### 1. Basic information on the centre

<table>
<thead>
<tr>
<th>Name of the Centre</th>
<th>The Regional Center on Capacity Development and Research in Water Harvesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Director</td>
<td>Dr. Ahmed Eltayeb Ahmed Elhasan</td>
</tr>
<tr>
<td>Name and title of contact person (for cooperation)</td>
<td>Dr. Ahmed Eltayeb Ahmed Elhasan</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:Ahmed_Eltayeb2000@yahoo.com">Ahmed_Eltayeb2000@yahoo.com</a></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Website</td>
<td></td>
</tr>
<tr>
<td>Location of centre</td>
<td>city/town <em><strong>Khartoum</strong></em>____ country Sudan__________</td>
</tr>
<tr>
<td>Geographic orientation</td>
<td>☑ global ☑ regional</td>
</tr>
<tr>
<td>Region(s) (for regional centres)</td>
<td>East Africa and Arab countries</td>
</tr>
<tr>
<td>Year of establishment</td>
<td>Agreement expected to Enter into Force by 23 may, The latest</td>
</tr>
<tr>
<td>Year of renewal assessment</td>
<td>2014</td>
</tr>
<tr>
<td>Signature date of most recent Agreement</td>
<td>4/12/2013 still awaiting Entry into force according to article 14</td>
</tr>
</tbody>
</table>

### Themes of activities during reporting period

<table>
<thead>
<tr>
<th>Focal Areas <em>(Not applicable)</em> note</th>
<th>the centre participated in a number of regional activities organized by UNESCO Cairo officer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☑ groundwater</td>
</tr>
<tr>
<td></td>
<td>☑ urban water management</td>
</tr>
<tr>
<td></td>
<td>☑ rural water management</td>
</tr>
<tr>
<td></td>
<td>☑ arid / semi-arid zones</td>
</tr>
<tr>
<td></td>
<td>☑ humid tropics</td>
</tr>
<tr>
<td></td>
<td>☑ cryosphere (snow, ice, glaciers)</td>
</tr>
<tr>
<td></td>
<td>☑ water related disasters (drought/floods)</td>
</tr>
<tr>
<td></td>
<td>☑ Erosion/sedimentation, and landslides</td>
</tr>
<tr>
<td></td>
<td>☑ ecohydrology/ecosystems</td>
</tr>
<tr>
<td></td>
<td>☑ water law and policy</td>
</tr>
<tr>
<td></td>
<td>☑ social/cultural/gender dimension of water</td>
</tr>
<tr>
<td></td>
<td>☑ transboundary river basins/ aquifers</td>
</tr>
<tr>
<td></td>
<td>☑ mathematical modelling</td>
</tr>
<tr>
<td></td>
<td>☑ hydroinformatics</td>
</tr>
<tr>
<td></td>
<td>☑ remote sensing/GIS</td>
</tr>
<tr>
<td></td>
<td>☑ IWRM</td>
</tr>
<tr>
<td></td>
<td>☑ Watershed processes/management</td>
</tr>
<tr>
<td></td>
<td>☑ global and change and impact assessment</td>
</tr>
<tr>
<td></td>
<td>☑ mathematical modelling</td>
</tr>
<tr>
<td></td>
<td>☑ water education</td>
</tr>
<tr>
<td></td>
<td>☑ water quality</td>
</tr>
<tr>
<td></td>
<td>☑ nano-technology</td>
</tr>
<tr>
<td></td>
<td>☑ waste water management/re-use</td>
</tr>
<tr>
<td></td>
<td>☑ water/energy/food nexus</td>
</tr>
<tr>
<td></td>
<td>☑ water systems and infrastructure</td>
</tr>
<tr>
<td></td>
<td>☑ other: (please specify) __________________________________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scope of Activities *</th>
<th>☑ vocational training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☑ postgraduate education</td>
</tr>
<tr>
<td></td>
<td>☑ continuing education</td>
</tr>
<tr>
<td></td>
<td>☑ public outreach</td>
</tr>
<tr>
<td></td>
<td>☑ research</td>
</tr>
</tbody>
</table>

* check on appropriate box
* check all that apply
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)
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
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 beneficiation 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 - Ecological 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