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IMPLEMENTATION OF IHP-VIII

Item 5 of the provisional agenda

Summary

This document provides a brief account of the implementation of the Eighth Phase of IHP (IHP-VIII, 2014-2021) which includes :

- Report of the Working Group for supporting the implementation of the Strategic Plan for IHP-VIII
- Focus for 2014-2015

The Bureau may wish to comment on this information note.

REPORT OF THE WORKING GROUP FOR SUPPORTING THE IMPLEMENTATION OF THE STRATEGIC PLAN FOR IHP-VIII (agenda item 5.1)

1. The Working Group on IHP-VIII Implementation discussed during the UNESCO Strategic and High-Level Meeting on 'Water Security and Cooperation (Nairobi, 11 - 13 September 2013).[1]

2. The objectives of the Working Group and input from the Koblenz preparatory meeting, which took place from 10 to 12 December 2012, were presented by Mr Johannes Cullmann. This preparatory meeting was a first step to create a forum to discuss the implementation of IHP-VIII and reached the conclusion that specific priorities corresponding to time periods should be set, as well as indicators of performance and reporting. Furthermore visibility and transparency with regards to IHP's activities should be further enhanced, so that Member States can understand the potential of IHP and participate more easily.

3. Mr Cullmann, in his quality as interim chair of the Working Group, informed the participants of the Nairobi meeting and presented election of a chairperson and rapporteur of the Working Group. Mr Antero Veiga of Cape Verde, and Mr John Mutorwa of Namibia were elected as co-chairs likewise, Mr Stein van Oosteren, from the Netherlands, and Mr William Logan, from the United States were elected as rapporteurs.

4. The Nairobi meeting discussed IHP-VIII and indicated the need for an implementation plan building on the achievements from previous IHP phases and taking into account the evolving needs and new challenges for water security,

5. In order to design the implementation of the strategic plan of IHP-VIII, the working group carefully considered each of the six themes, their focal areas and the associated specific objectives to define the order of priority, key outputs, interventions, the main partners and linkages with UNESCO priorities for Africa and gender equality. The working group met in parallel sessions, with each session focusing on a specific theme. Each session convened fifteen to thirty members, who could rotate among the sessions. The outcomes of each parallel session were summarized in the Nairobi meeting report.

FOCUS FOR 2014-2015 (agenda item 5.2)

6. Considering that the Eighth phase of IHP (IHP-VIII) is an eight year plan from 2014 to 2021, the implementation of the IHP-VIII strategic plan has specific focus for different biennia. The focus of IHP-VIII implementation for the 2014-2015 biennium is described below by IHP-VIII themes.

Theme 1: Water-related disasters and hydrological change

7. The activity will contribute to strengthen water security challenges by providing scientific platform through FRIEND, IFI, IDI, ISI and snow and glacier networks and will help develop adaptation strategies to cope with hydrological extremes and global change impacts on water resources. In order to improve the scientific understanding of hydrological processes at a regional to global scale FRIEND- Water Network will be mobilized. The activity will put an emphasis on water-related disasters and aims to foster and consolidate cross disciplinary networks and facilitate cooperation. In cooperation with International Drought Initiative (IDI), the activity will promote testing and validation of drought early

[1] The document is available at http://unesdoc.unesco.org/images/0022/002259/225993E.pdf

warning system as an operational tool for near real time monitoring of droughts and provide better adaptation policy strategies to member states. In cooperation with International Flood Initiative (IFI), the activity will improve understanding and promotion of an approach to flood risk management based on the idea of ''living with floods'' instead of ''fighting floods''. The activity related to climate change impacts on glacier, snow and water resources will be linked to ongoing effort carried out by IHP within the framework of International Multidisciplinary Network for Adaptation Strategies. Scientific and policy interventions will be identified for building more resilience vulnerable communities underpinned by sound scientific and policy measures. The sediment and erosion related activity will be coordinated with the International Sediment Initiative (ISI) which aims to increase awareness of erosion and sedimentation dynamics in all spheres of water management. The emphasis will be given to enlarge the sediment transport database. Target group: FRIEND, IFI, IDI, ISI, and IHP Snow and Ice networks, category 2 centres, policy makers, IHP national committees, professional associations and universities.

Theme 2: Groundwater in a changing environment

8. The focus for the biennium 2014-2015 will be on strengthening groundwater governance frameworks for the sustainable management of groundwater resources. This will entail further advancing the in-depth assessment of transboundary aquifers globally, providing technical and scientific assistance to Member States in the management of their groundwater resources, advocating for a true conjunctive management of surface and groundwater resources in the spirit of IWRM, strengthening existing partnerships and broadening the network of groundwater experts and practitioners. The successful cooperation with the Global Environment Facility has been confirmed by the execution of new initiatives and project proposals, clearly positioning UNESCO as the main global reference and partner for groundwater resources. This partnership will continue to grow alongside those with new partners to broaden and enrich the portfolio of groundwater activities. Focus will also be given to provide greater resonance to the efforts of advancing and promoting legal frameworks for the sustainable management of transboundary aquifers. In this regard, the major breakthrough in 2012 was the full inclusion of the provisions contained in the Draft Articles on the “Law of Transboundary Aquifers” in the UNECE Water Convention, following the renewed call from the UN GA for UNESCO-IHP to continue providing technical support to related countries for the peaceful management of their transboundary aquifers. In line with the spirit and objectives of the International Year of SIDS (2014), a special focus will be given to small islands development stats and their relation with groundwater.

9. Regional branches of the ISARM programme on transboundary aquifers will see renewed action to improve the assessments of aquifers in selected regions, particularly in central Asia, the Sub-Saharan Africa and the SADC region. Formal and informal education is crucial in many countries where a lack of groundwater professionals is hampering national and regional development as well as the sound management of water resources. One of the objectives of the next biennium will be to consider including groundwater as an element in major global processes related to water policy and decision-making. The World Water Forum in 2015 and the global debate on the post-2015 agenda and related Sustainable Development Goals will provide a platform to openly discuss challenges and opportunities related to groundwater resources management. Opportunities will be sought to take part in these processes. IHP has already taken the lead on the Water Governance Initiative Debate to bring forward the existing experience and expertise within UNESCO’s family on groundwater.

Theme 3: Addressing water scarcity and quality

10. Water quality issues will be addressed with specific focus on: improving scientific knowledge and understanding on new and emerging pollutants; and promoting innovative approaches to water quality and wastewater management. Case-studies and technical reports will be developed on emerging pollutants, which represent a diverse group of pollutants such as pharmaceuticals and endocrine disruptors that are not regulated under international and national water quality regulations, but widely occur in surface water bodies, groundwater resources, wastewater and the wider environment mainly as a result of human activities, industrial processes and the disposal of insufficiently treated wastewater. Focus will also be given on promoting innovative technological and policy solutions to water quality and pollution control such as nanotechnology and desalination. The newly-established International Initiative on Water Quality, which aims to provide a platform to strengthen scientific knowledge, research and policy and develop innovative approaches to tackles water quality challenges, will be developed and implemented in stages. With regard to strengthening human and institutional capacity to cope with the water scarcity for sustainable water resources management, a strategy will be developed through which IHP in cooperation with the Global Network on Water and Development Information for Arid Lands (G-WADI) will undertake focused activities aiming at enhancing the capacity of these networks to share information, develop mutual understanding of the challenges facing arid and semi-arid lands. It will utilize scientific advances in hydrologic monitoring and modeling and water resources management to contribute to sustainable development in the arid and semi-arid regions under increasing climate variability and climate change. The strategy also includes complementing and building on case studies which will assist Member States to deal with water scarcity. The following activities will be implemented in 2014-2015: in cooperation with the regional G-WADI networks, number of methodologies and tools will be developed to prepare adaptation policy strategies; a number of guidelines developed and disseminated for improving monitoring, data collection, processing and storage systems in arid and semi-arid areas; promote and support number of capacity development events for decision makers in managing water scarcity.

Theme 4: Water and human settlements of the future

11. The focus will be on promoting innovative technological, institutional and system-wide integrated approaches to addressing water challenges in urban areas in both developed and developing cities, as well as to develop and promote integrated urban water management models in emerging cities in developing countries. Best practices in sustainable urban water management will be identified and promoted, including state-of-the-art approaches based on flexible, smart urban water systems and adaptive water management. Pilot studies on water issues in emerging cities will be conducted. Emphasis will also be placed on enhancing awareness raising on water issues in rural communities and human settlements. The UNESCO-IHP Urban Water Series will continue with new titles addressing water issues in urban areas in specific climate contexts.

Theme 5: Ecohydrology, engineering harmony for a sustainable world

12. The focus will be on the importance of developing low cost advanced solutions for water quality and quantity through dual regulation of flow and biota concepts of ecohydrology, as well as the need to synthesize comparative studies of artificial wetlands for improving water quality at different scales. As a first step for implement this theme, IHP needs to identify spatial potential of catchments for implementation of different ecohydrological biotechnologies. This will help identify structural and non-structural measures for harmonisation of hydrotechnical infrastructure with catchment ecohydrological processes and for improvement of ecosystem services at all levels. Category 2 ecohydrology

centres in Poland, Portugal and Indonesia can undertake studies to pursue systems solutions for the integration of ecohydrological technologies at different scales during the first four years for IHP-VIII. The wider UNESCO family can help build legal and policy analysis to implement biotechnologies and systemic solutions through the establishment of related ecohydrology demonstration projects in fresh water and estuarine systems. It is recommended the use of ecosystem services and enhancement of carrying capacity approaches to improve water quantity and quality, biodiversity and resilience. This needs to be aided with economical evaluation of ecosystems services in landscapes. Partnership with Ramsar Wetlands and Intergovernmental Platform on Biodiversity and Ecosystems (IPBES) could be important vehicles for the effective delivery of this theme.

Theme 6: Water education, key for water security

13. This theme will cover different levels of education needed to ensure water security. It will focus on supporting the enhancement of tertiary water education capacities, particularly in developing countries, in collaboration with UNESCO-IHE and other higher-education institutions. The promotion of interdisciplinary and multidisciplinary curricula and research initiatives linked to water will be achieved via the promotion of joint courses and research, with a focus on innovation, among universities and other research institutions, with an emphasis on category 2 centres and UNESCO Chairs and with priority given to Africa and gender equality. In addition, a workplan will updated to strengthen collaboration between IHP, UNESCO-IHE, the UNESCO category 2 water centres and UNESCO water-related Chairs, also considering other UN system agencies and programmes, and existing international water-related education programmes. On a first phase, the workplan will start by focusing on IHP/UNESCO-IHE collaboration. On TVET, a webpage with curricula will be developed as a means to support initiatives to sustain and improve water-related vocational education. Improved tools for the teaching of water issues in the K-12 curriculum will be developed, based on existing work by UNESCO and Member States on water education at the school-level. Support will be provided to youth groups working on water issues. Youth organizations will be networked among themselves and with other organizations operating in water sciences and management. On informal water education, the development of community education strategies and the engagement of leading mass media resources will be reinforced based on the existing work conducted by UNESCO water-related centres and chairs. In collaboration with PCCP and ISARM, capacity building activities will take place, including advanced courses, to strengthen capacities for the sustainable management of transboundary waters.