

Format for Biennial Reports by UNESCO's Water-related Centres on activities related to the IHP in the period (June 2012- May 2014)

1. Basic information on the centre

Name of the Centre	The Regional Center on Capacity Development and Research in Water Harvesting
Name of Director	Dr.Ahmed Eltayeb Ahmed Elhasan
Name and title of contact person (for cooperation)	Dr.Ahmed Eltayeb Ahmed Elhasan
E-mail	Ahmed_Eltayeb2000@yahoo.com
Address	
Website	
Location of centre	city/town ___Khartoum_____ country Sudan_____
Geographic orientation *	<input type="checkbox"/> global <input checked="" type="checkbox"/> regional
Region(s) (for regional centres)	East Africa and Arab countries
Year of establishment	Agreement expected to Enter into Force by 23 may, The latest
Year of renewal assessment	2014
Signature date of most recent Agreement	4/12/2013 still awaiting Entry into force according to article 14
Themes Of activities during reporting period	<p>Focal Areas ♦ (Not applicable)^{note}</p> <p>the centre participated in a number of regional activities organized by UNESCO Cairo officer</p> <p><input type="checkbox"/> groundwater <input type="checkbox"/> urban water management <input type="checkbox"/> rural water management <input checked="" type="checkbox"/> arid / semi-arid zones <input type="checkbox"/> humid tropics <input type="checkbox"/> cryosphere (snow, ice, glaciers) <input type="checkbox"/> water related disasters (drought/floods) <input type="checkbox"/> Erosion/sedimentation, and landslides <input type="checkbox"/> ecohydrology/ecosystems <input type="checkbox"/> water law and policy <input type="checkbox"/> social/cultural/gender dimension of water <input checked="" type="checkbox"/> transboundary river basins/ aquifers <input type="checkbox"/> mathematical modelling <input type="checkbox"/> hydroinformatics <input type="checkbox"/> remote sensing/GIS <input checked="" type="checkbox"/> IWRM <input type="checkbox"/> Watershed processes/management <input checked="" type="checkbox"/> global and change and impact assessment <input type="checkbox"/> mathematical modelling <input checked="" type="checkbox"/> water education <input type="checkbox"/> water quality <input type="checkbox"/> nano-technology <input type="checkbox"/> waste water management/re-use <input checked="" type="checkbox"/> water/energy/food nexus <input type="checkbox"/> water systems and infrastructure <input type="checkbox"/> other: (please specify) _____</p>
	<p>Scope of Activities ♦</p> <p><input type="checkbox"/> vocational training <input type="checkbox"/> postgraduate education <input type="checkbox"/> continuing education <input type="checkbox"/> public outreach <input type="checkbox"/> research</p>

* check on appropriate box

♦ check all that apply

	<input type="checkbox"/> institutional capacity-building <input type="checkbox"/> advising/ consulting <input type="checkbox"/> software development <input type="checkbox"/> data-sets/data-bases development <input type="checkbox"/> other: (please specify) _____
Support bodies ¹	(Not applicable)
Hosting organization ²	
Sources of financial support ³	The government of Sudan
Existing networks and cooperation ⁴	
Governance (Not yet established, will be possible after the centre establishment is authorized by the legislative bodies of the country and hence the agreement with UNESCO enters into force)	<input type="checkbox"/> director and governing board <input type="checkbox"/> other: (please specify) _____ Link to election of board members to the IHP Intergovernmental Council (IGC) and hosting country IHP National Committee _____ Frequency of meetings: once every ___year(s) <input type="checkbox"/> Existence of UNESCO presence at meetings
Institutional affiliation of director	
Number of staff and types of staff (awaiting official procedures establishment)	total number of staff (full-time, or equivalent) : _____ number of staff who are water experts: _____ number of visiting scientists and postgraduate students: _____
Annual turnover budget in USD	

Note because the formalities and procedures to establish the centre are about to be finalized by the legislative bodies of the country in addition, even after signature Dec 2013 the agreement doesn't yet enter into force according to article 14. Hopefully this may be achieved by the end of May 2014. The Agreement of the centre is awaiting the notification by Sudan. The centre premises and facilities are made ready for commencement of activities once the formal procedures of its establishment are finalized. Hence, not yet has been a stage of review by UNESCO. However, the centre participated in a number of regional activities organized by UNESCO, Cairo office and also some activities nationally under IHP. High level Meeting Water security in Kenya (Sep. 2013), Arab IHP Natcom in Rabat (Oct. 2013), work shop in Nile basin cooperation Tanzania (Dec 2014), World Water Day Khartoum (March 2014), participation program, IGRAC board of directors meeting-delft Dec 2013

2. Activities undertaken in the framework of IHP in the period June 2012 – May 2014

- 2.1 Educational activities (i.e., those with accreditation) that directly contributed to the IHP-VII/VIII (Appendix-1 and 2) and WWAP
Please include here those activities which led to accreditation of degrees, or those held in formal school settings.
- 2.2 Research activities that directly contributed to the IHP-VII and/or IHP-VIII activities
Please include research/applied projects outputs such as publications that directly contributed to the IHP-VII/VIII and WWAP objectives
- 2.3 Training activities that directly contributed to the IHP-VII/VIII and WWAP objectives

3. Collaboration and linkages

¹ please specify bodies that cover the operational costs of the centre, and other essential costs such as salaries and utility bills, and that provide institutional support to ensure centre's sustainability

² if different from support bodies

³ please specify sources of main budgetary and extrabudgetary funds to implement projects

⁴ please write international networks, consortiums or projects that the centre is part of, or any other close links that the centre has with international organizations or programmes, which are not already mentioned above

- 3.1 Participation in major international networks, programmes, partnerships with other UN or other International Agencies, media and professional bodies
- 3.2 Participation in meetings related to the IHP and UNESCO (e.g., the UNESCO General Conference, the UNESCO Executive Board, the IHP Intergovernmental Council and/or other meetings organized by IHP)
- 3.3 Collaboration and networking with other UNESCO category 1 or 2 institutes/ centres
 - 3.3.1 cross-appointment of directors of the category 1 or 2 institutes or centres on the governing board
 - 3.3.2 exchange of information on activities such as training/educational materials, and funding opportunities
 - 3.3.3 exchange of staff, most notably professionals and students
 - 3.3.4 implementation of joint activities, such as workshops, conferences, training programmes, joint projects, field visits, software and data sharing, knowledge exchange and publications
- 3.4 Relationships with the UNESCO field and regional office whose jurisdiction covers the country of location
- 3.5 Relationship with the UNESCO National Commission and the IHP National Committee in the country of location and with other organizations of other countries
- 3.6 Relationship with other UNESCO-related networks, such as UNESCO Clubs, ASPnet, and UNESCO chairs
- 4. Communication**
 - 4.1 Communication and knowledge dissemination activities undertaken in the framework of IHP
 - 4.2 Policy documents and advice
- 5. Update on Centre Operations**
 - 5.1 Membership of the Board of Governors between designated period
 - 5.2 Key decisions made (attach minutes of meetings)
- 6. Evidence of the Centre's Impacts**
 - 6.1 Science Impacts (Major contributions to the science, technology, education, and regional and/or international cooperation in the field of water)
 - 6.2 Knowledge Transfer Impacts (Major achievements in the dissemination of knowledge and technology transfer)
 - 6.3 Policy Impacts (advice sought by government and other bodies and evidence of inputs into policy arena)
- 7. Future activities that will contribute directly to IHP and/or to WWAP**
 - 7.1 Operational Plan (attach if available)
 - 7.2 Strategic Plan linked with IHP-VIII (Appendix 2) (attach strategic plan if available)
- 8. Strategic Alignment with IHP-VIII**
 - 8.1 Focal areas within IHP-VIII the centre plans to contribute to and specific actions the centre will undertake to align its activities with the strategic plan for IHP-VIII (Please see Appendix-2)
- 9. Annexes**
 - 9.1 List of publications released by the centre (there can be overlap with those listed in 2.3 above)
 - 9.2 List of training courses conducted (there can be overlap with those listed in 2.1 above)

Appendix-1

Overview of the Core Programme Themes of the Seventh Phase of the IHP (2008-2013) WATER DEPENDENCIES: SYSTEMS UNDER STRESS AND SOCIETAL RESPONSES

Theme 1: ADAPTING TO THE IMPACTS OF GLOBAL CHANGES ON RIVER BASINS AND AQUIFER SYSTEMS

Focal area 1.1 - Global changes and feedback mechanisms of hydrological processes in stressed systems

Focal area 1.2 - Climate change impacts on the hydrological cycle and consequent impact on water resources

Focal area 1.3 - Hydro-hazards, hydrological extremes and water-related disasters

Focal area 1.4 - Managing groundwater systems' response to global changes

Focal area 1.5 - Global change and climate variability in arid and semi-arid regions

Theme 2: STRENGTHENING WATER GOVERNANCE FOR SUSTAINABILITY

Focal area 2.1 - Cultural, societal and scientific responses to the crises in water governance

Focal area 2.2 - Capacity development for improved governance; enhanced legislation for wise stewardship of water resources

Focal area 2.3 - Governance strategies that enhance affordability and assure financing

Focal area 2.4 - Managing water as a shared responsibility across geographical & social boundaries

Focal area 2.5 - Addressing the water-energy nexus in basin-wide water resources

Theme 3: ECOHYDROLOGY FOR SUSTAINABILITY

Focal area 3.1 - Ecological measures to protect and remediate catchments process

Focal area 3.2 - Improving ecosystem quality and services by combining structural solutions with ecological biotechnologies

Focal area 3.3 - Risk-based environmental management and accounting

Focal area 3.4 - Groundwater-dependent ecosystems identification, inventory and assessment

Theme 4: WATER AND LIFE SUPPORT SYSTEMS

Focal area 4.1 - Protecting water quality for sustainable livelihoods and poverty alleviation

Focal area 4.2 - Augmenting scarce water resources especially in SIDS

Focal area 4.3 - Achieving sustainable urban water management

Focal area 4.4 - Achieving sustainable rural water management

Theme 5: WATER EDUCATION FOR SUSTAINABLE DEVELOPMENT

Focal area 5.1: Tertiary water education and professional development

Focal area 5.2: Vocational education and training of water technicians

Focal area 5.3: Water education in schools

Focal area 5.4: Water education for communities, stakeholders and mass-media professionals

Appendix-2

Overview of the Core Programme Themes of the Eighth Phase of the IHP (2014-2021) WATER SECURITY: ADDRESSING LOCAL, REGIONAL, AND GLOBAL CHALLENGES

THEME 1: WATER-RELATED DISASTERS AND HYDROLOGICAL CHANGE

- Focal area 1.1 - Risk management as adaptation to global changes
- Focal area 1.2 - Understanding coupled human and natural processes
- Focal area 1.3 - Benefiting from global and local Earth observation systems
- Focal area 1.4 - Addressing uncertainty and improving its communication
- Focal area 1.5 - Improve scientific basis for hydrology and water sciences for preparation and response to extreme hydrological events

THEME 2: GROUNDWATER IN A CHANGING ENVIRONMENT

- Focal area 2.1 - Enhancing sustainable groundwater resources management
- Focal area 2.2 - Addressing strategies for management of aquifers recharge
- Focal area 2.3 - Adapting to the impacts of climate change on aquifer systems
- Focal area 2.4 - Promoting groundwater quality protection
- Focal area 2.5 - Promoting management of transboundary aquifers

THEME 3: ADDRESSING WATER SCARCITY AND QUALITY

- Focal area 3.1 - Improving governance, planning, management, allocation, and efficient use of water resources
- Focal area 3.2 - Dealing with present water scarcity and developing foresight to prevent undesirable trends
- Focal area 3.3 - Promoting tools for stakeholders involvement and awareness and conflict resolution
- Focal area 3.4 - Addressing water quality and pollution issues within an IWRM framework - improving legal, policy, institutional, and human capacity
- Focal area 3.5 - Promoting innovative tools for safety of water supplies and controlling pollution

THEME 4: WATER AND HUMAN SETTLEMENTS OF THE FUTURE

- Focal area 4.1 - Game changing approaches and technologies
- Focal area 4.2 - System wide changes for integrated management approaches
- Focal area 4.3 - Institution and leadership for beneficitation and integration
- Focal area 4.4 - Opportunities in emerging cities in developing countries
- Focal area 4.5 - Integrated development in rural human settlement

THEME 5: ECOHYDROLOGY, ENGINEERING HARMONY FOR A SUSTAINABLE WORLD

- Focal area 5.1 - Hydrological dimension of a catchment– identification of potential threats and opportunities for a sustainable development
- Focal area 5.2 - Shaping of the catchment ecological structure for ecosystem potential enhancement – biological productivity and biodiversity
- Focal area 5.3 - Ecohydrology system solution and ecological engineering for the enhancement of water and ecosystem resilience and ecosystem services
- Focal area 5.4 - Urban Ecohydrology – storm water purification and retention in the city landscape, potential for improvement of health and quality of life
- Focal area 5.5 - Ecohydrological regulation for sustaining and restoring continental to coastal connectivity and ecosystem functioning

THEME 6: WATER EDUCATION, KEY FOR WATER SECURITY

- Focal area 6.1 - Enhancing tertiary water education and professional capabilities in the water sector
- Focal area 6.2 - Addressing vocational education and training of water technicians
- Focal area 6.3 - Water education for children and youth
- Focal area 6.4 - Promoting awareness of water issues through informal water education
- Focal area 6.5 - Education for transboundary water cooperation