

PROCEEDINGS OF THE

Sixth Upper Indus Basin Network Regional Strategic Committee meeting

1 November 2022 | Almaty, Kazakhstan

SECTION 1

Key messages

- The Upper Indus Basin Network (<u>UIBN</u>) country chapters are producing a breadth of knowledge in issues ranging from groundwater availability, water governance, and adaptative agricultural practices to glacier mass balance and permafrost.
- The integration of the Gender Resource Group (GRG) in the Pakistan Chapter has been pivotal for greater inclusion of gender perspectives and women leaders in practice and policymaking related to water, hazards, and socioeconomic development. This approach can be replicated in the Afghanistan, China, and India chapters.
- It is important for the UIBN to seek opportunities of collaboration with other international forums such as the Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) for larger visibility of important climate change agendas in the region, and to inspire collective action for adaptation.
- Documentation is key preparation of a consolidated progress document of the network by the secretariat is important for the network and beyond to clearly communicate the UIBN's role and impact.

SECTION 2

About the event

The sixth UIBN Regional Strategic Committee (RSC) meeting was held in hybrid mode, bringing together the chair of the network, country chapter coordinators and cocoordinators from the four riparian countries (Afghanistan, China, India, and Pakistan), advisers, a GRG representative from Pakistan, and members from the secretariat (ICIMOD).

Duman Yimamaidi, Executive Director of the Almaty subcentre of the Central Asia Ecological and Environmental Research Center under the Chinese Academy of Sciences, and Galymzhan Saparov, Director of the Kazakhstan side of the centre, participated as special invitees to the meeting on behalf of the UIBN China Chapter. The RSC was organised at the sidelines of a larger conference on cryosphere and related hazards in High Mountain Asia. A few relevant participants of the conference also attended the RSC meeting as observers. These included academics from India (Indian Institute of Technology – Bombay; Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu; University of Kashmir) and Pakistan (Karakoram International University and the Aga Khan

Agency for Habitat). Most of the UIBN participants who participated in person were invited to several high-level panels of the cryosphere conference.

During the RSC meeting, participants shared the progress and experiences of the UIBN country chapters, identified avenues for regional collaboration related to science and policy interventions, discussed relevant areas where the country chapters could potentially support their respective governments based on their core expertise and institutional memberships, and explored ways to enhance country ownership and the network's sustainability.

In the inaugural session, Naim Eqrar, UIBN Chair, commended the country chapters' continuous efforts in building knowledge on climate change issues in the Upper Indus Basin and expressed hope that the network would help government bodies in evidence-based decision making and policy formulation processes. Izabella Koziell, Deputy Director General, ICIMOD, reiterated that it would be useful to consider housing the country chapters within the relevant ministries and/or relevant government departments and making them a part of regular programmes to strengthen the network's support to the respective governments and ensuring the UIBN's sustainability.

SECTION 3

Progress and experiences of the country chapters and the GRG

The presentations by country chapters on their experiences and progress detailed the breadth of knowledge development and capacity-building initiatives taking place within the country chapters. For the Afghanistan Chapter, the highlights included five publications on issues ranging from water governance, groundwater availability, and identification of transboundary aquifers to the impact of climate change on Maidan subriver basin. Furthermore, the country chapter also presented about UIBN activities and research findings to the new leadership at the Ministry of Energy and Water and engaged students at various universities to appraise them about the research findings and future research needs.

For the China Chapter, the ongoing and published research include issues on the <u>imbalance</u> of the Asian water tower, the <u>forest change footprint of the Upper Indus Valley</u>, <u>glacier inventories in the Karakoram</u> since the 1990s, and glacier mass balance simulation in the Hunza Valley. The country chapter is also looking to study the abnormal behaviour of glaciers in Karakoram. In addition, a proposal on enhancing in-situ monitoring capacity of sample glaciers in Hunza has been submitted to the Ministry of Science and Technology.

Key highlights for the India Chapter include research on topics including <u>arsenic</u> contamination in groundwater in different geological/geo-morphological <u>terrains</u>; parametrising the permafrost of the cryosphere; the Karakoram anomaly; elevation-dependent warming; and the contribution of <u>snowmelt</u>, glacier melt, and precipitation to streams and groundwater. The India Chapter is also coordinating with key stakeholders who could later support forming a GRG for India. This would open opportunities to study the impact of climate and climate variability on local livelihoods, and how local women have modified agricultural and horticultural practices to adapt to climate change impacts. In addition, the chapter also contributed to a <u>study</u> identifying 100 crucial research

questions on climate change in the Upper Indus Basin, published in the journal *Earth's Future*.

The UIBN India and Pakistan chapters are also collaborating on a transboundary <u>study</u> conducted in India's Ladakh area and Pakistan's Baltistan region analysing linkages among climate change, water, and agriculture.

The Pakistan Chapter shared its research on precipitation, analysis of summer surface air temperature variability, assessment of glacial lake outburst flood events, and early warning. Furthermore, different technical working groups within the country chapter are collaborating for research on topics such as the projection of attribution of streamflow composition in mountain rivers in China and Pakistan. In addition, technical working groups 2 and 3 have coordinated for the glacial lake outburst flood alerts during expected heat wave and precipitation events in northern Pakistan. Another major highlight for the Pakistan Chapter was the integration of GRG members in all the six technical working groups as GRG coleads, paving an avenue for climate change issues and impacts to be considered and addressed from a gendered lens and expertise. The country chapter is also in the process of deliberating the country chapter sustainability plan. An initial draft has been shared with the members for feedback.

Ammara Farooq Malik, Pakistan GRG member, shared the group's progress and plans. Group members have contributed to the following: policy dialogues and advocacy on women's issues with various stakeholders, including at forums such as COP26; gender sensitisation of various government departments; formation of women's community organisations; research on issues such as dug well sustainability for improved livelihoods of farmers; and knowledge product development in overarching areas of climate change, economic empowerment, and entrepreneurship for women. Malik emphasised that it is crucial for the GRG to be a part of the other basin country chapters, and for the group to establish its own governing mechanism and a five-year working strategy to strengthen its impact.

SECTION 4

The UIBN's key expertise and potential collaborative interventions

During discussions where the country chapters each worked as a group, the key areas of expertise identified were research on glacier and natural hazards, hazard mapping, adaptation, and mitigation.

- The Afghanistan Chapter could potentially look into glaciers, floods, and droughts and identify and harness capacity-building needs and opportunities of the relevant stakeholders.
- The China Chapter's interventions are linked with the government's programmes in the basin. The country chapter will vouch for such future government programmes and seek grants from research institutes for UIBN research and activities within the country as well as for collaborative interventions with other county chapters.

- The India Chapter's focus will remain on strengthening the knowledge base on adaptation and mitigation, hazards and their mapping with cascading impacts, and a multisectoral basin management approach.
- The Pakistan Chapter could focus on knowledge management, communication, and translation of research findings for practice and policy, reaching out to relevant institutions and political leadership. The UIBN could initiate capacity-building interventions and training workshops on different components with a special emphasis on integrating modern technologies into practice not only at the institutional level but also reaching out to grassroots communities.

The country chapters further identified research and activities that could offer avenues of collaboration between the country chapters:

- The Afghanistan Chapter expressed keen interest to conduct joint research on water resource management issues and improving flood and drought monitoring systems. It will expand glacier monitoring systems and joint projects related to water and hydrology by strengthening the knowledge base and networking.
- The China Chapter will look into China's broader national programmes to find avenues of collaborative initiatives bilaterally and multilaterally with other country chapters.
- The India Chapter emphasised on the need for collaboration on transboundary issues, especially hazards and hydrology, which have cascading implications.
- The Pakistan Chapter highlighted the need for collaboration between the UIBN and other South Asian forums for the promotion of regional issues at global platforms (such as the UNFCCC's COP) for the benefit of the region in general and the Indus basin at large. The lessons and experience of forming the GRG in the Pakistan Chapter can help establish such groups in other country chapters and at the regional level as well.

SECTION 5

Way forward

The UIBN members committed to continue building knowledge and expanding the network's reach. As per the UIBN's governance framework, the group also discussed the upcoming rotation of its chair in 2023. Further discussions will be held with the China Chapter coordinator for their availability in taking up the position. The China Chapter representative suggested to the secretariat that a consolidated progress document of the network be shared to aid the decision on the role of UIBN chair.

The next RSC meeting was proposed to be held in the second half of 2023 as ICIMOD is in the process of restructuring.

Additional event information and materials are available at: https://www.icimod.org/event/regional-strategic-committee-meeting-of-the-upper-indus-basin-network/

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