

WEBINAR REPORT

Nature-based Solutions (NbS) to enhance ecosystem services in the Hail Haor Wetlands, Bangladesh

Wednesday, 16 September 2020



UNIVERSITY OF
OXFORD

International Centre for Climate Change and Development (ICCCAD) and Center for Natural Resource Studies (CNRS) organized an hour long discussion on “Nature-based Solutions (NbS) to enhance ecosystem services in the Hail Haor Wetlands, Bangladesh”, which is the first webinar under the ‘NbS Bangladesh Network’ webinar series. NbS Bangladesh platform (www.nbsbangladesh.info) is hosted by ICCCAD and supported by the Nature-based Solutions Initiative (NBSI) at the University of Oxford. The webinar took place on 16 September 2020 from 12.00 pm – 01:00 pm over the zoom platform. The discussion highlighted the potentials of NbS in enhancing ecosystem services in Hail Haor wetlands, and the pathways to strengthen the policy integration and interventions to upkeep the sound ecosystem health in these areas.

Welcome remarks by *Dr. Saleemul Huq, Director, ICCCAD*

- Protecting and maintaining the health of the ecosystem is a long-term process. Thus, we need to ensure continuous policy advocacy with the concerned ministries, departments and authorities in a strategic manner.
- Local Government Engineering Department (LGED) received funding from the Green Climate Fund (GCF) to develop climate resilient infrastructure. In these types of interventions, ‘NbS Bangladesh Network’ can provide scientific and technical inputs to promote nature-friendly and climate-resilient development.
- Hosting sessions on NbS across various sectors with concerned policymakers, departments (such as: Ministry of Land, Ministry of Water Resources, Ministry of Women and Children Affairs, Department of Fisheries, Department of Forest, LGED and others) in the upcoming ‘7th Gobeshona Conference’ to advocate for mainstreaming NbS issue in the policy level.
- Aligning actions and build-up connection with Global Centre for Adaptation as NbS is a big focus and one of the key action tracks in the Global Commission on Adaptation (GCA).

Keynote presentation on “Co-management of wetlands adopting nature-based approaches: Lesson from Hail Haor wetland in North-eastern Bangladesh” by *Dr. Mokhlesur Rahman, Executive Director, CNRS*

- *Wetlands are a unique ecosystem in Bangladesh, serving broadly to the harmony between natural conservation and human well-being. Hence, protecting these ecosystems are essential.*
- *Several nature-based initiatives have proven to be beneficial for this wetlands. Opportunities need to explore to replicate these practices at scale to enhance the capacity of these ecosystems.*
- *Produce issue-based policy briefs to influence and convince policymakers and decision-makers.*
- *Develop multiple scenario analysis for identifying the strategies to promote green development in different ecosystems.*

Remarks from Discussants

Dr. Ali Muhammad Omar Faruque, Deputy Director (Agriculture, Water and Environment), Department of Bangladesh Haor and Wetlands Development

- It is important to develop a practical wetland management system along with criteria, particularly through nature-based management components to protect and restore these rich wetlands.
- Need to implement the fishery related policies strictly to meet the demand of the communities as well as ensuring the health of the wetlands. In addition, watershed management has to be considered in planning process.

- Political conflicts are needed to be addressed through necessary policy interventions. It shall help to provide benefits to the marginalized population and ensure their ownership in maintaining these ecosystems.

Mr. Md Rayhan Shiddique, Deputy Project Director (Infrastructure), Haor Flood Management and Livelihood Improvement Project (HFMLIP), LGED

- Interventions should be designed in such a way that those do not harm the original setting of the ecosystems. However, stakeholders need to be integrated properly in the decision-making processes to conserve these wetlands.
- Opportunities should explore the potential of private-public partnership (PPP) to initiate multiple interventions in protecting these wetlands.
- Collaborative measures are needed among various group of stakeholders to work together and conserve the flora and fauna of the different wetlands across Bangladesh.

Md. Emdadul Hoque, District Fisheries Officer, Moulavibazar

- Unprecedented human interventions are the major cause of wetland destruction. So, they need to be controlled to protect these ecosystems.
- Even though the Department of Environment (DoE) is the custodian of these wetlands, they often cannot maintain these ecosystems properly. Political conflicts and dominance of influential locals are major obstacle in these areas.
- Regular consultation is needed with the departments, NGOs, practitioners and local stakeholders to protect these wetlands. We may also declare some areas as “No fisheries zone” to conserve particular areas. Broadly, there is need of assistance from the concern departments to protect these wetlands.

Open discussion

Participants raised questions mainly regarding to the current condition of these wetlands and how efficiently wetland management system can be implemented; how to influence the decision-makers in the policy level to protect these wetlands and how to explore opportunities to conduct higher ecosystem-based research in a collaborative manner. In addition, queries were raised on the plan of the “NbS Bangladesh Network” to do policy advocacy for the co-management mechanism for wetlands and how to sustain different initiatives after any certain project intervention is over. Participants also mentioned about habitat restoration to be given top priority in NbS.

In response to these queries, Dr. Mokhlesur Rahman mentioned that there’s several nature-based initiatives in these wetlands and it is important to explore opportunities on how to expand them at scale and replicate. Also, there is a higher need to take collaborative approach to conduct further research among practitioners, experts and concerned stakeholders. Dr. Saleemul Huq requested everyone to join the network to raise collective voice to advocate for mainstreaming NbS in the development planning processes.

Way forward

- Policy level advocacy is essential to explore opportunities on how to protect these wetlands.
- Knowledge generation on various aspect of wetlands and collaborative mechanism among stakeholders are also important to take mutual decision-making toward protecting ecosystems.
- Exploring scopes on how to integrate community level stakeholders in the decision-making process.

Annex I: Screenshots from the Webinar

Recording... **LIVE** on Facebook

Webinar on
Nature-based Solutions (NbS) to enhance ecosystem services in the Hail Haor Wetlands, Bangladesh

16 September 2020
12:00 pm – 01:00 pm
(GMT+6)

Jointly organized by
 International Centre for Climate Change and Development (ICCCAD) and
 Center For Natural Resource Studies (CNRS)

With support from
 Nature-based Solutions Initiative (NBSI) at the University of Oxford







Format of Webinar

12:00 pm – 12:30 pm: Remarks from the Moderator, Keynote paper presentation and Remarks from the Discussants

12:30 pm – 01:00 pm: Open Discussion and Feedback Session

Moderator: Dr. Saleemul Huq, Director, ICCCAD

Keynote presenter: Dr. Mokhlesur Rahman, Executive Director, CNRS

Discussants :

Dr. Ali Muhammad Omar Faruque, Deputy Director (Agriculture, Water and Environment), Department of Bangladesh Haor and Wetlands Development

Md Rayhan Shiddique, Haor Deputy Project Director (Infrastructure), Flood Management and Livelihood Improvement Project (HFMLIP), LGED

Md. Emdadul Hoque, District Fisheries Officer, Moulavibazar


Nbs Bangladesh Portal: www.nbsbangladesh.info

@ICCCAD @NbsBangladesh #Nbs #NbsBangladeshNetwork #HailHaor

Recording... **LIVE** on Facebook

Meeting is now streaming live on Facebook

Selected Project Impacts



Fish Production

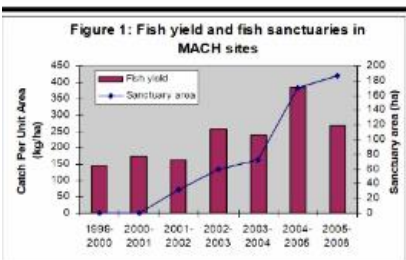
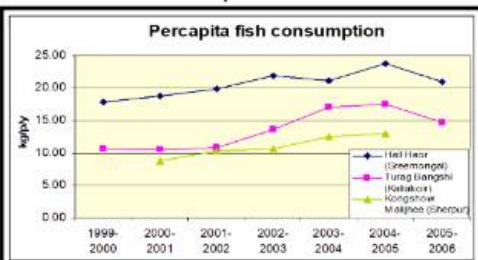


Figure 1: Fish yield and fish sanctuaries in MACH sites

Fish consumption



Percapita fish consumption

Income

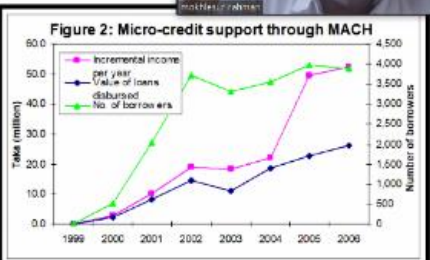



Figure 2: Micro-credit support through MACH

Water Bird Species



- Fish diversity increased, 3 locally rare species restored
- Fish catches increased by 88% from 1999 baseline
- Fish consumption increased by 25-36%
- Revolving loan funds reduced dependence of 5,200 households on fishing by 2/3rds
- By 2006 a 24% increase in use value of the haor (largely from fish)

Recording Paused LIVE on Facebook

Concluding Remarks

- Nbs interventions are adaptive, low cost, green and long lasting solutions
- Each Nbs intervention has domino effects – one intervention addresses multiple problems and produce multiple positive outputs/outcomes
- Nbs focuses on - restoring and maintaining "relationship nexus between water-food-health-biodiversity-climate change."
- Locally more accepted and participatory than top down /grey solutions
- Applicable for wider settings – ecosystem management/ restoration (wetland, forest, coastal zone), DRR, CCA-CCM, Urban/ peri-urban resilience
- Able to meeting various **social, economic** and **environmental** challenges and achieving several SDGs (SDG #2: End hunger; SDG# 6: Clean water; SDG#13: Combat Climate Impacts; SDG#14: Life under water, and SDG#15: Life on land)
- Need transboundary cooperation and joint management in water and aquatic resources management
- Ecosystem management through Nbs is a lengthy process that links many necessary elements and need state patronization and support through an enabling and policy and institutional arrangements ...through systemic integration and approaches

Recording... LIVE on Facebook You are viewing mokhlesur rahman's screen View Options

MACH partners:

GOB partners:
DoF/ MoFL

NGO Partners:
BCAS - policy and capacity,
Caritas – Micro-finance and livelihoods
CNRS – Co-management and NBS implementation

Tasfia Tasnim

DFO, Moulvibazar Emd...

mokhlesur rahman Masood Siddique

Md Rayhan Shiddique Dr. Ali Muhammad ...

Saleemul Huq Anisuzzaman Chowd...

Unmute Start Video

Recording... LIVE on Facebook

Talking:

Saleemul Huq

Annex II: List of Participants

Sl. No.	Name	Organization	Designation
1	Dr. Saleemul Huq	ICCCAD	Director
2	Dr. Mokhlesur Rahman	CNRS	Executive Director
3	Md Rayhan Shiddiqe	LGED	Deputy Project Director (Infrastructure) Haor Flood Management And Livelihood Improvement Project
4	Md. Emdadul Hoque	Fisheries Department	District Fisheries Officer
5	Dr. Ali Muhammad Omar Faruque	Department of Bangladesh Haor and Wetlands Development	Deputy Director (Agriculture, Water and Environment)
6	Mr. AKM Rafiqul Islam	DoE	Deputy Director
7	Dr. Md. Rafiqul Islam	Department of Livestock Services (DLS)	Focal Point, ULO
8	Mr. Ishtiaq Uddin Ahmad	SUFAL, Bangladesh Forest Department	Chief Technical Advisor
9	Md. Fakhru Abedin	BWDB	Project Director, Haor Flood Management and Livelihood Improvement Project
10	Md. Monirul Islam	BIRRI	Principal Planning Officer (PPO)
11	Mr. A.K.M.Monirul Alam	Department of Agricultural Extension (DAE)	Additional Director
12	Dr. Fahmida Khanom	Department of Environment (DoE)	Director (NRM)
13	Bishwajit Roy	University of Lisbon	PhD Candidate, Climate Change and Sustainable Development Policies
14	Dr. Laskar Muqsudur Rahman	Wildlife Conservation Society	Senior Forestry Officer
15	Ms. Afsari Begum	Practical Action	Sr. Specialists-DRR
16	Gawher Nayeem Wahra	Foundation for Disaster Forum	
17	Sumaiya Firoze	USAID	NRM Specialists
18	Sayed riadh	Concern Worldwide	Head of Programme
19	Radiyah Mohammed Salim	Friendship	
20	Dr. Mohammad Sakhawat Hosen	Friendship	Deputy General Manager
21	Nayeem Khan	Friendship	Team Leader
22	Nusrat Jahan	FAO	Project Officer
23	Arfan Uzzaman	FAO	
24	Asif Yousuf	Crafts for Conservation	Chair
25	Hasibur Rahman	CODEC	Community Resilience Officer, BRIC Asia project
26	M Abdul Wahab	World Fish	Eco-Fish Project Leader
27	Sheuly Akter	IFRC	DRR, CCA practitioner
28	Anisuzzaman Chowdhury	JICA Bangladesh Office	Program Manager
29	Dr. Anil Kumar Das	FAO Bangladesh	National Consultant (Program)
30	Dr. Mohammad Muzammel Hoque	ICBAAR programme, UNDP	Project Manager, Integrating Community-based Adaptation into Afforestation and Reforestation Programmes in Bangladesh
31	Md. Illias Miah	Centre for Environment, Human Rights &	Chief Executive

		Development Forum (CEHRDF)	
32	Dr. Farid Uddin Ahmed	Arannayk Foundation	Executive Director
33	Masood Siddique	CNRS	NRM and Fisheries Expert
34	Mr. Ehsanul Haque	UNHCR, Cox’s Bazar	Asst. Environmental Officer
35	Dr. Md Monirul Islam	Dept. of Fisheries, University of Dhaka	Professor
36	Dr. Md. Zashim Uddin	Department of Botany, University of Dhaka	Professor
37	Dr. Sharif Ahmed Mukul		
38	Md. Rezwana Siddiqui	East West University	Senior Lecturer
39	Dr Md. Mijanur Rahman	BRAC	Programme Specialist (Climate Change, Environment and Resource Mobilization)
40	Syed Mohammad Zihan	UNHCR-CNRS	A. M&E (GIS) Officer
41	George Ashit Singha	CCDB	
42	Makidul Islam Khan	Department of Fisheries, University of Dhaka	Research Associate
43	Nayeema Rasid	FAO	
44	Muhammad Shafiqul Islam	CNRS-WFP-DRR project, Cox’s Bazar	Project Manager
45	Sanjib Kr. Mondal	Caritas Bangladesh	Senior Program Officer and Agriculturist
46	Sudipta Ghosh	CNRS Cox's Bazar	Biologist
47	Sujan Datta	CNRS	Environment Facilitator
48	Md. Monjurul Hasan	Bangladesh Fisheries Research Institute	Scientific Officer
49	Md. Abdul Maleque	UNHCR, Cox’s Bazar	Program Associate
50	Dr. Md. Khabir Uddin	Department of Environmental Sciences, Jahangirnagar University	Professor
51	Mehedi Hasan Tuhin	ICCCAD	Coordinator, IT-Web Services
52	Dr. Mizan Khan	ICCCAD	Deputy Director
53	Dr. Ali Mohammad Rezaie	ICCCAD	Research Coordinator
54	Sarder Shafiqul Alam	ICCCAD	Programme Coordinator
55	Mahmud Ali	ICCCAD	Manager-- Admin. and Finance
56	Saqib Huq	ICCCAD	Programme Coordinator
57	Marwa Tasnim	ICCCAD	Partnership Officer
58	Farah Anzum	ICCCAD	Research Associate
59	Tasfia Tasnim	ICCCAD	Senior Research Associate
60	Adiba Bintey Kamal	ICCCAD	Project Associate

Annex II: Webinar concept note and agenda

Webinar on **Nature-based Solutions (NbS) to enhance ecosystem services in the Hail Haor Wetlands, Bangladesh**

Wednesday, 16 September 2020 | Time: 12:00 pm – 01:00 pm | Mode: Zoom Meeting

CONCEPT NOTE

Nature-based Solutions (NbS) have been emerging as an integrated approach, having the potential to tackle climate change impacts at relatively low-cost whilst delivering multiple benefits for people and nature. To enhance understanding of the importance of NbS and to scale-up their implementation in Bangladesh, International Centre for Climate Change and Development (ICCCAD) and the Nature-based Solutions Initiative (NBSI) at the University of Oxford have developed the **NbS Bangladesh Portal** (www.nbsbangladesh.info) to showcase the collated scientific evidence and evidence from practice on the effectiveness of existing NbS projects from across Bangladesh. NbS Bangladesh portal will be populated through a formalized “NbS Bangladesh Network” who can contribute to the portal and collaborate with other network members.

Therefore, **Center For Natural Resource Studies (CNRS)** and **International Centre for Climate Change and Development (ICCCAD)** will be organizing the first webinar under this NbS Bangladesh Network webinar series on “**Nature-based Solutions (NbS) to enhance ecosystem services in the Hail Haor Wetlands, Bangladesh**”. The webinar will be conducted through **zoom platform** on **Wednesday, 16 September 2020 from 12:00 pm to 01:00 pm**.

The one-hour long session will have remarks from the moderator, keynote presenter and discussant(s) for the first 30-minutes. Following the presentation, there will be 30-minutes interactive Q/A and feedback session.

- **Moderator: Dr. Saleemul Huq**, Director, ICCCAD
- **Keynote presenter: Dr. Makhlesur Rahman**, Executive Director, CNRS
- **Discussant(s): Dr. Ali Muhammad Omar Faruque**, Deputy Director (Agriculture, Water and Environment), Department of Bangladesh Haor and Wetlands Development / **Mr. Md Rayhan Shiddique**, Deputy Project Director (Infrastructure), Haor Flood Management and Livelihood Improvement Project (HFMLIP), LGED / **Md. Emdadul Hoque**, District Fisheries Officer, Moulavibazar

Summary of the keynote presentation

Hail Haor is one of the richest wetland ecosystems in the northeastern part of Bangladesh used to provide home for rich biodiversity of fisheries and wildlife including migratory waterfowl. With a dry season area of over 3,000ha it expands to over 12,500ha in wet season and supports local livelihoods mainly through fishing, collecting various non-fish resources viz. aquatic vegetables, fruits, fodder, biomass fuel, duck and cattle rearing and wage laboring in rice fields. Over years, with increasing population pressures coupled with other factors, such as loss of connectivity, siltation, agricultural aggression, reduced dry season habitats, overfishing, unsustainable land use in the catchment and absence of pro-poor wetland leasing systems negatively impacted the wetland and its ability to provide ecosystem services which in turn affect livelihoods of around 10,000 local people. To revert the situation, Government of Bangladesh and USAID initiated a 6-year long project to facilitate nature-based approaches with active engagement of local user communities and stakeholders.

This presented paper would highlight the problems that affect the production systems and livelihoods of resource-dependent communities of Hail Haor. It would also describe the implementation of multiple nature-based solutions packages that contributed to support improving the social-ecological production systems of Hail Haor and user communities.