

Key messages and recommendations from the Meghna Knowledge Forum 2021



“Dependency and Co-existence”
First Prize, Meghna Photo Competition 2021
Kazi Zenifar Azmiri, Bangladesh

1. Meghna Knowledge Forum 2021

From 22 to 24 June 2021, IUCN and partners facilitated the Meghna Knowledge Forum (MKF), the first knowledge forum on the Meghna basin. The theme of the virtual scientific symposium was “Strengthening the science-policy interface for integrated basin management.” MKF provided a learning exchange platform for a range of aspects linked to transboundary cooperation, including culture, economy, inland navigation, climate change, community inclusion and youth engagement.

MKF was a collaborative effort – with 17 co-conveners, and more than 40 speakers from high-level government institutions, academic community, civil society organisations (CSOs), the private sector, including youth leaders working on water governance issues in the Meghna basin.

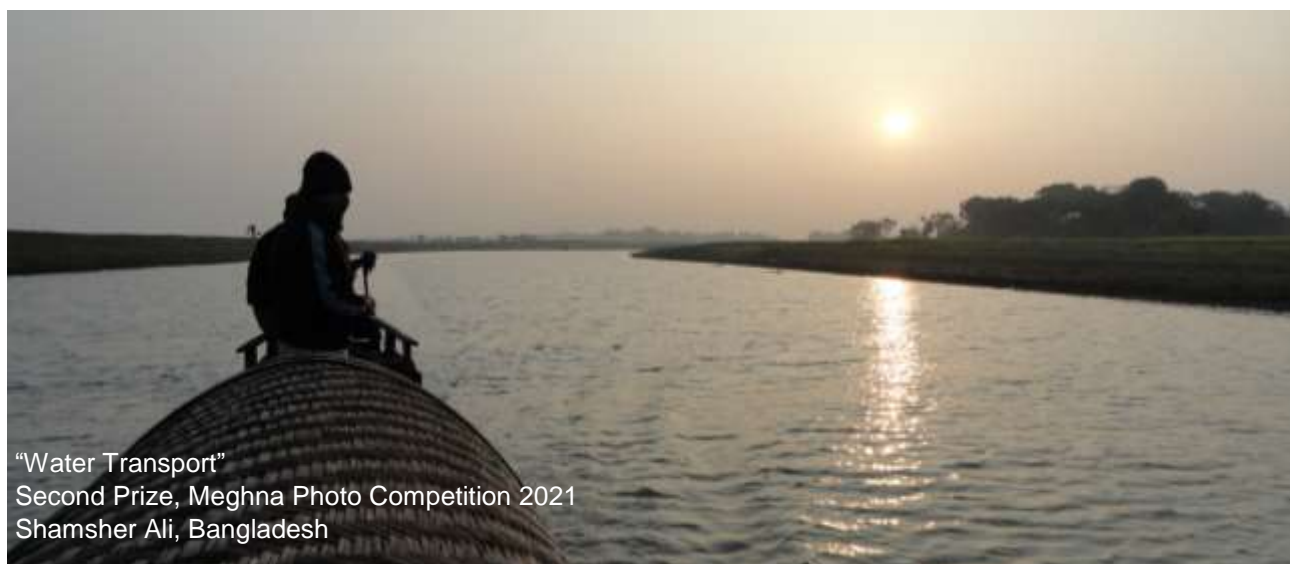
Each day, more than 100 participants attended the forum with more than half of the participants coming from Bangladesh and India.

The three-day forum was organised into ten sessions with high-level inaugural and valedictory remarks, thematic plenaries and side events:

- The inaugural and valedictory speeches were presented by parliamentarians, as well as officials from the Ministries of Water, Planning and Environment from India and Bangladesh;
- The thematic plenaries highlighted the Meghna basin’s geophysical and cultural diversity, as well as its socio-economic challenges and governance issues.

- Side events, led by partner organisations, explored a) data and information on climate change impacts; b) private sector engagement for inclusive cross-border navigation and trade; c) youth awareness of the river; and d) how to operationalise multi-level cooperation for equitable benefit sharing in the Meghna river basin.

IUCN also initiated the Meghna Photo Competition to highlight the socio-ecological richness of the basin. More than 70 photos were submitted by professional and amateur photographers from Bangladesh and India. The three winning photos are highlighted in this document.



“Water Transport”
Second Prize, Meghna Photo Competition 2021
Shamsher Ali, Bangladesh

“The population of the Barak valley has increased more than three times in the last 30-40 years, this has put pressure on the natural resource and its sustainable utilization. Thus, it is important to lay down guidelines on how to live in harmony with nature.”

Dr. Rajdeep Roy

Member of Parliament, India, Silchar, Assam, India

“The focus of MKF 2021 on livelihoods and biodiversity enhancement is aligned to the governments’ agenda and directly contributes to the bilateral efforts made by the two governments towards the holistic management of the basin.”

Mr. Kabir Bin Anwar

Senior Secretary, Ministry of Water Resources, Government of Bangladesh

“There is no alternative to cooperation, and by working together, Bangladesh and India can make the Meghna river basin one of the most vibrant regions of South Asia.”

Mr. M. A. Mannan

Minister of Planning, Government of Bangladesh

“Our agriculture and livelihoods strategy are less carbon intensive, and yet it is not getting the attention of the State. We need government support in continuing our traditional occupation and lifestyle.”

Ms. Hiramon Talang

Indigenous Khasi Community Member and Rights Activist, Sylhet, Bangladesh

2. Key messages and recommendations

Participants and speakers shared several key messages around the need to move from cooperation from solving issues to cooperation for enhancing joint benefits. They emphasised that cooperation on the Meghna should lead to the equitable sharing of the benefits from the basin. This should be done in accordance with people's rights, culture, and the principles of environmental conservation.

A number of specific recommendations were identified and are presented below.

2.1 The Meghna river basin - A cultural and natural heritage

The Meghna basin, shared by Bangladesh and India, covers 64,947 square km with 33% in Bangladesh and 66% in India (CEGIS & NEHU 2019). It is one of the last free-flowing rivers in Asia.

It is estimated that more than 50 million people in Bangladesh and India depend on the ecosystem services provided by the basin through the provision of water, forestry, agriculture, and fisheries among other services.

More than 90% of the forests of the basin are located in India, and these forests are the source of many transboundary rivers of the Meghna basin, such as the Umngot (Piyain), Simsang (Someshwari), and Barak, flowing into Bangladesh. It is estimated that the Meghna basin contributes 14% of the total water flow in Bangladesh. The Meghna basin includes the extensive, dynamic wetlands, known as *haors* in Bangladesh, which provide food and water management at scale.

The Meghna river basin hosts a remarkably rich cultural and natural heritage.

Special features of Meghna are the presence of many different indigenous forest-dependent communities such as the Chakpa, Garo, Jaintia, and Khasi, and the fishermen and farmers depending on the extensive *haors* of the Sylhet region in Bangladesh.

The Meghalaya plateau and hills of Assam, Manipur, and Nagaland are parts of the eastern Himalayan biodiversity hotspot and are also the source of the Barak River, well known for its rich

aquatic biodiversity, including the endangered Ganges river dolphin and more than 100 reported species of fish. Eight of the 16 key biodiversity areas (KBAs) of Bangladesh are located in the Meghna basin. More than 260 species of fish species have been identified in the 373 *haors* (wetlands) in Bangladesh.

The Indian part of the basin is particularly rich in plant diversity, with more than 1,200 endemic plant species, including several endangered medicinal plant species such as *Rouvlfia serpentaria* (IUCN 2018).

The basin includes a number of protected areas of high conservation value, including the Nokrek Biosphere Reserve in Meghalaya India, which is a haven for biodiversity. The basin also includes Ramsar sites, or wetlands of international importance - the Tanguar haor.

2.2 Data and research – the foundation for cooperation

Participants emphasised that cooperation based on sound scientific data is essential. The Meghna is the least explored basin among the Ganges-Brahmaputra-Meghna (GBM) rivers. The MKF echoed the need for data, and evidence on the ecosystem status, e-flows, water quality and impacts of development and climate change in the Meghna basin.

Data on river water level and river discharge for flood forecasting are currently collected in 15 locations within the basin.

In recent years, there has been an increase in industrial activity in the basin, particularly mining, cement production industries, and large-scale rubber and tea plantation.

Recent reports from local communities citing changes in the colour of the Umngot river, and the death of a large number of fishes led to an investigation by the Meghna Investigative Division of Central Water Commission, India. The results revealed high concentrations of nickel pollution in the river.

Climate change impacts, including flash floods and landslides, irregular rainfall and temperature increase are occurring in the Meghna Basin, affecting the productivity of agriculture, forestry, fisheries, and the navigation sector. Under an increased precipitation scenario, there will be increased soil erosion, affecting forestry and fisheries' livelihoods in both Bangladesh and India.

Research by the Assam University, India, indicates that more than 50% of the basin is experiencing increasing temperature trends and that Meghalaya is the most impacted region, suffering from water scarcity in the dry season. Meghalaya contributes 31.6 billion cubic meters of water to the *haor* areas of Bangladesh, therefore the two regions need to cooperate to manage the impacts of climate change (MBDA, India).

Research on land use rights indicates potential conflicts and impacts on the basin's Indigenous communities. In Bangladesh, the forest areas traditionally managed by the indigenous Khasi communities were brought under intensive forest management, such as social forestry, by the national government, through the creation of forest reserves and ecological parks.

This was done without the involvement of indigenous communities, such as the Khasi, who have been effectively managing the land for generations.

There is a need to conduct a thorough analysis of the effectiveness of biodiversity and resource management strategies employed by indigenous communities and recognise their benefits to overall conservation goals.

In Meghalaya and Manipur, although the land rights of the indigenous people are protected by the constitution, the traditional shifting cultivation cycle is becoming unsustainable, due to reduced cycle time, from 15 years to 3-4 years, and increasing population pressure. This has implications for long-term livelihoods and food security and also contributes to forest and soil degradation.

Considering the existing data and research, MKF participants suggested the following priority actions:

- Bangladesh and India should sign sub-basin bilateral agreements on transboundary tributaries such as the Umngot river (also known as the Dawki or Piyain), establishing joint research teams and water quality monitoring stations near the borders. This sub-basin approach will build trust between the government agencies and residents of the two countries, opening opportunities for benefit-sharing and cooperation in other sectors and stakeholder groups. The priority

research themes should include water quality parameters, climate change vulnerability, and the linkages between land use changes and impacts on flood vulnerabilities and food security.

- The forum highlighted the need for a comparative analysis of the social forestry, versus traditional resource management strategies practiced by indigenous communities.
- There is a need to identify climate-resilient forest and land-use management strategies, and opportunities to diversify local livelihoods by strengthening market linkages for natural products.

2.3 Governance of the Meghna basin – from a joint vision toward institution building

The Meghna basin hosts a number of institutions with varying priorities, working at the regional, national, and sub-national levels. At the regional level, the Joint River Commission provides a platform for water dialogue between the two countries. Recently, the Joint Consultative Committee (JCC), established under the 2011 Framework Agreement on Cooperation between Bangladesh and India,¹ has become increasingly important. The JCC provides a platform for the central ministries responsible for external/foreign affairs, water, forest, and trade to discuss transboundary cooperation for the management of shared river basins. The JCC mandate looks at water resources, hydropower potential and ecosystems, connectivity and trade, and economic cooperation.

At the sub-basin level, India has established the Meghna Investigation Division, under the CWC. Bangladesh has created a specialised agency, the Department of Haor and Wetland Development, for the implementation of the Haor Management Plan. However, there is no platform for dialogue between the sub-basin institutions to discuss transboundary issues.

Participants provided recommendations to strengthen the basin-wide governance in the Meghna:

¹ [2011 Framework Agreement on Cooperation](#)



“Lives through the flow”
Third Prize, Meghna Photo Competition 2021
Pranab Goswami, India

- There is a need for a basin-level vision to ensure sustainable management and development, integrating the aspirations of policy, institutions, and people working at multiple levels. This joint vision should start with a joint diagnostic, supported by research. This will guide and support the harmonisation of the two government’s agendas for ecology, economy and community-based management. The joint vision and diagnostic analysis of the basin could be facilitated by informal dialogue mechanisms such as the Meghna Advisory Group² and then feed more formal governance processes in each country.
- The joint vision could support the development of a river basin institution to strengthen multi-level cooperation for IWRM in the basin. Article 6 of the 2011 Framework Agreement for Cooperation between Bangladesh and India provides a mandate for the two countries to work together to preserve the ecosystems of the shared river basin. This could provide an entry point for the dialogue to create a Meghna River Basin Organization or a Meghna basin-specific dialogue platform.

² [First meeting of Meghna Advisory Group \(Report\)](#)

- Local governance arrangements, indigenous land rights, and people-to-people cooperation should be encouraged on specific issues linked to navigation, trade and natural resources, to solve transboundary issues such as silting and flood management. This can help demonstrate innovative ways of approaching cross-border governance.
- Youth can be key players in river conservation³. It is important to design a youth awareness programme on river issues and promote the narrative that rivers are living entities and have limited carrying capacity.

2.4 Operationalising cooperation – building on nature for mutual benefits

The development of robust, multi-level and comprehensive transboundary cooperation in the Meghna basin is a long process, however, the MKF discussion identified several areas for immediate cooperation.

³ [The River Game: Connecting Children and Youth to River through Edutainment](#)

“Article 6 of Framework Agreement for Cooperation (2011) between Bangladesh and India mandates the two countries to work together for the preservation of ecosystem of the shared rivers. This provides an entry point for strengthening the discourse on the formation of Meghna Basin Organization.”

Mr. Malik Fida A Khan

Executive Director, Center for Environmental and Geographic Information Services, Bangladesh

“We need to engage small businesses and traders to ensure benefits of cross-border connectivity trickles down to the communities. The private sector can provide support by creating infrastructure to facilitate the participation of small traders and boat owners.”

Mr. Biswajit Chakrabarty

Director FICCI, North-East Advisory Council & Assam State

The forum highlighted transboundary trade opportunities for several products including Indian betel nuts, oranges, golden honey, and organic turmeric through navigation routes and trading posts in the border areas (border hats), to Bangladesh, where these are in great demand. Poor connectivity and market linkages for agricultural and forest-based products, and a low level of local capacity to develop value-added products are hindering the development of sustainable economic models for these products. In addition, policies rarely recognize these opportunities and often overlook the role of Indigenous communities and traditional knowledge in these processes. For example, the betel plantations, traditionally practiced by the Khasi are being removed to make space for rubber and tea plantations in Bangladesh. In addition, hilsa fisheries, formerly important and revered by the local indigenous communities in India are now declining; stakeholders mentioned the need for studies investigating migratory routes and various threats to hilsa fish in the Meghna river basin, to understand the cause of its decline in India.

The Meghna basin provides a range of ecosystem services, and the majority of its population is dependent on the primary sector (forest, agriculture and fisheries) to sustain their livelihoods. Examples of traditional resource management strategies supported by the local government, include the creation of mahseer and hilsa fish sanctuaries, in India and Bangladesh respectively, to conserve the breeding sites of these economically important species. The degradation of ecosystems leads to transboundary economic loss, decreased livelihood opportunities, limited regional ecotourism options and water-related risks.

- The forum stressed the need to revive traditional river navigation routes for cross-border trade and the harmonisation of navigation rules that allow for direct engagement of women entrepreneurs and small vessel owners. To provide incentive for the development of inclusive cross-border inland navigation, the policies and guidelines must facilitate the engagement of small-scale producers and vessel owners. Opening cross-border trade through smaller river channels could start on a small scale, from one town to another. A study should be conducted to observe the benefits of trade for local communities and its impact on local agriculture.
- A Meghna cooperation strategy for the coordinated management and restoration of forest and wetlands, as Nature-based Solutions, would address some of the most pressing challenges in the basin, including silt management, food security and climate change adaptation. It was mentioned that land-use changes and deforestation are contributing to increased siltation, affecting navigation in Barak-Kushiyara River and wetland management in the haor areas of Bangladesh. The two countries should develop a long-term vision and strategy for the afforestation in the basin to reduce siltation.
- Promoting transboundary trade in the basin would provide an opportunity to create new women entrepreneurs and improve their economic and social conditions, especially for matrilineal indigenous communities living along the border.

3. Looking forward – implementing the recommendations from MKF

The Meghna Knowledge forum provided a set of key recommendations that will serve as the basis for a series of dialogues at the basin and national levels. The key recommendations will be shared with stakeholders at the national level for refinement and discussions on implementation. The Meghna Advisory Group, facilitated by IUCN, can act as an informal dialogue platform, before bringing detailed proposals to the government at all levels.

Priority actions include the strengthening of research on water management and land use, the development of a joint vision for the basin which builds on the principles of equitable benefit-sharing, and the implementation of ecosystem restoration programmes, to provide Nature-based Solutions.

A priority for IUCN and partners will be to support the governments and stakeholders in attracting funding and investments for the climate resilient management of the basin and to support the implementation of existing frameworks. In particular, IUCN and partners have developed a proposal for a Global Environment Fund (GEF) International Water that has been endorsed by Bangladesh and is under consideration from India. This project would provide additional support to governments to operationalize their cooperation framework and implement the recommendations from this forum.

Additionally, MKF participants highlighted the need to showcase the Meghna on the international stage via several global platforms linked to water, including UNFCCC COPs, CBD COPs, Ramsar COPs, the World Water Forum and others.

Click [HERE](#) to browse through the ten graphic posters from each session, capturing key messages from more than 40 speakers who participated in MKF 2021.

4. Summary of Media Coverage

[MKF lays the foundation for a multi-stakeholder platform in the Barak-Meghna river basin](#)

North East Now

[Bangladesh, India urged to cooperate on Meghna River basin](#)

Dhaka Tribune

[Boost cooperation for ecosystem services in Meghna basin: A dialogue urges building trust between stakeholders across BD-India border](#)

The Daily Observer

[Huge potential, yet Meghna basin gets little attention: Experts](#)

The Business Standard

[Trade potentials on Meghna basin river routes mostly unused: Stakeholders](#)

The Business Standard

[Short-haul trade through trans-boundary waterways to benefit local livelihoods in Northeast: Experts](#)

North East Now

[Threats to Meghna river basin ecosystem: A wake-up call for Bangladesh, India](#)

The Financial Express

[Integrated management can ensure vast livelihood chances in Meghna basin](#)

The Business Standard

YouTube links

Reporting by Channel I, MKF Media partner

[MKF inaugural news](#)

[MKF valedictory news from 25:18 to 27:28](#)

IUCN Asia YouTube

[The River Game: Connecting Youth with River](#)

6. Donors and Partners

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