



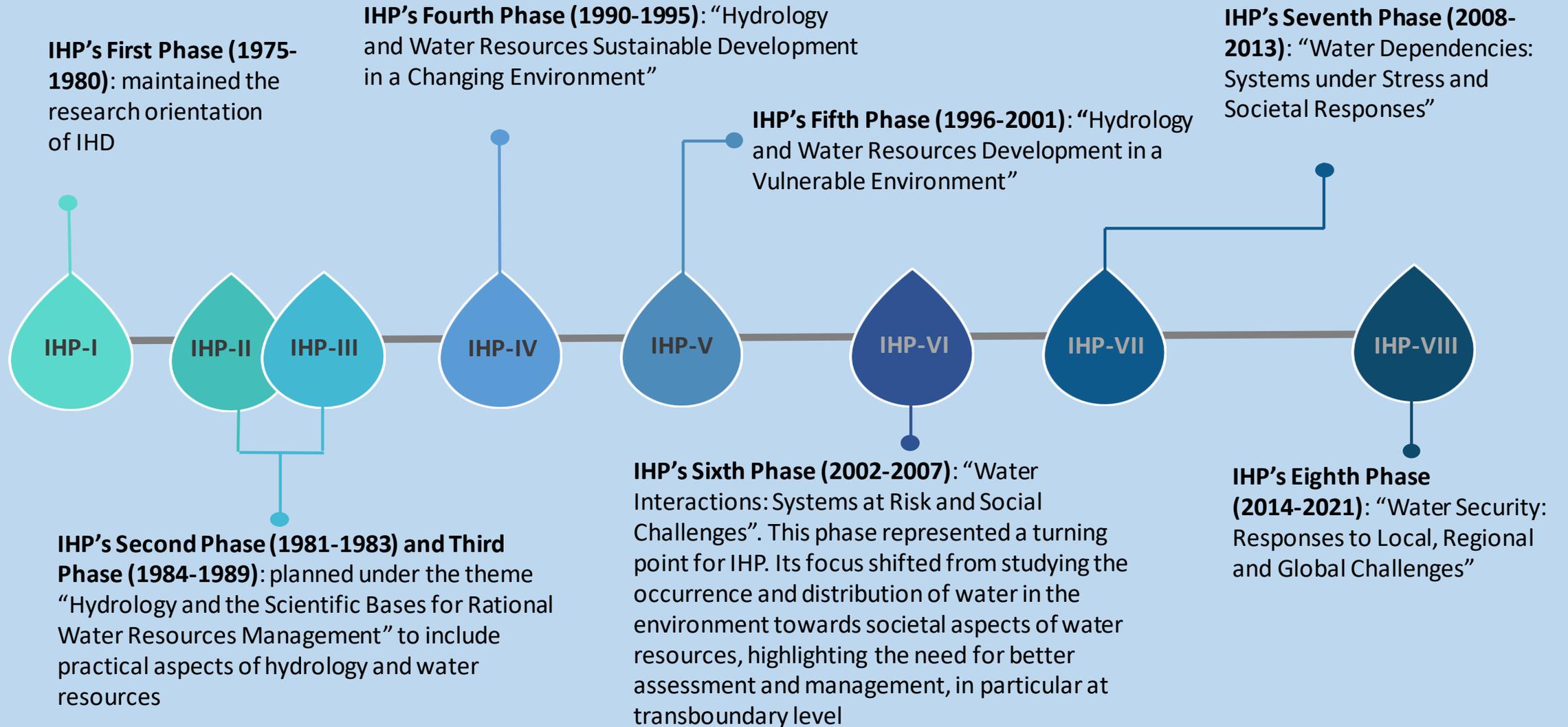
UNESCO Water Programmes:

Science, education and capacity building to address water challenges and achieve SDGs

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IHP Phases: Evolving from hydrological science to a holistic approach to water sciences





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IHP-VIII (2014-2021) Water Security: Responses to Local, Regional and Global Challenges



Water security is ‘the capacity of a population to safeguard access to **adequate quantities** of **water of acceptable quality** for **sustaining human and ecosystem health** on a watershed basis, and to ensure efficient protection of life and property against **water related hazards**.



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The SDG 6 on water and sanitation

- The water and sanitation crisis is getting worse.
- **Global water challenges are unprecedented and growing.**
 - Water scarcity
 - Water pollution and water quality degradation
 - Water-related disasters (droughts, floods)
- The **Sustainable Development Goal 6 (SDG 6)** *‘to ensure availability and sustainable management of water and sanitation for all by 2030’* is **alarmingly off-track.**

- To achieve the SDG 6, an **immediate and integrated global response is needed to rapidly improve progress on SDG 6.**
- **The SDG 6 supports many of the other 16 SDGs**—on health and disease prevention, education, food, gender equality, ecosystems and biodiversity, energy and climate change.

The SDG 6 Global Acceleration Framework



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SDG 6 Global Acceleration Framework



The [SDG 6 Global Acceleration Framework](#) is a new, unifying initiative that aims to deliver fast results at an increased scale. It is part of the UN Secretary-General's Decade of Action to deliver the SDGs by 2030.

Action driven by five Accelerators:

- **Financing.** Optimized financing is essential to get resources behind country plans.
- **Data and information.** Data and information targets resources and measures progress.
- **Capacity development.** A better-skilled workforce improves service levels and increases job creation and retention in the water sector.
- **Innovation.** New, smart practices and technologies will improve water and sanitation resources management and service delivery.
- **Governance.** Collaboration across boundaries and sectors will make SDG 6 everyone's business.



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Water, sanitation and hygiene: Responding to the Covid-19 pandemic

The Covid-19 pandemic has shown the crucial importance of water, sanitation and hygiene

- Access to clean water, sanitation and hygiene is the first-line, most effective and affordable means to prevent and stop the covid-19 spread → **Urgency to achieve the SDG 6 on water and sanitation**

What lessons to be learnt from the Covid-19 pandemic?

- **Access to water and sanitation should leave no one behind.**
- Water, sanitation and hygiene - **WASH in schools and health facilities is crucial**
- Research needs to be strengthened to **address the knowledge gap and scientific uncertainties on the fate and impacts of new pollutants and pathogens in water**. *For example, scientific uncertainties about the survival and persistence of Covid-19 in drinking water and sewage*

Research and scientific information needed on water and sanitation in relation to COVID-19:

- **Science-based decision making is important in developing appropriate mitigation and response measures** to address water challenges

What UNESCO Water Programmes can offer?

- Promote open science & research on these issues and facilitate the sharing and accessibility of research findings to the world community and all stakeholders, including decision-makers
- **Strengthening education and capacity building on water and sanitation**



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Science for sustainable development and the SDGs



Make scientific evidence a prerequisite

- Science is a must for designing and implementing transformations to sustainable development.
- The 2030 Agenda must serve as a shared compass to rapidly mobilize and harness the extensive knowledge available.

The SDG 6 Global Acceleration Framework





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The SDG 6 on water and sanitation



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SDG6 on clean water and sanitation

Ensure availability and sustainable management
of water and sanitation for all



6 CLEAN WATER
AND SANITATION



Target 6.a: By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse of technologies.

Indicator 6.a.1: Amount of water- and sanitation-related official development assistance (ODA) for water- and sanitation-related activities and programmes that is part of a government coordinated spending plan.

→ *What is missing?*



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Why a new Indicator on Water Education ?



↳ *What is missing from Indicator 6.a.1?*

Expansion of capacity-building for water related activities: water education

Ex: Secondary Education / Are Water Sciences studied in the Natural Sciences teaching?

University / Are curricula for Hydrologists and Hydrogeologists adequate - updated?

How many "water professionals" are formed at universities?

↳ *Gap:* Indicator 6.a.1 does not contribute necessary information to measure the value of the component of target on capacity building (water education) and does not provide countries with tools to set, monitor and improve their baseline.

↳ *Issue:* Impact and sustainability of ODA will be diminished if not sufficient trained and skilled human resources for national water resources studies and assessment of surface water and groundwater resources and sanitation services.



A dedicated indicator on water education is missing



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Water education and capacity development in the transition from IHP-VIII to IHP-IX phase

Priority Area 2: Water Education

- Leading** Water Education in cooperation with other UN agencies and partners
- Provide support on **curriculum development**, lifelong learning and formal, and non-formal water education activities from primary school to post-graduate level
- Public awareness** at all levels raised at all levels on the value of water
- Development and implementation of **transdisciplinary research** collaboration and educational approaches by UNESCO water family
- Teaching and learning materials** on water related matters at all level – given also the emergence of a new broad range of technologies-methods and tools to support translating scientific information into a format facilitating education, decision-making and policy formulation
- Strengthen capacities and **skills of water professionals** and technician at water-related tertiary, and vocational education level
- Enhance **capacities of decision makers** and water managers to make better decisions and implement efficient policies



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UNESCO Water Family

169 IHP National
Committees

36 Water Centres
(cat 2)

60 Water Chairs

WWAP

Europe &

North America

- 23 Chairs
- 11 Centres

Arab States

- 5 Chairs
- 5 Centres

Latin America & the Caribbean

- 12 Chairs
- 6 Centres

Asia and the Pacific

- 12 Chairs
- 11 Centres

Africa

- 8 Chairs
- 3 Centres



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UNESCO IHP focus in Central Asia

- Focus on cryosphere and risks related to glaciers melting: science-policy-communities interface. University programmes under development with project partners
- Stronger linkages with other UNESCO international programmes and its designated sites (WHS, BRs and UGGs) as pilot areas
- Focus on school level education as part of science education
- Groundwater as another priority area, but in a more multidisciplinary, as well as TB context (lack of data as well as specialists). It's the topic of the WWDR 2022
- Closer work with IHP national committees, chairs and centres in the region and outside – linking science with education and practice
- Coordination with donors and partners important, involvement of youth a priority. Open to cooperation with all interested stakeholders





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World Water Assessment report 2021 – VALUING WATER coming soon!

- **22 March** – World Water Day
- Regional launch event planned for the beginning of April, traditionally discussing the topic of the report with the experts in the context of its actualities for the region

[Valuing Water: a preview of the UN World Water Development Report 2021 - YouTube](#)

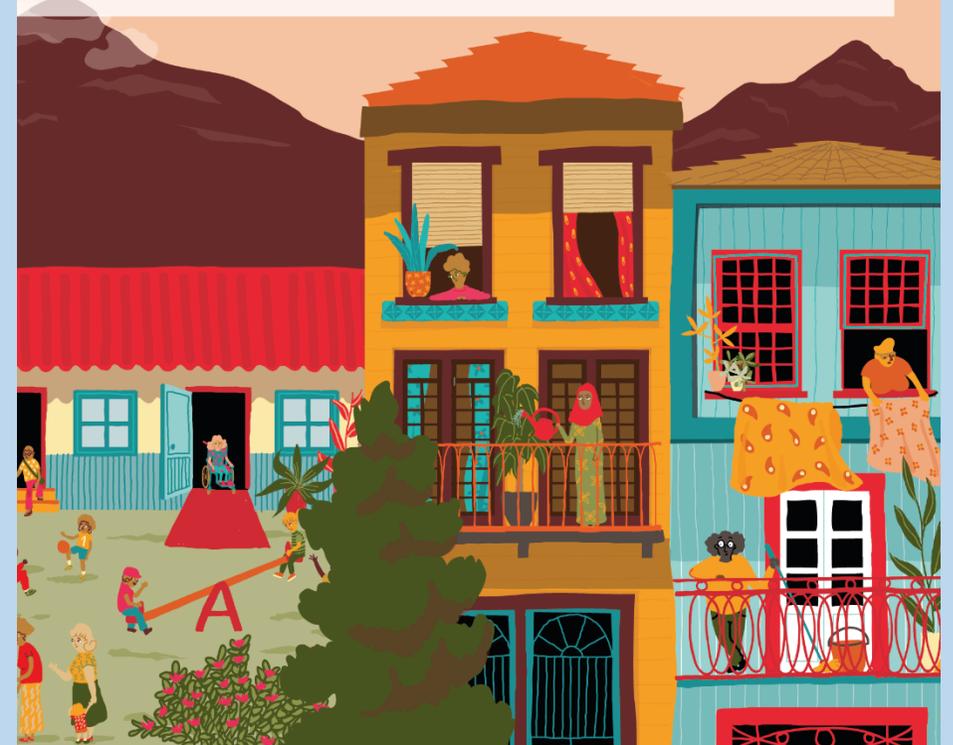


www.worldwaterday.org

Что для вас значит вода?

Для разных людей вода имеет разное значение. Для жилья, школ и рабочих мест вода может означать здоровье, гигиену, достойную жизнь и возможности.

Присоединяйтесь к диалогу #WorldWaterDay





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Thank you !

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www.en.unesco.org/themes/water-security/hydrology

