



International Hydrological Programme

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THE ROLE OF UNESCO-IHE INSTITUTE FOR WATER EDUCATION IN THE INTERNATIONAL HYDROLOGICAL PROGRAMME (IHP) OF UNESCO¹

Item 8.1 of the provisional agenda

SUMMARY

In 2003, the UNESCO-IHE Institute for Water Education became an integral part of UNESCO as a category I institute. This document raises a number of issues concerning role of UNESCO-IHE in the International Hydrological Programme, and how to enhance collaboration.

Decision required: Paragraph 15.

¹ Document prepared and submitted by the UNESCO-IHE Institute for Water Education

STRENGTHENING LINKAGES BETWEEN UNESCO-IHP AND UNESCO-IHE

The need for water professionals to achieve the Millennium Development Goals (MDGs)

1. While it is increasingly recognized that the world is facing a global water crisis, there is less awareness of the global “water education crisis”. The international agenda is focused on meeting the Millennium Development Goals by the year 2015. Water and sanitation are goals in and of themselves, while at the same time being linked to virtually all of the other goals. Multiple projections have been made and assessments of investments required. However, all investments in water are at risk if countries continue to lack sufficient numbers of competent water professionals to manage those investments and ensure their long term sustainability.

2. According to current estimates, in order to reach the MDGs, the number of water professionals in Africa must increase by 300%, in Asia by 200% and in Latin American by 50%. Clearly, the developing world is facing a crisis in water education and capacity building.

The importance of education, training and capacity building in IHP

3. Water education has always been a key component of the IHP. In IHP-VI, water, education and training (WET) is one of the five themes prioritized for 2002-2007. WET is seen not only as a priority theme but also as “strongly interwoven with other themes”. It has been proposed to the Council by the Bureau that the Draft Strategic Plan for IHP-VII contain a theme on water education for sustainable development (ref. document IHP/IC-XVII/11 and IHP/IC-XVII/INF-9). This would enable IHP in its 7th phase to contribute fully to a UNESCO housewide strategy and programme for water education at all levels (primary, secondary, graduate and post-graduate, as well as non formal education) now under development, within the framework of the United Nations Decade on Education for Sustainable Development (ref. document IHP/IC-XVII-12).

4. UNESCO’s capacity to assist Member States with respect to water education and capacity building has been very significantly increased by the entry of the UNESCO-IHE Institute for Water Education into UNESCO in 2003, after having operated as a Dutch institute since 1957. UNESCO-IHE is the premier water education institute in the world, and is the only entity of the United Nations system authorized to confer fully accredited Master’s and PhD degrees in various aspects of water management.

5. The 16th session of the Intergovernmental Council strongly encouraged increased cooperation and joint action between UNESCO-IHP and UNESCO-IHE as well as with the water centres (category II) operating under the auspices of UNESCO (ref. IHP/IC-XVI/3, Resolution XVI-2). Since then, a great deal of progress has been made in bringing the strategic planning and workplans closer together and in ensuring complementarity and synergy.

6. This document explores how interaction between UNESCO-IHP, UNESCO-IHE and the category II centres could be strengthened. The objective of the cooperation between IHP and UNESCO-IHE would be to bring all water-related actors together in a network/partnership arrangement, to undertake joint research, and to communicate and transfer the research findings to water sector institutions and professionals in Member States, through various education and capacity-institution building mechanisms. Formalizing these relationships may also assist with fund-raising, as Member States would recognize the contributions of UNESCO-IHP and UNESCO-IHE to their national development goals. Regional financing mechanisms and

development banks may also see the advantage of investing in a more coordinated effort in capacity building in the water sector to building a foundation towards the sustainability of the MDGs.

Education, training and capacity building at UNESCO-IHE

7. Some details concerning the Institute are provided here, in order to allow Council members to better understand what UNESCO-IHE can offer as a partner with the IHP.

8. Education, training, research and capacity building are among the core functions of UNESCO-IHE. Among these, education is the largest in terms of time expenditure by academic staff (roughly 50%). The Institute offers four postgraduate Master of Science programmes with fourteen specializations, and a PhD programme. It also executes approximately 38 regular short courses, 8 on-line short courses, and a host of tailor-made training courses annually. Research is organized around the broad themes of water security, environmental integrity, urbanization, water management and governance, and information and communication systems. Capacity building activities of the Institute deal mostly with the strengthening of human and institutional capacity at higher education institutions in developing and transition countries.

9. Since 1957, more than 13,000 MSc degrees have been awarded to mid-level professionals from 162 countries, virtually all of whom return to their home country after completing their degrees. Additionally, in recent years, an average of 12 PhD degrees has been awarded annually. The Institute has also awarded more than 15,000 short course certificates to professionals in Delft or in tailor-made courses offered in the Member States or specific regions. Each year IHE receives in excess of 1,400 applications for approximately 200 available fellowships. There are approximately 5,000 active applications on file at any point in time. Virtually all students attending UNESCO-IHE require fellowships. Support to the Institute is seen as an investment and not a donation. This notion is supported by the fact that nearly 87% of graduates are still active in water ten years after graduation. There are currently 12 sitting Ministers or Deputy Ministers who are graduates of UNESCO-IHE.

10. UNESCO-IHE has an annual budget of about € 23 million (ca. US\$28.75 mln). However, the Institute is completely extrabudgetary, meaning that it receives no funds from the Regular Programme of UNESCO. In fact the Statutes establishing the Institute preclude such funding. A subsidy covering 30-35 % of the income turnover is received from the Netherlands Ministry of Education, which only partially covers the cost of staff and facilities. The remainder of the staff and facility costs needs to be generated from the activity-based income that is received by the Institute. Additionally, support for nearly all of the fellowships awarded must be generated by the Institute staff. This income is realized by successfully competing for project funds (education, training, research and capacity building projects), as well as cultivating both bilateral and multilateral fellowship support and some assistance from the private and NGO sectors towards this goal. At any one time the Institute may be executing as many as 150 projects, varying in size between € 10,000 and € 5 million.

11. Given their extrabudgetary nature, all the projects managed by UNESCO-IHE logically include fees to compensate for the time input by staff in developing and implementing these contracts. Although time inputs are generally charged to clients, UNESCO-IHE has a very limited time budget for activities that are both non-billable and considered to be a 'service to society'. This means that time inputs by staff in these activities are not charged. Some of the time inputs in activities that aim to catalyze improved cooperation between IHP and UNESCO-IHE could

possibly be charged against this budget line, but such a contribution would not be sufficient to develop or maintain a substantive collaborative effort with the IHP water centers or chairs.

12. The Institute has initiated a vigorous fund-raising effort with all sectors of civil society. In the first quarter of this year, the Director-General and the Minister for Development Cooperation of the Netherlands co-hosted a Strategic Roundtable on the Future of UNESCO-IHE for all of UNESCO's permanent delegates and observers. The management of the Institute, with support from the Division of Water Sciences, has made a number of contacts with Member States with the specific aim of generating support for research projects and the UNESCO-IHE Fellowship Trust Fund. Other non-conventional fund-raising efforts have been initiated, for example with Rotary International to engage local Rotary Clubs and Districts, and by organizing special cultural events, as well as a burgeoning effort to involve private sector firms under their corporate social responsibility activities.

Linking IHP and UNESCO-IHE

13. It is proposed that links between IHP and UNESCO-IHE be reinforced by:

- a) Using the resources available in UNESCO-IHE to catalyze forming a dynamic network of UNESCO water centers, both category I and category II. This idea is presented in document IHP/IC-XVII-8, along with a process towards that end. Such a network or partnership could make a significant contribution to the fulfillment of postgraduate education and training needs of Member States, particularly in collaboration with post-graduate educational institutions and technical agencies responsible for water resource planning and management. However, creative operational and funding mechanisms would be an essential component to any such sustained partnership.
- b) Connecting IHP National Committees more strongly to UNESCO-IHE, by, as suggested by the Bureau (ref. document IHP/Bur-XXXIX/3 para 9) appointing national education officers within IHP National Committees to act as focal points for linking with UNESCO-IHE.
- c) Developing joint activities or projects involving category II centers and chairs through the UNESCO regional hydrologists to strengthen the education/capacity building mission of IHP in the Member States and regions.

Sample Activity List

14. For the sake of discussion, examples of specific projects to promote education and capacity building of the water sector are put forward below. It must be stressed that each of these projects would require a funding initiative to ensure that all the inputs from UNESCO-IHE including staff time are financially compensated.

- a) Improved coordination and cooperation between IHP, its water centers and chairs, and UNESCO-IHE
 - Formation of a network/partnership similar to UNESCO-IHE's Partnership for Water and Research (sharing of educational products, common research etc.)
 - Joint development of a strategy paper for international water-related education, research and capacity-building needs in Member States or regions (geographic or thematic based on category II focus).

- Involvement of UNESCO chairs in projects, teaching (guest-lectures) or PhD promotions etc.
 - Organize a meeting of all involved parties annually in conjunction with IHP Council meetings.
- b) Involvement of staff from UNESCO-IHE in IHP research activities
- Staff member from UNESCO-IHE will be assigned to follow one or several themes of the IHP VII (2008-2013) including, where appropriate the leadership of a working group in some of the focal areas.
 - Involvement of experts from UNESCO-IHE in on-going IHP projects.
- c) Projects involving Category II Centers and Chairs through the UNESCO regional hydrologists to strengthen the education / capacity building mission of IHP in the Member States and regions
- Set-up a webpage for UNESCO with an overview of (good) water-related e-learning modules (incl. programme details etc.): 'A road map through the water-related e-learning milieu'
 - Intensify the JIHP cooperation (UNESCO-IAEA): training students in isotope hydrology at UNESCO-IHE using the IAEA fellowship programme (in progress)
 - At the suggestion of the UNESCO Regional Hydrologist for Latin America, UNESCO-IHE met with officials of Itaipu Binacional to further develop the concept of a capacity building partnership with the Institute that would potentially involve regular MSc training, short and tailor-made courses and specifically support to the development of an Itaipu center for hydroinformatics. Itaipu would fund this activity (in progress)
 - Joint development of common teaching modules and research projects
 - Joint development of an 'agreed' curriculum for training of water professionals
 - Joint development of IHP e-learning short-course on Introduction to Hydrology and/or Integrated Water Resources Management that is the available through UNESCO web site. This could be based on existing UNESCO-IHE-modules (duration max. one week, ideally 3 days; video-PPT with a few exercises; almost no-supervision; target audience all professionals in water business and stakeholders with little a-priori knowledge)
 - Fund regular fellowships at UNESCO-IHE based on expressed training needs or develop and implement short or tailor-made courses to be delivered in Delft or in the Member States / regions.
 - Summer school offerings, e.g. on water-related disasters together with ICHARM (Japan); duration 2 weeks with keynote lectures and small working groups, one day field trip (e.g. Delta works if in Delft), for higher level academics (PhD students, post-docs etc.)

Draft resolution

15. The Council might wish to consider the draft resolution presented in the Annex.

Annex

Draft resolution on strengthening linkages between UNESCO-IHP and UNESCO-IHE

The Intergovernmental Council of the International Hydrological Programme of UNESCO

- Recalling** Resolution XVI-2 of the 16th session of the IHP Council,
- Expressing alarm** at the very serious lack of sufficient numbers of water professionals to achieve the Millennium Development Goals and to ensure their sustainability in the longer term
- Recognizing** the lead role of UNESCO-IHE in providing post-graduate education in the water sector,
- Concerned** with the continuing shortfall in funds available for fellowships to support training at UNESCO-IHE, and that this might compromise the Institute's ability to provide the assistance needed by the Member States to reach the MDGs,
- Notes with satisfaction** progress made since the 16th session of the Council to forge ties between UNESCO-IHP and UNESCO-IHE,
- Strongly encourages** increased strengthening of the linkages – including joint activities - between UNESCO-IHP and UNESCO –IHE in order to build up an effective and efficient partnership among various actors engaged in freshwater issues in UNESCO, including the Secretariat, regional hydrologists, IHP National Committees, UNESCO's water centres, and UNESCO Chairs.
- Endorses** the concept of building a solid network of UNESCO water centres (both categories I and II), and asks that UNESCO-IHE play the leading role in this regard,
- Calls on** the representatives of the IHP on the Governing Board of UNESCO-IHE to work towards implementing this resolution, in particular by playing an active role in reinforcing the links between IHP and UNESCO-IHE,
- Recommends** that Member States:
- Provide direct support to the UNESCO-IHE Fellowship Trust Fund to increase number of water professionals trained at the Institute,
 - Support research efforts in the water sector undertaken by UNESCO-IHE based on the ODA policies and priorities of Member States, and in particular joint undertakings between UNESCO-IHP and UNESCO-IHE.