

Synthesis of the International and national water dialogue on the delivery of SDG 6 in Mongolia and wider Asia and the Pacific region

25 October 2016, Ulaanbaatar, Mongolia

Preamble

On 25th October 2016, UNESCO – through its Regional Sciences Bureau for Asia and the Pacific and supported by its office in Beijing, the Mongolian National Commission for UNESCO in cooperation with the Ministry of Environment and Tourism of Mongolia conducted the international and national water dialogue on the delivery of Sustainable Development Goal 6 “Ensure availability and sustainable management of water and sanitation for all” in Mongolia and wider Asia and the Pacific region.

Water is essential to sustainable development. This is reflected in the United Nations 2030 Agenda through the presence of cross-cutting water-related challenges and issues across many of its Sustainable Development Goals. Access to water is a precondition for food production, for the development of sustainable cities, for reducing inequalities, for life on land – to name but a few. And water is addressed specifically through Sustainable Development Goal (SDG) 6 “Ensure availability and sustainable management of water and sanitation for all”.

With six main and two supportive targets, SDG 6 sets detailed goals for a series of key water-related issues: 1) equitable and safe access to drinking water, 2) equitable and safe access to sanitation, 3) improvement of water quality, 4) increase water use efficiency, 5) implementation of integrated water resource management (IWRM) including at transboundary level, 6) protection of water-related ecosystems, a) expansion of international cooperation for capacity building and b) engagement of local communities in water management.

In UNESCO, global, regional and local solutions to water challenges and issues are considered mainly within the organization’s International Hydrological Programme (IHP), an intergovernmental programme currently implementing its 8th eight-year phase (2014-2021) under the theme “Water security: Responses to Local, Regional, and Global Challenges”. IHP’s work is articulated around six major themes, three of which are directly related to SDG6:

- Theme 3: addressing water scarcity and quality
- Theme 4: water and human settlements of the future
- Theme 5: ecohydrology – engineering harmony for a sustainable world

Challenges

A total of 46 national and international experts from 13 countries representing the networks of three UNESCO intergovernmental scientific programmes IHP, MAB (Man and Biosphere Programme), IGGP (International Geoscience and Geoparks Programme) discussed over three sessions:

- Water Security in Arid Environment
- Integrated UNESCO initiatives in Water and Environment
- Mongolian perspectives on water security

The experts identified the main Mongolian needs to be addressed in the pursuit of SDG6 and its related targets as follows:

- Need to reduce the current vulnerability of drinking water supply, which is highly dependent on groundwater recharged through rivers and precipitation (SDG 6 Target 1)
- Need for customised integrated water governance in arid and semi-arid regions (SDG 6 Targets 1,2,3,4,5)
- Need for local community/multi-stakeholder participation process in water governance processes (SDG 6 Targets 1,2,3,4,b)
- Need for efficient IWRM implementation linking with local communities, potential users and ecosystems (forest and others) management to combat desertification, soil erosion and sand movement (SDG6 Targets 1,2,3,4,5,6)
- Need to raise capacity for enhanced social and institutional resilience to climate variability (drought, desertification) through further international cooperation in the field of risk identification, policy for disaster risk reduction, STI and local knowledge. (SDG6 Targets 1,2,3,4,5,6,a)
- Need to raise capacity water sector management based on science and stakeholder participation approach
- Need to improve water diplomacy with two neighbours (China and Russia) and international organizations for enhancing water security of country and implement water strategies against climate change’s negative impacts and coming water stresses

Opportunities and actions

Mongolia is an active member of IHP, MAB and IGGP. From its national committees and scientific networks and through the UNESCO Regional Sciences Bureau in Jakarta and the UNESCO Representative Office to Mongolia in Beijing, Mongolia has access to a regional and global pool of leading experts and state-of-the-art resources, tools and partners, including UNESCO’s global family of Category 2 Centres and Chairs.

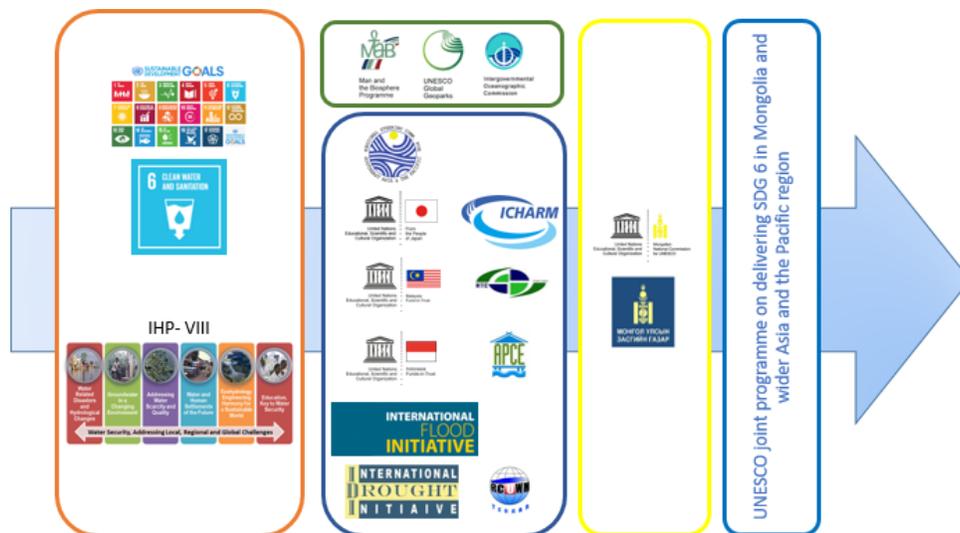


Figure 1 National and Regional mechanism for SDG 6 delivery.

Detailed discussions were held around the following three questions:

- What are the priority actions in building resilience and mitigating the negative impacts of climate change in the context of water security in arid and semi-arid regions?
- How can IWRM be strengthened including through the development of synergies with other UNESCO programmes such as MAB and IGGP?
- What are the specific needs for water education and capacity building for SDG6 delivery in Mongolia and the wider Asia-Pacific region?

Discussions resulted in the following proposed actions (details in Annex):

- Strengthen transdisciplinary capacity building in local institutions for IWRM including climate change resilience by enhancing regional collaboration with the IHP-RSC network and Category 2 water centres, chairs and initiatives such as the International Flood Initiative (IFI) and the International Drought Initiative (IDI) with enhanced data access and sharing.
- Strengthen specific capacity for groundwater monitoring and management through enhanced data access and sharing, regional collaboration through the IHP-RSC network, Category 2 water centres, UNESCO Chairs, IDI, G-WADI and establish collaboration with IGRAC and Asia-Pacific Geoparks Network (APGN), a network of geologists.
- Strengthen transdisciplinary capacity for multi-stakeholder water governance and science based policy making in UNESCO Biosphere Reserves (BR) and river basins by recognising ecosystem sustainability and adaptability.
- Strengthen transdisciplinary capacity for implementation of BR through enhanced regional collaboration with the Asia-Pacific Biosphere Reserves network (APBRnet) through the East-Asia Biosphere Reserves network (EABRN), and promote BRs as model for river basin sustainable development where relevant.
- Build/Strengthen transdisciplinary capacity for UNESCO Global Geopark establishment in Mongolia through enhanced regional collaboration with APGN and promote geoparks as model for river basins sustainable development where relevant.
- Initiate groundwater recharge program for drinking water supply and economic water security areas based on international and bilateral cooperation and collaboration with UNESCO network organizations.
- Promote wastewater reuse and eco-sanitation in the cities especially in groundwater recharge zones and lakes.
- Increase supports from UNESCO to implementation of UNESCO programmes in Mongolia.

The participants also took note of the Mongolian UNDAF 2017-2021 and its three broad collective results:

- (1) promoting inclusive growth and sustainable management of natural resources;
- (2) enhancing social protection and utilization of quality and equitable social services, and
- (3) fostering voice and strengthening accountability.

In particular, the importance of water was stressed for attaining these goals and the specific water-related targets and indicators included in particular under result 2.

ANNEX:

Dialogue and Group Discussions

Discussion Group1

Discussion Topic

What are the priority actions in building resilience and mitigating negative impacts of climate change in the context of water security in arid and semi-arid regions?

Participants: Takeuchi, Takara, Nyamdavaa, G.Davaa Tabios, Purevdorj, Batjargal, Looser, Adiyasuren, Jamieson (5 MNG, 2 JPN, 1 NZ, 1 PHL, 1 GER)

Preliminary discussions: First the group conducted preliminary discussions to agree on several aspects necessary before identifying the priority actions in building resilience and mitigating negative impacts of climate change. The following points were agreed within the group:

- a) Policy and management decisions should be science based
- b) There is a need to make the distinction between resilience and mitigation in particular between engineering resilience (ability to recover fast) versus social-ecological context (ability to persist or adapt)
- c) The need to recognize the sustainability and adaptability of ecosystem
- d) The need to communicate clearly on the meaning of water-efficiency which implies a wise-use of water resources with a demand-driven management
- e) The need to enhance the ability to communicate briefly and clearly including negative impacts action

Actions:

- a) Proper Risk impact assessment is necessary (both in terms of water quality and quantity, including groundwater monitoring)
- b) Solutions need to be sustainable including indigenous knowledge when more appropriate than modern science
- c) Implement good information exchanges including multi-sources (like Remote Sensing, satellites, big data) and knowledge flow infrastructure
- d) Include future scenario setting or forecasting
- e) There is a need to increase women participation in high level government decision making and for community level, acknowledge women play major (dominant?) role in household decisions
- f) Need for inclusive cross-cutting transdisciplinary approach including all sectors (private, civil, public, academia)

Dialogue and Group Discussions

Discussion Group 2

Discussion Topic

“How can IWRM be strengthened including through the development of synergies with other UNESCO programmes such as MAB and IGGP?”

The Discussion Group

The group was constituted of X persons (Prof Lee, Dr Elfith, Prof Kobayashi, ...)

Summary of the Main conclusions: the discussion yielded the following actions in order to strengthen IWRM through the development of synergies with other UNESCO programmes such as MAB and IGGP:

1. Need to include IWRM approach which is inclusive and collective
2. Need to ensure Bottom-up approach
3. Need to take in account cultural aspects
4. Need for toolkits to be shared by all programmes
5. Need to raise IWRM concepts to Biosphere Reserves and Geoparks management
6. Need for paradigm shift and not work in silos and integrate all
7. Need to connect between science and policy so that science become actionable
8. Need to strengthen information sharing
9. Need for exchange of good practices, expertise in specific areas and data at local, national and regional level
10. Need for more training
11. Eco-DRR needs to be included in IWRM approach
12. Need to create common goals between IHP/IWRM and MAB, IGGP communities
13. Need for a follow-up action with proper common proposals and projects
14. Need for more active participation from the delegations
15. Need to conduct an assessment study of IWRM projects: what are the status after their implementation and need to report and share
16. Need to acknowledge water is important for everybody through a clear communication
17. All suggestions should be strengthened into a programme: “Strengthening action programme IWRM implementation in AP”
18. Use “water security” instead of IWRM as the term is more approachable for general public.

Dialogue and Group Discussions

Discussion Group 3: Needs for SDG 6 Delivery

Discussion Topic

“What are the specific needs for water education and capacity building for SDG 6 delivery in Mongolia and the wider Asia-Pacific region.”

The Discussion Group

The discussion group consisted of 12 members drawn from Mongolian Government Ministries, NGOs and from members of the RSC, half of the group were female. The group paid particular attention to the points that had been raised in the presentations during the dialogue.

Summary of the Main Conclusions

1. **Criteria for safely managed sanitation.** Sanitation is often not much discussed in polite society, yet is a critical part of the SDG 6 targets. The MDGs took prescriptive, western approaches to improved sanitation. For nomadic people and low density populations that live on low small islands such approaches are often not applicable or can even increase risks. The emphasis should be on appropriate, safely managed sanitation to improve health outcomes, suitable for nomadic and low density remote outer island populations.
2. **Assessing accurate water footprints.** Universal and equitable access to safe and affordable drinking water is a key target in SDG6. We have heard that apartment dwellers in Ulaanbaatar use between 180 to 240 L/person/day while people who live in gers either in nomadic or peri-urban areas have between 6 to 10 L/person/day. Such figures can be misleading, as ger dwellers and other rural and peri-urban populations often access water from many sources, including relatives and friends and also many use water to supply livestock. There is an urgent need for accurate assessment of the true water usage from multiple sources of peri-urban and rural communities. Some governments have taken notice of the UN’s 2010 resolution that water is a basic right and have assigned a basic quantity (such as 50 L/person/day) as a person’s free entitlement.
3. **Engaging the community.** We have heard a lot at this meeting about the fundamental importance of engaging the community in water management and indeed one of the targets of SDG6 is to support and strengthen the participation of local communities in improving water and sanitation management. Community engagement requires special skills, empathy and extreme sensitivity to cultural and religious nuances frequently outside of the usual curricula of water supply and sanitation engineers. Training in ways to respectfully engage communities is required to meet this SDG target.
4. **Entraining political leaders.** While not a specific SDG6 target, we have heard in this meeting the importance of having political leaders to champion water reforms and improvements. Learning from successful case studies that have successfully entrained political leadership in the water reform and improvement process will be important for meeting SDG targets.
5. **Sharing experiences.** One of the great advantages of the UNESCO IHP is that it draws together people from a wide range of cultures, races and geographic and hydrologic situations. There is a rich depth of experience and promoting the sharing of those experience, such as occurs at the RSC for SEAP meetings is a valuable tool for building capacity to meet the SDG6 targets.
6. **Multi-trans disciplinary skills.** The successful attainment of SDG 6 targets requires a broad range of disciplinary skills: engineering, science, social science, economics and many others. In truly integrated water resource management a complex set of interactive and intertwined

processes are at play. What is the most efficient way of building training programmes that acknowledge the complexity of the tasks we face and promotes an understanding and respect for other disciplines?

7. **Reliable, accessible information.** We have heard the often-repeated phrase that you can't manage what you don't know. Beyond management, community engagement requires accessible, reliable information at a level that can be appreciated by the broader community. The supply of appropriate, reliable and readily accessible information requires both training in how data is assessed as reliable and in what form it is presented.