprises an online, 10-course curriculum, with a UNU academic diploma provided to graduates. It is specifically directed to water practitioners in developing countries and is offered in partnership with higher education institutions in different world regions.



UNU-INWEH'S PROGRAMME “NICHE”

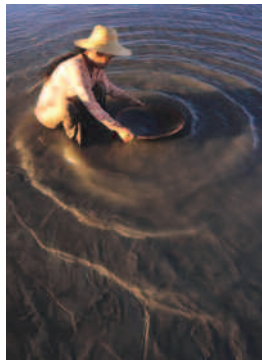
For added value and specificity in its work programme, UNU-INWEH:

- Undertakes **capacity development as its core function** – capacity development that is client-owned, demand-driven and results-based
- Works at an **advanced, professional level** – largely targeting decision-makers and science leaders
- Fosters an **integrative approach** to water management to promote holistic outcomes
- Engages **world-class professional leaders**, who are drawn to UNU-INWEH by its neutrality and credibility as both a UN body and an international university

AN EXPANDING NETWORK OF PARTNERS:

UNU-INWEH actively seeks partnerships with individuals, agencies, institutions and enterprises with compatible interests and capabilities. Existing partners include other UN agencies, academic institutions, governmental and non-governmental organizations, and the private sector. Through these alliances, UNU-INWEH is committed to success in four areas:

- Broadening strategic engagement in its three threatened ecosystem programmes (river basins, coastal zones and drylands)
- Enlarging and focusing programme development in "Health and Water," a growth area for UNU-INWEH
- Strengthening governance and policy-related aspects of the programme
- Pooling resources and capacities to enhance effectiveness and fundraising success



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