
MULTI-COUNTRY STAKEHOLDER DIALOGUE TO UNDERSTAND ISSUES OF COMMON INTEREST FOR IMPROVED BRAHMAPUTRA BASIN MANAGEMENT

Workshop Report



**The Transnational Policy Dialogue for
Improved Water Governance of
the Brahmaputra Basin: Phase II**

23RD MAY 2015

Hotel Bengal Inn, Gulshan, Dhaka, Bangladesh

PROGRAMME SCHEDULE

Time	Agenda	Panelists
10:00 am – 10:15 am	Registration	Students – BUET
10:00 am – 10:15 am	Welcome address & Opening remarks and purpose of the workshop	Mashfiqush Salehin
10:15 am – 10:30 am	Background of the Project: BD – I & BD - II	Anamika Barua
10:45 am – 11:00 am	<i>Tea Break</i>	
11:00 am – 12:00 pm	<p>Roundtable Chair 1: Jabin Jacob Theme: Identifying & understanding the key issues of conflicts between the riparian countries <u>Key Questions</u></p> <ol style="list-style-type: none"> 1. What are the key issues of conflict for the River Brahmaputra between the riparian countries using a hydro-political approach? 	
12:00 pm – 13:00 pm	<ol style="list-style-type: none"> 2. What are the underlying political and technical processes which shape the relations across actors positioned differently in terms of knowledge, power and values in the basin? 	
13:00 pm – 13:15 pm	Summing up the session	Chair
13:15 pm – 14:15 pm	<i>Lunch</i>	
14:15 am – 15:15 pm	<p>Roundtable Chair 2: Jabin Jacob Theme: Identifying the possible pathways of cooperation <u>Key Questions</u></p> <ol style="list-style-type: none"> 1. How and what are the possible institutional arrangements that can bring improved cooperation among the riparian countries? 	
15:15 pm – 16:15 pm	<ol style="list-style-type: none"> 2. What is the appropriate roadmap for implementing the practical institutional arrangement? 	
16:15 pm – 16:30 pm	Summing up the session	Chair
16:30 pm – 16:45 pm	<i>Tea break</i>	
16:45 pm – 17:00 pm	Way forward/ Vote of thanks and close	Poulomi Banerjee

Participants List

Sr.	Name	Designation- Department
1	Mr. A K Mitra	Former Secretary Water Resources, Govt. of Assam
3	Mr. Likar Angu	Chief Engineer, WRD, Arunachal Pradesh
4	Mr. Jabin T. Jacob	Assistant Director & Fellow, Institute of Chinese Studies (ICS), New Delhi
5	Dr. Yan FENG	Professor Asian International Rivers Center (AIRC), Yunnan University, Kunming, China
6	Ms. Wang Wenling	Asian International Rivers Center (AIRC), Yunnan University, Kunming, China
7	Mr. TENZIN KINLY	Royal Society for Preservation of Nature - former Forest Department, Bhutan
8	Dr. Anamika Barua	Executive Director, SaciWATERS, Hyderabad
9	Dr. Poulomi Banerjee	Senior Fellow, SaciWATERS, Hyderabad
10	Mr. Sumit Vij	Research Fellow, SaciWATERS, Hyderabad
11	Prof. Mohammad Rezaur Rahman	Professor Institute of Water and Flood Management (IWFM) Bangladesh University of Engineering and Technology (BUET), Dhaka
12	Mr. Md. Sarafat Hossain Khan	Additional Chief Engineer & Project Director, PMU, CEIP-I, Bangladesh Water Development Board (BWDB)
13	Mr. Jati Das Kundu	Additional Director General (Planning) Bangladesh Water Development Board (BWDB)
14	Mr. Mir Sajjad Hossain	Member Joint Rivers Commission Bangladesh
15	Mr. Saiful Alam	Director (Planning) Water Resources Planning Organization (WARPO) Dhaka
16	Prof. Dr. M. Monowar Hossain	Executive Director Institute of Water Modelling (IWM), Dhaka (Trust of Ministry of Water Resources)
17	Mr. Abu Saleh Khan	Deputy Executive Director (Operation) Institute of Water Modelling (IWM) (Trust of Ministry of Water Resources)
18	Dr. Maminul Haque Sarker	Deputy Executive Director (Development) CEGIS, Dhaka (Trust of Ministry of Water Resources)
19	Mr. Mantu Kumar Biswas	Joint Chief, Planning Wing Ministry of Water Resources (MoWR) Government of Bangladesh
20	Prof. Mashfiqus Salehin	Professor Institute of Water and Flood Management (IWFM) Bangladesh University of Engineering and Technology (BUET), Dhaka
21	Dr. Md. Aminul Haque	PSO (In Charge), Socio Economic Section, WARPO
22	Ms. Priyanka Chaturvedi	
23		The Asia Foundation
24	Mr. Anwar Hussain	Dept. of Sociology, University of Dhaka
25	Mr. Moshiru Rehman	Government Engg. Department, Dhaka
26	Mr. Mohd Ikramullah	Min of Water Resources, Bangladesh

Background:

Towards effective management of Brahmaputra river basin an international dialogue involving co-riparian of China, Bhutan, India and Bangladesh was organized in Dhaka, Bangladesh on 23rd May 2015. The workshop is a part of series of dialogue that has been initiated in 2013 with the support from The Asia Foundation and facilitated by South Asia Consortium for Integrated Water Resources Management Studies (SaciWATERS) in partnership with Bangladesh University of Engineering and Technology (BUET), Bangladesh and Indian Institute of Technology-Guwahati (IIT-G), India. *The purpose of this workshop is to understand the key challenges and opportunities across co-riparian countries positioned differently in terms of knowledge, power and development initiatives.* The dialogue took place at a multitrack track (2+3) diplomatic mode being bringing in bureaucrats and technocrats from India (Assam, Arunachal Pradesh), Bangladesh, Bhutan and China. The outcome of the discussion will feed into the consortium's long-term agenda of pushing for a regional level institutional transformation for effective and good governance of the Brahmaputra River basin.

The workshop sought to address the following key questions:

- 1. What are the key issues of conflict for the River Brahmaputra between the riparian countries using a hydro-political approach*
- 2. What are the underlying political and technical processes which shape the relations across actors positioned differently in terms of knowledge, power and values in the basin?*
- 3. How and what are the possible institutional arrangements that can bring improved cooperation among the riparian countries?*
- 4. What is the appropriate roadmap for implementing the practical institutional arrangement?*

Introduction:

Prof Mashfiqush Salehin, from IWFM, BUET welcomed the participants and gave a brief overview of the purpose of the workshop. He shared the outcomes of the earlier bilateral dialogues happened in India and Bangladesh and how those initiatives got into this international workshop. He pointed out that the workshop would be closed door one where comments and remarks of the participants will not be recorded. Dr Anamika Barua, Executive Director, SaciWATERS, presented the background of this project, main events occurred during the first phase of this project and the expected outputs. Her presentation clearly showed the gradual shift in the consortium's strategy of moving from track three to track two dialogue and the intention to upgrade into track one and one and half. She emphasized that Brahmaputra basin needs a transnational institutional arrangement in form of a commission, however the journey to

achieve this is long, tiring and difficult, but there is hope and such dialogue at different modes is the stepping stone towards that goal.

After this the sessions of the day began with a round of introduction from the participants.

Session I- “Identifying & understanding the key issues of conflicts between the riparian countries Panel discussion”

The session began under the chairmanship of Dr Jabin T. Jacob, Assistant Director & Fellow Institute of Chinese Studies (ICS). The session largely centered on the hydro political issues, knowledge and power dynamics across upstream and downstream countries. Chairman first invited delegates from China to share their views on issues of utilization, sharing and management of the Brahmaputra in its upstream. Delegates were requested to throw light on China’s view on hydropower development, data sharing and multilateral agreements with India and Bangladesh respectively.

Prof Yan Feng and Dr Wenling Wang represented China. Both are from Asian International Rivers Centre (AIRC), Yunnan University, Kunming. Prof Feng mentioned about the extensive work done by AIRC on Mekong having similar characteristics like Brahmaputra. She mentioned that China is concerned about the impact of Brahmaputra river in the Tibet particularly in the dry season where there is severe crisis. While commenting on the hydro diplomatic relationship, she emphasized on the fact that suggestions, ideas coming out from such discussion are extremely important and needs to be communicated to the government of the respective countries. She shared her experience on Lancang-Mekong – long-term cooperation and emphasized on the similar efforts that can be adopted towards forming the Brahmaputra river commission. Prof Feng pointed out the crucial role of an integrated institution at a transnational level in resolving disputes and fostering cooperation. While mentioning the significant role played by UN in supporting the long-term cooperation between upstream and downstream countries of China, Vietnam, Myanmar, Cambodia in case of Mekong she urged for similar initiatives in case of Brahmaputra. Utilizing the river within the territorial limits of each riparian is bound to happen, for instance for Mekong, China came up with constructing dams for generating power. Laos also prioritized hydropower and tributary development. Cambodia came up with system to hold up the upstream water during flood, fisheries production and increase the flow in the dry season for rice production, Vietnam prioritize flood control and rice production. In 1994 China signed new agreement with the downstream countries. All these differences resolved to a great extent in 2004 when Chinese government came into an agreement with Mekong river commission to share the data on water so as to support downstream countries for flood control. With this Prof Feng highlighted the importance of joint research and data sharing in promoting cooperation and paving the way for long-term institutional development.

While appreciating such kind of dialogue initiative Dr Wang mentioned that such common platform could create an enabling environment to discuss various researches, which in turn can be shared across the government as policy briefs. While commenting on the fact that transboundary issues are largely political need of the hour is to translate the technical research into policy advocacy material with a purpose of pushing the political will towards effective water governance.

“Free flow of data is required and can reduce the misunderstanding to a great extent.....”-

“There is a need to share dry season data, particularly flow data.....”-Sri A.K.Mitra, Ex Secretary Water Resource Division, Government of Assam, India.

Discussion further led to plethora of questions and counter questions poised by the Indian and Bangladeshi delegates. Efficiently stirred by the Chairperson, questions primarily revolved around two important dimensions, namely; kind and type of data sharing happening between china-India and china –Bangladesh respectively and extent of hydropower development and river diversion happening in China and India that has the potential threat to Bangladesh.

In terms of data sharing, questions emerged on the kind of data that is exchanged between India and China and also during what period of time does that sharing take place. Prof Feng mentioned that between India and China agreement has been signed to share data from three hydro-monitoring stations. She mentioned that China has only constructed one dam for power generation. There is a need for irrigational development in Lasha as it is a drought prone area and affected by strong wind. China has plans for storage dams however waiting for permission.

Crucial thing that emerged from the discussion is that already cooperation in terms of monsoon data sharing is happening between China, India and Bangladesh. China has signed a bilateral agreement with India where rainfall, discharge and water level during monsoon season are getting shared. Similar bilateral agreement has been signed between India and Bangladesh on several data sharing.

However participants from WRD, Bangladesh mentioned that there is no continuous data sharing on discharge from India side. China and Bangladesh on sharing the flood, discharge, rainfall and water level. While there are differences in the type of data being shared with India and Bangladesh respectively what has emerged is that there is a crucial need of continuous data sharing both monsoon and dry season data for all the four riparian countries. Such continuous free flow of data can reduce the mistrust for each other. This is important to understand the river ecology as a whole passing beyond boundaries.

Talks on hydropower, river diversions were frequently raised during the session. Technocrats from Bangladesh shared their concern about India and China's plans to divert Brahmaputra and run of the river projects. As regards the physical processes, Brahmaputra River has huge variation in terms of catchment area, depth and flow and hence any kind of diversion in upstream will seriously affect

"Cumulative Environmental Impact Assessment Studies at the transnational level should be taken up as a means of cooperation across riparian countries....."- Dr Rabindra Kumar, IFS, Chief Conservator of Forest, MoEF, Government of India

"Any intervention in Arunachal should take into account the land and water rights of the tribal.....current draft bill should be reviewed in the light that it should not impinge tribal rights.- Sri Likar Angu, Additional Secretary, WRD Arunachal Pradesh

downstream flow to Bangladesh. As far as the key issues of conflict over Brahmaputra is considered any intervention in the upstream by either China or India particularly with river diversion and dam construction becomes a matter of concern for Bangladesh. Since the density of population is high so if some erosion takes place then a lot of casualties happen, also the dynamics of the river itself causes a lot of problems for Bangladesh. The main threat hence is the water diversion by China or India. Free flow of data in terms of type of data, intervention and

planning is needed to optimize planning by countries. Questions raised by Mr Sarafat.. from Bangladesh commented that there is a huge variation in water flows of Brahmaputra system. What about coastal area ecosystems? Balance between freshwater and brackish water needs to be maintained if Bangladesh part of the system survive It is therefore extremely important to know what is the intention of the individual government. Mr Safdar Hussain by mentioning about the MoU signed between China and Bangladesh commented that data sharing only will not solve the problem, collaborative approach on erosion control, structural side flood management needs to be undertaken.

Talking on the hydropower development by respective countries/states it has been largely argued that fear are most of the times media speculated. Dr. Jacob mentioned water diversion in China has not been very successful. Cities not have been able to extract water from river diversion projects because of pollution and unaccounted water loss. There have been strong environmental movements in China against three gorges. Thus with regards to any intervention, the differential impacts on different countries need to be assessed. Assessment of effects of any changes in the river flow within and outside country needs to be done. Co-benefit among countries needs to be thought of as what is happening in downstream is due to the variation in upstream hence dialogue among countries would be essential.

Discussing more on the nuances of conflicts happening between Arunachal and Assam, two co riparian states within India, participants commented lack of trust

between them is hampering the diplomatic relations at the transnational level. Dr Rabindra Kumar, IFS, Chief Conservator of forest, Ministry of Environment and Forest, Government of India, shared his views on Hydropower projects taken up by Arunachal Pradesh. The stretch of Brahmaputra falling with Arunachal has immense potential for hydropower generation. However there is also a strict system of getting environmental clearances (EPA act of 1986) that comprises of public hearing of all proposals by pollution control board. Some work has been done on the carrying capacity of individual rivers in Tawang basin to understand the cumulative effects of proposed hydropower projects over different rivers of Brahmaputra system. Most of the impact assessment studies do not take the holistic picture into account. To minimize conflicts and to see the mutual cooperation to come up there should be cumulative Environmental Impact Assessment studies at a transnational level.

Sri Likar Angu, Additional Secretary, WRD, Arunachal Pradesh further added that from Arunachal Pradesh point of view there is a sharing of 43% of Brahmaputra river basin area with Indian territory, 17% of whole basin and length is within 100km, per capita availability wise Arunachal is far ahead of national average. The demand of irrigation and drinking water is not at all an issue but the area of conflict is from Assam point of view and not Arunachal point of view. There has been some talk in Government of India level during 2004-05 for necessity of forming one basin level regulatory authority consisting of all 7 states. For this the Government of India through Ministry of Water resources circulated a draft bill to all states for review. The bill is lying with Government of Arunachal Pradesh for scrutiny. Arunachal is taking time, as land and water rights of the tribal is a sensitive issue. Thus the proposed bill should be examined whether it will have any infringement on the rights of tribal people and in any way the Act developed by GOI should not create any imposition on the local inhabitants. He concluded that the issue of dams and hydropower within India is of lack of consensus between center and the states.

While talking about the Brahmaputra in Assam Sri A.K.Mitra, ex secretary, WRD, Government of Assam mentioned that river has a problematic length in Assam due to topographic. Brahmaputra comprises of 40 major tributaries and 126 sub-tributaries, which happens to be the largest river network in the world. Such a complicated strength is a challenge for Assam. Assam has been fighting for the last 60 years to control floods. Lost more than 50% of the cultivable land, total land lost is 4,37,000 ha till date. Looking at this damage Assam wanted a permanent solution. Government of India announced an apex body viz. NE Water Resources Authority in 2004, even though Prime Minister announced this publicly it hasn't been formed yet. There have been human and financial loss of 80000 cr. Government of India is trying to have a Brahmaputra Valley Authority draft of which has been shared with all concerned states. There are opportunities and challenges in the management policy.

Prof Shafique... From Further commented that getting data is not a problem. Satellite imagery can be used to get seasonal data. However it is important to get observed data from the field to authenticate the findings.

Commenting more on the areas of hydro diplomatic conflicts Dr Anwar Hussain from Dhaka University raised the question that why data sharing is happening at a bilateral level? In most of the dialogue and discussion community perspective are not given adequate attention. Concerns have been raised that downstream states are not aware of plans of the upstream nations. There is a chain of apprehensions, conflicts taking place in a sequel. There is uncertainty of information and uncertainty of perception. Individually the countries must be analyzing parameters in consideration of better environment management but a holistic picture does not seem to emerge, also the objectives of neighboring countries isn't very clear. Areas of mutual interest need to be identified to decrease conflicts by knowing the apprehensions of downstream countries, by carrying out studies on flood management, erosion control, hydropower etc. The riparian ecosystem and aquatic life also need to be taken care of in EIA studies. An institutional arrangement on how to undertake EIA studies on transboundary basis need to be just looked into and equal attention to catchment area needs to be paid.

"Countries cannot work in isolation...it is important to maintain ecological integrity of the basin"- Dr. Anwar Hossain, Dhaka university

Some of the important questions raised during the session are:

Q) Does information exchange between China and Bangladesh is different from that of India and China? Why is there is a difference in data given to Bangladesh and India?

Ans: The custodian of data for Govt of India is Central Water Commission for international data. With regards to China, data is useful only for flood warning systems but holistic information is not provided to Bangladesh.

Q) Why is water shared between two countries when the river is shared by more than two countries? Bangladesh is always excluded from data exchange between India and China

Ans: It is seen that every country is busy in developing their own developing project but every river basin maintains ecological integrity. 1997 UN Convention- If we fail to maintain ecological integrity we wont be able to develop long term solutions, also issues at community level need to be addressed so as to develop a common ground- pathways for sustainable water resource management- for whole basin based on ecological integrity.

According to the agreement between India and Bangladesh they have been sharing the Ganges flow. There needs to be some master rules for India and Bangladesh to cooperate and develop Brahmaputra river. There should be arrangement for data sharing with India and Bangladesh to understand the key conflicts for water utilization in future w.r.t Brahmaputra River. Until 2009, India used to give data on monsoon to Bangladesh, data from Nepal is also received by Bangladesh but what is happening is whatever project is undertaken downstream area is never considered, hence there is an issue of bilateralism and unilateralism which needs to be overcome through dialogue to influence Track I. With regards to exchange of data too there has been complaints about China not sharing the data for the whole year, similar issues on Mekong too. There is no such agreement on sharing of data. For e.g Bangladesh is getting data on the river Ganges from India, data is similar to gold mine everybody comes to know what is happening anywhere. The basic conflict is if you share data we may come up with development in upstream area by using the data and then somebody will criticize it.

Session II- "Identifying the possible pathways of cooperation"

The session was chaired by..... from Taking from the morning session participants discussed more on creating pathways for cooperation, means to continue the dialogue process and ways to push agenda for a Brahmaputra commission/joint river basin agency. The session stressed on good governance and institutional transformation at the basin level. Participants emphasized the value of such informal dialogue and urged the organizer to continue to at least 5 years. Creating a forum by bringing four countries along with the co-riparian states as members of the forum can be way to continue the dialogue process. There is lot to learn from each other like initiatives done for Ganga, Mekong etc. Prof Feng pointed out he need to set up a network agency to continue the dialogue. Dr Jacob mentioned that the Yangtse and Yunan provinces of China has lot o freedom which gives them the independence to make choices of their water management strategies. He further mentioned that it is imperative to have all the states within India sharing the river basin to be part of the dialogue forum.

Sri AK Mitra said Assam Government has mandate to set up a institution in line to CEGIS of Bangladesh. 2011 Assam Chief Minister Sri Trun Gagoi's visit to Bangladesh pointed towards this vision. Water Resource Division Assam has send 2 batches of officers to Yellow River Conservancy programme. They are currently in the position to send 3rd batch of junior officers. He strongly recommended creating a congenial platform for dialogue between Assam and Arunachal Pradesh, which would in turn resolve 50 percent of the problem. Sri Angu suggested for a regional level institution, however he highlighted that such a body should be inclusionary in nature. No basin-level resident should feel isolated or imposed-upon by anyone. While talking about institutional transformation Dr Rabindra Kumar suggested to work with the existing body like SAARC.

Dr Tenzin, Executive Director, RSPN Bhutan said that trans-boundary is more of a political issue in Bhutan. Hydropower generation is mostly a central government political endeavor, where community has never been taken seriously. Regional cooperation is not happening in the way it should be. Apprehension about run of the river projects in Bhutan is creating anxiety in Assam. He commented on the character of development that is largely promoted is the determining factor in transnational river basin management. Thus it is important to sit, meet and discuss and pushed the agenda of sustainable development. Herein lays he significance of dialogue.

Considerable deliberation was made on the possible framework and road map for the Brahmaputra Commission. Suggestions came that the commission should be in a position to take up joint research (flood management, river flow etc) and also approves any national level projects. There should be representation from provisional and central level (CWC in case of India). Begum Fahida from Ministry of water resources suggested that the outcomes of such dialogue should be made known to the politicians and ministers. She further added that a draft agreement should be prepared about the modalities of the commission, joint research to be carried out and share that with the minister. Dr. Wang suggested several areas for joint research like flood control, climate change, dry season flow, ecological sustenance in Brahmaputra basin.

The session was concluded with the summary points and way forward. Some of the suggestions emerged are as follows:

- Continue the dialogue process at track 2 and 1.5 level and restructure/upgrade the present initiative into a multilateral dialogue forum involving China, Bhutan, India and Bangladesh. The forum should meet annually at each of the partner countries to discuss diverse issues of cooperation.
- Creating an apex body at the national and transnational level for effective cooperation and agreement building is critical. The first step towards this is to form a basin level treaty at national and then at transnational level. Within India such an initiative has already been taken by Government of India, wherein draft bill to create a Brahmaputra valley Authority in line with Tennessee valley authority has been proposed. The bill has gone for state scrutiny. Arunachal is particularly sensitive towards this bill as it involves land and water rights. The forum should continue the dialogue process by meeting once in a year to facilitate trust and cooperation between Arunachal and Assam. To do so involvement of the Arunachal Government is critical. Vertical integration between states of Assam, Arunachal Pradesh and Government of India is critical towards developing the apex institution.
- The forum should bring States of West Bengal, Meghalaya, Sikkim, Manipur into the dialogue.

- Data sharing and information flow – while data sharing exists between the countries, it is not round the year and in most cases it is only rainfall data and water level data during the monsoon season. China has separate bilateral arrangements with India and Bangladesh respectively. Data sharing modalities also varies between countries. China shares flow data, rainfall data, discharge data and water level data with Bangladesh. While with India it shares the discharge and water level data. However for both the countries the data is not continuous only for monsoon/wet season data.(5 months). Although satellite imagery can crate provide some data, observed data is extremely important for ground truthing. In this Upstream countries like china and Bhutan has article role to play. Most of the data sharing agreement till now (either Bhutan and India, or China-India or China-Bangladesh) is bilateral in nature and discontinuous in nature. It is important to have multilateral agreement of data sharing for both wet and dry season across four riparian countries. The forum should take this as one of the important point of discussion in their annual meeting.
- It is also important to keep countries informed about the development activities that are taking place at the basin level. The forum in its annual meeting can create a platform to share the research and development happening in each of the riparian countries.
- Taking a basin approach for the study of the Brahmaputra river is already happening. However basin is mostly restricted within a particular countries territorial jurisdiction. Shared understanding of the basin in its transnational scale unraveling the activities in the upstream countries affecting its downstream counterpart is under researched. The forum should provide space to share already undertaken scientific research (even if few in number) to understand the issues. Outcome from such deliberations can be used to inform policies.
- Communication and dissemination to the stakeholders should be important agenda of the forum. The communication at one hand should be to the government officials in one hand and citizens on the other. Writing in the newspaper, magazine can create a way to reach out to the communities. While by preparing a draft agreement plan and sharing it with the respective ministries of each of the four countries will provide a way towards informing the policies. This will lay a road map towards creating apex imitational body.
- Understanding and managing at the basin level should also be addressed by endorsing the idea of undertaking regional scale EIAs. In India MoEF gives clearance with recommendations from the state governments. the proposal is supported by the rapid appraisal by the pollution control board. Public hearing

is done in front of the deputy commissioner. Then the proposal is submitted to the Expert Appraisal Committee (EAC). The EAC gives recommendation and suggestions before the EIAs are passed. India prepares EIAs for Bhutan. Considering the process by which these EIAs are prepared proposed forum should aim for informing the policy to create transnational EIAs.

