

"Changing the World: Water Awareness Education & SDGs"

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Highlights of our UNESCO Resolution

UNESCO Resolution XXIII-5: *Global Network of Water Museums and UNESCO IHP in Support of Water Sustainability Education and Water Awareness Efforts*

* recalling (among other) the 2030 Agenda and SDG 6 as well as IHP-VIII Strategic Programme;

* welcomes WAMU-NET contribution to disseminate water related knowledge to a worldwide audience through exhibitions, art performances, education, public awareness and other communication efforts;

> WAMU-NET becomes an "IHP initiative" (four years, renewable)

> AIM: better using water museums to improve water management via communication and educational activities



UNESCO and IHP UNESCO



United Nations Educational, Scientific and Cultural Organization United Nations Educational, Scientific and Cultural Organization seeks to build peace through international cooperation in Education, the Sciences and Culture. UNESCO's programmes contribute to the achievement of the Sustainable Development Goals (SDG's) defined in Agenda 2030, adopted by the UN General Assembly in 2015.



The International Hydrological Programme (IHP) is the only intergovernmental programme of the UN system to water research, water resources management, and education and capacity building.



IHP UNESCO Phase VIII 2014 – 2021

- IHP UNESCO founded in 1975 is implemented in six-year programmatic time intervals or phases.
- Within the interval (phase) 2014–2021 IHP is implementing in it's 8th interval (Phase VIII) the strategy *"Water security: Responses to local, regional, and global challenges".*
- Given population growth, degradation of water quality, growing impact of floods and droughts and other hydrological effects of global change, water security is an increasing concern.
- Water security is defined as 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 -- floods, landslides, land subsidence,) and droughts.



Resonance between IHP UNESCO Phase VIII and WAMU-NET Manifesto

WAMU-NET Manifesto (2017) recalls that "(...) water today is increasingly threatened by waste, quantity and quality degradation, and also by indifference, that is, by a poor relationship of humanity towards such a precious and irreplaceable source of life"

and

Aims that "Through the Global Network of Water Museums, a new ethical vision concerning the most precious source of life will be fostered, promoted and disseminated worldwide. Such a vision is aimed to inspire more sustainable water management and social justice models, as a source of creative inspiration for the emergence of a new Water Culture, calling both people and institutions to implement urgent and innovative actions to repair our deteriorated relationship with water"



IHP UNESCO Phase VIII: 6 themes and focus areas

- Theme 1: Water-related disasters and hydrological change. Human activities have disrupted the natural hydrological and ecological regimes. The foreseen future population growth (and related effects as urbanization, migration patterns, food production etc) will continue to significantly change water-related risks.
- Theme 2: Groundwater in a changing environment. Globally, groundwater represents 9.8 % of the Earth's unfrozen freshwater. This focal area addresses the safety and reliability of groundwater resources as a vital necessity for human life, social and economic development, poverty alleviation and healthy functioning ecosystems. It envisages sustainable groundwater resources management including artificial recharge, adapting to the impacts of climate change and promoting groundwater quality protection.



IHP UNESCO Phase VIII: 6 themes and focus areas (2)

- Theme 3: Addressing water scarcity and quality. The goal is to find a balance between water for human and economics-based demands and water for maintaining ecosystem integrity and environment sustainability. Envisages safety of water supplies and controlling pollution with all stakeholders involvement and awareness and conflict resolution.
- Theme 4: Water and human settlements of the future. Close to 1 billion people lack access to improved water sources, and over 2.6 billion people lack access to basic sanitation; almost all of these live in cities in developing countries. Cities are facing a range of pressures, such as climate change, population growth, deterioration of urban infrastructure systems etc. Due to these pressures cities of the future will experience difficulties in efficiently managing scarcer and less reliable water resources and to provide sufficient sanitation. There is need for intervention of innovative approaches and technologies, integrated management approaches.



IHP UNESCO Phase VIII: 6 themes and focus areas (3)

Theme 5: Ecohydrology, engineering harmony for a sustainable world related to water catchment areas and envisages methods to reverse degradation of water resources, stop further decline in biodiversity and increase water and ecosystems resilience. A special focus is on Urban Ecohydrology for the purpose of storm water purification and retention in the city landscape, potential for improvement of health and quality of life.

THEME 6:WATER EDUCATION, KEY FOR WATER SECURITY

To meet the challenges identified in the previous five themes, efforts should continue to be made to improve and update water education at all levels: scientists, water professionals, decision makers and community education strategies to promote community-wide water conservation, as well as skills in local co-management of water resources. Last but not least, action is required to make water education a significant component of the K-12 (kindergarten to 12th grade) curriculum.



IHP UNESCO Phase VIII: 6 themes and focus areas (4)

THEME 6:WATER EDUCATION, KEY FOR WATER SECURITY (2)

Includes:

- Enhancing tertiary water education (for scientists)
- Vocational education and training (water technicians)
- Mostly focuses on Water education for children and youth and on
- Promoting awareness of water issues through informal water education (including through more transparent water related data to the media).
- Education for transboundary water cooperation and governance

Remember IHP Phase VIII, theme 6 !



2030 Agenda and SDG 6

International fundamental documents related to civil and political rights

- December 1948 UN General Assembly proclaims the Universal Declaration of Human Rights (Resolution 217A)
- December 1966 UN GA adopts The International Covenant on Civil and Political Rights (Res.2200A) in force from 23 March 1976
- 2010, recognizing that the fulfilment of fundamental rights (to life etc) requires other civil and political rights, UN General Assembly adopts Resolution 64/292 *The human right to water and sanitation,* confirming that economic, cultural, social rights are essential for the fulfillment of basic human rights



2030 Agenda and SDG 6 (3)

Agenda 2030, SDG's, and SDG 6

- In 2015 UN adopted Resolution 70/1 Transforming our world: the 2030 Agenda for Sustainable Development.
- Agenda 2030 contains 17 Sustainable Development Goals (SDG's) with 169 targets designed to seek to realize the human rights of all through a balance of the three dimensions of sustainable development: the economic, social and environmental.
- Most relevant to WAMU-NET is SDG no.6



SDG 6

- Sustainable Development Goal no.6 calls to: Ensure availability and sustainable management of water and sanitation for all
- > SDG 6 is in turn structured into 8(eight) targets and 11)eleven) indicators.
- The core of SDG 6 is stated in target 6.1: "By 2030, achieve universal and equitable access to safe and affordable drinking water for all";
- Lack of access to safe, clean, affordable water is one of the causes for social inequity, may prompt to social conflict, affects the right to life and health,



SDG 6 related key messages

- Access to water is essential to basic human rights (e.g. right to life and health etc), to other social and economic right of individuals and communities;
- Water scarcity is contributing factor to **social inequity** (poor people/communities are generally affected); may prompt **social conflict**;
- Water scarcity is affecting water quality, prompts to reduced water consumption, alteration of hygiene related behaviour (water sharing habits etc)
- Water scarcity has economic impact: higher costs for bottled water, for storage facilities, etc. In poor communities, water scarcity is quoted as cause for excessive use of labour or extra efforts, generally for women (they must travel in some cases long distances to haul water)
- Environment and water sources protection is key for access to safe, clean water for all
- Water use habits should be adapted to present and future water related challenges
- Art is key (cross-curricular) tool for education
- Is possible to use fun for educational purposes

Remember Agenda 2030 and SDG 6 !



Case study: SOMES Water's Water Museum based educational program (for children and adults alike)



Playground for children Education for children







Some of the activities within the Museum based educational program include, but not restricted to:

 Open lessons about water source protection and environment sustainability at the Museum, Water Purification and WWT Plants, or at the schools Plantation of trees/plants (water sources areas)

- **Voluntary cleaning of water source areas**
 - Creativity activities/competitions on water/environment topics

Distribution of dodicated socklose for children

