



MACH (Management of Aquatic Ecosystems through Community Husbandry) is a Government of Bangladesh project supported by USAID. The project partners (Winrock International, Bangladesh Centre for Advanced Studies, Center for Natural Resources Studies, and Caritas Bangladesh) have worked closely with the Department of Fisheries since 1998. The aim was to establish community based co-management and restore and increase sustainable productivity at the ecosystem level in three large wetlands: Hail Haor in Sreemongal, Turag-Bangshi river and wetlands in Kaliakoir and the Kangsha-Malijhee basin in Sherpur. In the wet season these wetlands cover about 32,000 ha, and in the dry season they include over 100 distinct waterbodies. Over 110 villages inhabited by over 184,000 people are directly involved.

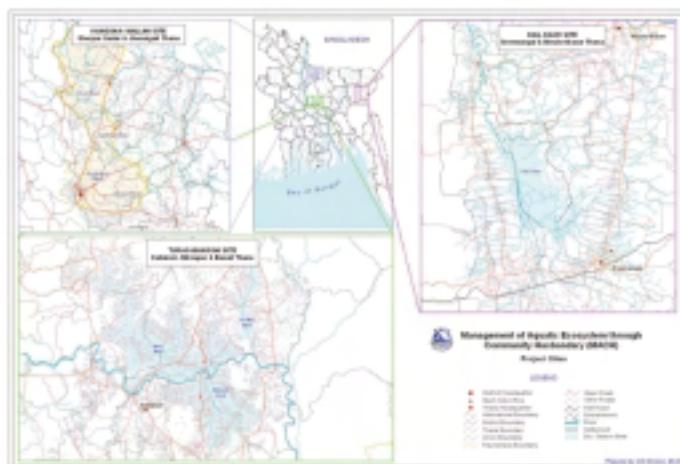
## Scaling up Community-based Co-Management of Wetlands and Fisheries in Bangladesh

The inland capture fisheries and wetlands of Bangladesh are in crisis. Loss of wetlands and dry season surface water to agriculture and other land uses, and very high exploitation rates of natural fisheries, mean that the staple diet and a major source of livelihood for millions of the rural poor is threatened. This is a common pattern in the world's fisheries, but Bangladesh has been in the forefront of innovating local institutions that can successfully manage wetlands. Developing successful community based co-management arrangements that ensure sustainable wetlands, productive fisheries and meet the needs of the poor is a challenge. MACH policy brief No. 1 - "Community-based Co-management: A solution to wetland degradation in Bangladesh" has drawn lessons and made recommendations regarding community based co-management arrangements. This document focuses on the challenges for scaling up and how this may best be achieved.

### BACKGROUND

In an attempt to find new solutions to problems resulting from top-down approaches to resource conservation and sustainability, community-based co-management recognizes that local communities should have direct control over the management, utilization and benefits of local resources (in this context land, water and fishery resources) in order to value and use them in a sustainable manner.

MACH has taken an ecosystem approach involving entire floodplains and surrounding watersheds and all the people who depend for their livelihoods (income and food) on those systems. MACH's goal was to increase the sustainable productivity of all resources, including fish, plants, and wildlife over an entire floodplain ecosystem (*beels* - lakes and depressions, seasonal floodplains, rivers, and *charas/jharas* - streams), not just a single water body. One unique aspect of this approach has been the development of a decentralized co-management arrangement that brings together community organizations, local elected government and local administration. The issue is how to scale this up to reverse the trends in over 12,000 public waterbodies and over 4 million ha of floodplain wetlands in the whole of Bangladesh.



LESSONS LEARNT

The lessons considered here focus on institutional issues: the community based organizations and the co-management arrangements.

Community based organizations

- Since the early 1990s several projects have helped develop about 250 community based organizations (CBOs) for fishery and wetland management, recognizing that there were serious limitations to past fisher cooperatives. MACH has supported 16 CBOs managing relatively larger wetland areas. Capacity and understanding in fishery and habitat protection and management are important, but for sustainability the major effort has been on developing equitable, democratic, transparent and accountable procedures and practices.
- For the types of larger wetlands where MACH has worked the CBOs need to represent several villages or parts of the wetland and a range of stakeholders. The wetlands and fisheries include both public water bodies leased to the CBOs and private land that is seasonally flooded.
- In these representational CBOs it has been necessary to set targets for membership of poorer resource users, and to organize the poor into smaller groups. This was facilitated by those smaller groups accessing training and credit to generate additional incomes as an incentive to limit resource use to sustainable levels.



RMO resource management planning meeting

Types of CBO for fishery and wetland management

<b>Membership based</b>	For example, all poorer households fishing for an income in a water body join the CBO. Makes rules affecting members and excludes others from fishing altogether or prevents non-members from fishing for an income. Typically has a representation system for their executive committee and a clear link between groups of members and the executive.
<b>Representational</b>	All types of stakeholders represented (often with a majority of places reserved for professional fishers). Makes rules affecting all potential users. May have voluntary representatives who expect to retain their position indefinitely, or representatives with clearly defined constituencies (by area or stakeholder type) where the constituents have rights and processes for replacing their representatives.

Relation between institutional approaches and fishery resource base.

Resource base	Membership based	Representational
Closed waterbody with stocking	<b>Most often adopted</b> , but if membership is not limited to poorer professional fishers and funds are provided, then richer households will infiltrate or keep power.	Not recommended. Easy then for richer non-fishers to pay and get a share in the fishery.
Beel jalmohal without stocking	Tried and adopted. If membership is not limited to poorer professional fishers then richer households may keep power by paying the lease. May lack mechanisms to resolve conflicts with adjacent landowners.	Tried and adopted. To reduce risk of richer non-fishers paying for a share in the fishery, a high percentage of representatives need to be fishers and rules set to ensure conservation and access for fishers.
Floodplain	Used for company or shareholder funded stocking of fish in well defined private floodplains. Sale of shares tends to favor better off households, and practices tend to eliminate miscellaneous fish and subsistence fishing.	<b>Most often adopted</b> , where fishers, landless and farmers are involved they can reach consensus on conservation measures and compromise on land and water management.
River	<b>Either approach feasible</b> , but membership approach can result in local conflicts and lack of wider community support. Representational approach makes recognition of interests of other stakeholders easier.	

Shaded: MACH experience. Unshaded arrangements tried by other projects including Fourth Fisheries Project and Community Based Fisheries Management Project phase 2.

- Local opinion leaders have an important role in resource management and CBOs, changing their opinions is an important step both for resource management and for accepting good governance practices, otherwise there is a tendency for at least some of these leaders to expect an indefinite role and be unresponsive to the concerns and needs of the communities they represent and serve.

- Typical project durations such as five years are not sufficient to establish capable sustainable CBOs. MACH has needed 6-8 years, including a start up period to understand the communities, institution building, improving resource management, and phasing out.
- Establishing CBOs and their fishery management actions requires funds. Fourth Fisheries Project spent about Tk 120 per fisher per month on community organization. MACH spent about Tk 240,000 per CBO per month (Tk 120 per benefited household per month for CBOs covering larger areas).
- To these costs must be added the efforts in sites that ultimately were unsuccessful for various reasons. To limit this and learn from experience regular monitoring and review processes are needed that involve CBOs, facilitation teams and external agents.

## Co-management

- Links with local government and formal recognition of CBOs are important in establishing their legitimacy to represent community interests and in overcoming conflicts. In MACH they have been registered under the Social Welfare Department, are invited to Union Parishad meetings, and make resource management plans that are endorsed by the Upazila Fisheries Officer.
- All community based management of fisheries in Bangladesh is based on some form of co-management between CBOs and Department of Fisheries. However, the experience of MACH is that this should be broader. "Local Government Committees" that comprise of Upazila officials (chaired by the Upazila Nirbahi Officer and with Upazila Fisheries Officer as member-secretary, but also including local government engineer, livestock officer, social welfare, etc.), Union Parishad Chairmen, and the leaders of the CBOs have proved very effective.
- For sustainability continued sources of funds are needed, while without funds local government has little incentive to take an active interest in the CBO activities. MACH has addressed this by providing endowments to the co-management committees to cover their operating costs including visits to review CBO activities, and to cover grants to the CBOs for further fishery and wetland restoration and management.
- The Department of Fisheries' Inland Capture Fisheries Strategy (ICFS) has adopted many of these lessons and provides a framework for a national program. Based on experience, it proposes as a national policy that local CBOs should be complemented by an Upazila level co-management committee, especially where there are several water bodies and CBOs.



Local Government Committee meeting

## RECOMMENDATIONS

For long term sustainability there should be a body that can represent local interests and oversee, review and coordinate local community management of fisheries. These functions can be served by expanding and redefining the terms of reference of the Upazila Jalmohal Management Committees. When the policy objectives change from government revenue generation to enabling local limits on fishing access, so should the committees responsible. Jalmohal committees were constituted to fix lease values and monitor management in jalmohals. The new committees will have substantially different goals and objectives and to avoid confusion regarding their role they should be renamed as Upazila Fisheries Committee (UFC). These UFCs would in due course replace the Upazila Jalmohal Management Committees.

1. *Upazila Fisheries Committees* should be formed as detailed in the ICFS, based on the model developed by MACH. UFCs will review CBO activities, resolve conflicts, and approve wetland and fishery management plans. UFCs will have devolved responsibility for reserving access to jalmohals for CBOs that are equitable, benefit poor fishing communities, and have sound plans for sustainable fisheries. UFCs will oversee and advise the activities of CBOs, and regulate wetland use to ensure that fisheries are sustainable and productive.
2. Provide a *legal framework* for reserving jalmohals for management by CBOs that are endorsed by an UFC and registered (social services or cooperative), and that recognizes similar community based management of other public and private wetlands.
3. Develop *national guidelines* for effective, equitable and transparent CBOs. Waterbodies and communities are diverse so CBO arrangements will be adapted to fit the local situation. But irrespective of this, effective CBOs should be democratic (e.g. hold regular

elections), transparent and accountable through general meetings and links with villages, keep proper accounts, involve active participation of women as well as men, and be capable of planning and managing fishery resources.

4. *Cooperation between government agencies* is vital since several agencies have responsibilities in wetlands, and already CBOs and co-management arrangements are being tried by organizations such as Local Government Engineering Department, Department of Environment, and Bangladesh Water Development Board. Best practices and the principles of good governance and of conservation and sustainable use of waterbodies should be adopted by all. The DOF can take a lead in promoting its approach and strategy through cooperation with the related agencies.
5. A *two pronged approach to scaling up* may be adopted:
  - a. For larger wetland systems, that are nationally important for capture fisheries and other wetland fauna and flora, projects should be developed that would provide concentrated support to establish community based co-management and help restore productivity and biodiversity for the benefit of local poor users and the nation. Thereafter such sites

would be covered by the general long-term arrangements for community based co-management.

- b. In the other upazilas with UFCs, which are likely to each hold several more isolated and smaller waterbodies/fisheries, there could be a rolling program in each upazila that would aim to initiate a high quality CBO in a new waterbody every two years. To facilitate this a program would be needed at upazila level to make grants to capable NGOs and that ensures sufficient well trained and oriented fisheries officers are posted.
6. Government should set aside *funds* for the operation of the UFCs. There should also be a fund that will make grants to qualified CBOs against proposals endorsed by UFCs for works to conserve and restore their fisheries, and help support them where alternative sources are not available through income generating enterprises. Some of these needs might be met through endowments particularly in the case of large very important wetlands. Resources should also be directed to these purposes by influencing the priorities of agencies, for example persuading NGOs to support non-fish income sources for poor fishers, persuading water resource development agencies to fund habitat restoration priorities identified by CBOs and UFCs.

## CHALLENGES AND NEXT STEPS

1. Approve and establish UFCs, first for those Upazilas where there are more than one existing CBO, and expand quickly to key Upazilas with important fisheries and wetlands.
2. Ensure the UFC composition includes concerned government officers, Union Parishad chairmen and CBO leaders, as proposed by DOF.
3. Revise the Terms of Reference of the Senior/ Upazila Fishery Officers to reflect their roles in the UFC and in overseeing sustainable co-management of fisheries resources.
4. Develop guidelines for the UFCs to review fishery management and CBOs, for CBOs to be invited to UP meetings, and for fishers and CBOs to monitor the progress of UFCs.
5. Train UFC members in management of capture fisheries and wetlands.
6. Encourage government and external agencies to fund facilitation and development of CBOs in priority locations where access to waterbodies is assured by government.
7. Make agreements for supporting CBO development between government and NGOs that are capable of establishing effective, pro-poor, sustainable CBOs.

## REFERENCES

- DOF. 2006. Inland Capture Fisheries Strategy. Department of Fisheries, Dhaka.
- Halder, S. and P. Thompson (2006) Community based co-management: a solution to wetland degradation in Bangladesh, MACH Technical Paper 1. Management of Aquatic Ecosystem through Community Husbandry, Winrock International, Dhaka.

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