

Afghanistan Side Event
during the
**Upper Indus Basin Network Workshop for
Enhancing Science-Based Regional Cooperation**



ICIMOD



About ICIMOD

The International Centre for Integrated Mountain Development (ICIMOD) is a regional knowledge development and learning centre serving the eight regional member countries of the Hindu Kush Himalaya (HKH) – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan – based in Kathmandu, Nepal. Globalization and climate change have an increasing influence on the stability of fragile mountain ecosystems and the livelihoods of mountain people. ICIMOD aims to assist mountain people to understand these changes, adapt to them, and make the most of new opportunities, while addressing upstream and downstream issues. ICIMOD supports regional transboundary programmes through partnerships with regional partner institutions, facilitates the exchange of experiences, and serves as a regional knowledge hub. We strengthen networking among regional and global centres of excellence. Overall, we are working to develop economically and environmentally-sound mountain ecosystems to improve the living standards of mountain populations and to sustain vital ecosystem services for the billions of people living downstream – now and in the future.



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Meeting Summary

Afghanistan is one of the riparian countries sharing the Upper Indus Basin with China, India and Pakistan. The Upper Indus Basin Network (UIB-N), which was established in Pakistan in 2014, is gearing up to expand into the other three countries, including Afghanistan. With deliberations around this scheduled at the UIB-N Workshop in Kathmandu on 24 and 25 April 2018, ICIMOD's SWaRMA initiative held a side event with delegates from Afghanistan on 23 April 2018. The objective of the side event was to introduce the principles behind UIB-N, and share research experiences related to climate change and its impact on water resources.

The key outcome of the meeting was that participants agreed that by engaging in UIB-N, Afghanistan would benefit from science based regional cooperation and joint research. It was also agreed that Afghanistan will be a part of the governance structure of Regional UIB-N and nominate experts as Technical Working Group (TWG) leads, co-leads, strategic committee members and advisors, after discussions with relevant Afghan experts and following the procedures of government of Afghanistan.

During the main Regional UIB-N event, it was agreed that the Afghanistan country office will serve as one of the UIB-N's secretariats to carry out work in Afghanistan. It was agreed that the Afghanistan Country Chapter of the UIB-N would be established with support from SWaRMA.

Relevance for Afghanistan

The UIB-N will support Afghanistan to develop an understanding of present and future water availability, demand, and hazards in the context of climate and global change by:

- Providing regional and global platforms to share knowledge, identify knowledge gaps and develop solutions on the above mentioned topics.
- Linking Afghan experts with regional and international experts for advisory services to develop solutions to specific issues.
- Enabling sharing of state of the art knowledge (articles, events and news) of the Upper Indus Basins and sub basins through interactive virtual platforms.

The Upper Indus Basin Network (UIB-N) is an informal science based research network of national and international researchers working in the upper Indus Basin.

The UIB-N mission is to promote coordination and collaboration among organizations and individuals active in research in the Upper Indus Basin for improved understanding of present and future water availability, demand, and hazards.

UIB-N also seeks to develop solutions for various stakeholders at local, national and international levels. The network comprises of members from national organizations and universities of Afghanistan, China, India, and Pakistan, ICIMOD and other international organizations and universities working in the UIB.



Background

Strengthening Water Resources Management in Afghanistan (SWaRMA) aims to enhance Afghanistan's regional engagement with its HKH neighbors for management and development of water resources of importance for Afghanistan's overall development. Preliminary assessments indicate a need to strengthen knowledge and fill critical information gaps through regular dialogue and interactions with neighbouring countries and international agencies for better understanding and management of water resources.

Afghanistan is one of the riparian countries sharing the Upper Indus Basin with China, India and Pakistan. The Upper Indus Basin Network, which was established in Pakistan in 2014, is gearing up to expand into the other three countries, including Afghanistan. With deliberations around this scheduled at the Upper Indus Basin Network (UIB-N) Workshop at ICIMOD in Kathmandu on 24 and 25 April 2018, ICIMOD's SWaRMA initiative held a side event with delegates from Afghanistan on 23 April 2018. The objective of the side event was to introduce the principles behind UIB-N, and share research experiences related to climate change and its impact on water resources. The meeting also presented UIB-N as a means to increase opportunities for science based collaboration with riparian countries sharing UIB waters. SWaRMA is a capacity enhancement initiative for co-creating knowledge and providing co-learning opportunities in Afghanistan, supported by the Governments of Afghanistan and Australia, and CSIRO.

The Afghanistan side event included a field visit to ICIMOD's Godavari Knowledge Park to demonstrate mountain technologies used in project sites.

Delegates from Afghanistan representing Ministry of Energy and Water (MEW), Ministry of Foreign Affairs (MoFA), and Afghanistan National Disaster Management Authority (ANDMA), and CSIRO from Australia, participated in the side event.



The Meeting

Opening Session

In his welcome remarks, **Dr David Molden**, Director General of ICIMOD said that the purpose of the special side event was to understand the UIB-N better and to discuss how Afghanistan can contribute to the UIB-N in generating and sharing knowledge on mountains, water, and climate change. He also highlighted the importance of the event in enhancing science based regional collaboration and shared benefits among the four riparian countries of Upper Indus Basin.

In his address, **Ezatullah Siddiqui**, Advisor to ANDMA said the World Disaster Report 2016-2017 ranks Afghanistan as the 15th most vulnerable country on environmental issues like climate change, floods, droughts, extended dry spells since 2015, and limited water resources. He said that this could be a good opportunity to integrate UIB-N with SWaRMA to gain experience, enhance expertise, enhance the database on water resources, generate and share information, and build capacity of Afghan professionals.

Dr Arun B Shrestha, Regional Programme Manager, River Basins and Cryosphere Programme, ICIMOD spoke of the relevance of UIB-N for Afghanistan. The River Basins and Cryosphere Programme at ICIMOD seeks to manage water resources and disaster risk reduction through science and research. It pays due attention to gender response and capacity building with past and future climatic trends in mind. The programme studies climate variability in the HKH, the state of the cryosphere and changes over time, and impacts of these changes on future water availability. The Indus Basin Initiative is one of six in ICIMOD's River Basins and Cryosphere Programme that has been involved in the UIB-N and has contributed to it since its establishment. It is supported by the Australian Government's Sustainable Development Investment Portfolio (SDIP) of the Department of Foreign Affairs and Trade (DFAT).

Dr Carmel Pollino, CSIRO, provided an overview of the working area, and CSIRO's engagement in Afghanistan. She highlighted collaboration with ICIMOD in the SWaRMA project to evaluate a range of possible water-related development pathways. These can include analysis of data at a basin scale, basin level modelling, scenario analysis using global data set, tool box development for understanding of water resources, simplifying water resource planning, and scenario development for decision support.

Dr Neera Shrestha Pradhan, Programme Coordinator, SWaRMA, introduced SWaRMA as a two-year project aimed at co-creating learning opportunities to strengthen water resources management in Afghanistan. It is supported by the Government of Afghanistan and Government of Australia and implemented through ICIMOD in collaboration with the Commonwealth Scientific and Industrial Research Organisation (CSIRO), and relevant government organizations in Afghanistan. The project aims to strengthen Afghan capacity for water resources management by assessing water resources, developing and



using water information systems, enhancing capacity for water management planning, and boosting Afghanistan's regional engagement with its HKH neighbors. She also mentioned ICIMOD's previous engagements in Afghanistan and partnerships with the Government of Afghanistan including the Ministry of Energy and Water (MEW), Ministry of Agriculture, Irrigation and Livestock (MAIL), and Ministry of Foreign Affairs (MoFA).

SWaRMA was launched at an inception workshop from 9 to 11 March 2018 in New Delhi, India with support from the Government of Australia. The workshop brought together major stakeholders working on water resources management in Afghanistan to share and discuss the project concept, and develop it into a project document for implementation. In addition, the workshop helped raise awareness, develop a common understanding, secured commitment, and created a sense of ownership among different partners and stakeholders.

Participant Expectations

1. To get information about the UIB-N and contribute to the network.
1. To value the activities of various organizations and institutions in the Indus Basin
2. To exchange knowledge and experience to strengthen existing knowledge systems.
3. To solve scientific matters jointly and value the activities of the network.
4. To focus special attention on Afghanistan and to seek support of experts who are working in similar contexts and on issues related to water resources and energy for enhancing capacities of Afghan professionals.
5. To make senior Afghan policymakers aware that science based research is important for Afghanistan.
6. Contribute to the network through science experience.
7. To benefit from information and data sharing.

Understanding UIB Network:

Dr Arun B Shrestha introduced the UIB Network and the existing governance structure including the Chair, Strategic Committee members, six technical working groups, advisors as well as major activities and events organized.

He also highlighted the ten key questions that UIB-N seeks to address:

1. What were the climatic trends and variabilities in the basin in the past, and what will they be like in the future?
2. What is the state of various cryosphere components (glacier, snow, permafrost), how are they are changing with time, and how are they likely to change in the future under climate change?
3. How can the present observation system be strengthened to address questions that have been asked in the past?
4. How to enhance the effectiveness of data collection, quality control and dissemination at the national and regional levels?
5. How will climate change and cryosphere dynamics impact water availability in the future?
6. What will be the water demand scenario of the future?
7. How can supply-demand gaps be addressed?
8. What are the most suitable and sustainable development options for the upstream part of the basin?
9. What are the natural hazard hotspots, and how is vulnerability changing?
10. What could be the impact of cryosphere changes on the ecosystem?

Discussion and Consensus Building Session

Participants agreed that by engaging in UIB-N, Afghanistan would enhance science based regional cooperation, and benefit from opportunities to conduct joint research. The outcomes of the deliberations in the Discussion and Consensus Building session were:

- Afghan participants agreed to actively contribute to the UIB-N through UIBN-Afghanistan Chapter, which includes the Strategic Committee (SC), and Technical Working Groups (TWG), with clear roles and responsibilities of respective committees and groups, after due deliberations with relevant Afghan experts and as per Government of Afghanistan procedures.
- Participants recognized opportunities in as well as challenges to collaboration among UIB riparian countries.

Closing Session

In closing, Dr Arun Shrestha summarized key action points:

1. UIB-N will be useful for Afghanistan, and representatives look forward to contributing positively.
2. There is an opportunity to conduct joint research among regional countries sharing Upper Indus waters.
3. Members in a UIB-N governance structure will be nominated in accordance to official procedure and following discussions with Afghan experts.
4. SWaRMA will request the focal ministry in Afghanistan to nominate members as UIB-N SC, advisors, and TWG leads.



Muhammad Hassan Faizee, Deputy Director General for Security Cooperation and Border Affairs, MoFA appreciated the meeting for providing insights into the structure and functioning of UIB-N, establishing understanding on current status, and indicating the way forward. He supported the idea of Afghanistan representation on the UIB-N governing body, and to inform SWaRMA about representatives identified for the governance body following a focal point meeting in Afghanistan. He also said that the discussions reinforced coherence and meaningful energy for mutual cooperation. He highlighted the need for joint studies and research in order to understand issues and challenges as a whole. He ended by saying that Afghanistan seeks opportunities to share available water resources data, and so the UIB-N can link Afghanistan with other countries sharing common interests and benefits.



Dr David Molden said that UIB-N is a science based platform for moving forward and for building trust. ICIMOD is very supportive of cooperation and facilitates dialogues and interactions regularly. He also indicated that the Himalayan University Consortium (HUC) presents opportunities for collaboration between universities.

Dr Neera Shrestha Pradhan thanked the Afghanistan delegation of and other participants and concluded that the SWaRMA project and its engagement in UIB network will be a valuable and promising platform to learn from each other's experiences.



Annexes

Annex I: Workshop Agenda

Time	Programme	Facilitator
9:00–9:15	Arrival and registration of the participants - SWaRMA Programme Associate	Indu Chitrakar
Opening session 9:15–10:15	<ol style="list-style-type: none"> 1. Welcome remarks by <i>Dr David Molden</i>, DG 1. Remarks by Representative from the Government of Afghanistan 2. Participants' introduction and expectations 1. Introduction of River Basin and Cryosphere Programme at ICIMOD and rationale of UIB network by <i>Dr Arun B Shrestha</i> 1. CSIRO's engagement in Afghanistan by <i>Dr Carmel Pollino</i> 1. SWaRMA – Strengthening Water Resources Management in Afghanistan and significance of Afghanistan's engagement in UIB Network by <i>Dr Neera Shrestha Pradhan</i> 	Arun Shrestha
10:15–10:45	Group photo and Tea/Coffee Break	
Understanding UIB Network: 10:45–12:30	<ol style="list-style-type: none"> 1. Presentation and facilitation by <i>Dr Arun B Shrestha</i>; supported by Mr Madhav Dhakal <ul style="list-style-type: none"> • UIB network in the context of Hindu Kush Himalaya • Strategic Committee (SC) • Technical Working Groups (TWG) • Major activities and events organized • Existing governance structure 2. Discussions and consensus building: <ul style="list-style-type: none"> • Members of SC and their roles & responsibilities • Members of TWG and their roles & responsibilities • TWG leads and co-leads 3. Opportunities and challenges of collaboration for UIB in the basin, and between neighbouring countries like Afghanistan and Pakistan etc. 	Neera Shrestha Pradhan
Closing Session 12: 30–13: 00	<ul style="list-style-type: none"> • Action points and way forward by <i>Dr Arun B Shrestha</i>, ICIMOD • Remarks by Representative from the Government of Afghanistan • Remarks from ICIMOD • Vote of Thanks by <i>Dr Neera Shrestha Pradhan</i>, ICIMOD 	Arun Shrestha
13:00–14:00	Lunch	
Afternoon	Visit to Godavari Knowledge Park http://www.icimod.org/?q=1634	

Rapporteur: *Mr Madhav Dhakal*, Associate Hydrologist, ICIMOD

Annex II: Workshop Participants

S.N	Names	Organization	Designation	Email ID
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14	Indu Chitrakar	ICIMOD	Program Associate, SWaRMA	indu.chitrakar@icimod.org
15	Smita Ghimire	ICIMOD	SSA, Knowledge Management and Programme Support	smita.ghimire@icimod.org

Annex III: Post Assessment

Post Assessment of the Upper Indus Basin Network – Afghanistan Side Event for Enhancing Science based Regional Cooperation

Four government officials from Afghanistan participated in this workshop and three of them provided their feedback.

Most of them said that workshop met their expectations. The workshop was relevant to the context and needs of the participants. The participants found the location of the workshop, timing and facilities satisfactory. However, their travel route (Kabul-Kathmandu-Kabul) was very challenging.

The most relevant science knowledge sessions were, a) Flood Modeling in the Upper Indus Basin – Challenges and limitations, and b) Activities of Hazards and Risks working group. Scientific Knowledge sharing sessions were important and they got intermediate (in between basic and advanced) level knowledge from the presentations of the six technical working groups of UIBN.

Overall, they found the technical and governance sessions informative and valuable. They would highly recommend others to attend such workshops in the future.



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