



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.

## Fishing Rights and Access: Poverty Reduction and Sustainable Fisheries

The inland capture fisheries and wetlands of Bangladesh have been gradually encroached and the remaining wetlands are overused. The wetland fisheries are in decline, and a major cause has been the way fishing rights are issued in the many public water bodies that are vital to the fisheries. The system followed over the decades involves short-term leasing out of public water bodies or *jalmohals* to maximise government revenue. This encourages maximisation of short-term income by leaseholders and makes poor fishers dependent on moneyed and influential people; it does not promote sustainable fisheries management or protect biodiversity. This document focuses on the issues of access rights and how alternatives to the existing system could support sustainability and address poverty reduction.

### 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 order to value and use them in a sustainable manner.

MACH has not focused only on *jalmohals* (government held water bodies that are often the perennial portion of a larger wetland), but it has found that because much of the dry season surface water is located in *jalmohals*, that management of these areas is critical to the sustainability of wetland productivity as a whole, and that much of the value of the fishery is driven by them.

Restoring fishery productivity benefits the poor provided fishers have secure access, since a majority of fishers in inland waters are poor. A survey of 125,000 households (CBFM 2003) found 82% of households fishing for income were poor, and that about half of rural poor households living in the floodplains catch fish and use other aquatic resources. Poverty is more than just having a low income and inadequate food and shelter, it is multi-dimensional. In the fisheries sector it is associated with economic exclusion from high value water bodies, social marginalisation of traditional fishers, class exploitation by moneylenders and leaseholders, and political disempowerment from decisions affecting fisher livelihoods.



## LESSONS LEARNT

**Access rights and sustainability**

Jalmohal leases in 2000 contributed only about 0.07% of total government revenue (BBS 2001). Legal cases often prevent collection of revenue, and revenue from jalmohals larger than 8 hectares actually fell between 1997 and 2001 (Ministry of Land data quoted in Huda 2003). Hence the argument that leasing is vital for government revenue is no longer valid.

In the 1980s and early 1990s licensing of fishers through the “New Fisheries Management Policy” was tried but failed to encourage the cooperation among fishers and wetland users that is necessary to conserve and sustain the resource.

Since 1995 the end to leasing and resultant free access in flowing rivers has encouraged over-fishing and control by locally powerful people who invest in more brush piles (*katha*) and boats. Consequently catches are declining. For example, although in the Turag River government set aside sanctuary areas and recognised the right of a Resource Management Organisation (RMO) formed by MACH to protect these sanctuaries, it left the rest of the river as open access, so the RMO has no right to set sustainable limits to use there.

The leasing system for jalmohals is a familiar one. Paying for a lease is recognised as conferring on the leaseholder the right to set limits on fishing. Rather than the leaseholder using this right to maximise his income, this mechanism can be used to enable conservation and sustainable fishery management. Thus all of the RMOs formed by MACH have had the leases to certain water bodies reserved for them, and on this basis have been able to establish sanctuaries and closed seasons that have been respected widely and that they have been able to enforce where needed. This is part of an approach with many elements, including community based organisations (CBOs), involvement of local government, and participatory planning; but CBOs holding fishing rights in defined areas is an essential part of this arrangement.

If this system is operated with the Upazila level government taking primary responsibility, which from MACH experience results in closer supervision and better responses in resolving local conflicts, there may be cases where wetlands and water bodies cover more than one Upazila. In this case coordination mechanisms between local-government as well as between CBOs are needed.

**Access rights and poverty**

However, CBO access has been one of the conditions of the Ministry of Land. Agreements between the Ministry of Land and Ministry of Fisheries and Livestock have provided an improved framework, by allowing jalmohals to be reserved for CBO management for 10 years, and by ending the requirement for annual increases in the lease payment. But by requiring that the initial lease payment is 25% higher than the previous three years' average lease, the government has focused on extracting more revenue from fishers without regard for sustainability or poverty reduction.

There are many anomalies in the lease rates. For example, among the beels within Hail Haor, all with similar characteristics and under community management, are Balla Beel with a lease rate of Tk 2,610 per ha in 2006 (and 18 of its 38 ha are now dried up in the dry season), and Laler Doba Beel with a lease rate of Tk 623 per ha in 2006. Moreover, with four times the number of fishers per hectare in the beel with the higher lease, inevitably the income per fisher there is much lower. High lease rates in the context of community management are a double disadvantage they are a disincentive to set aside part of the area as a fish sanctuary, and they tax the poor fishers at a high rate.

So abandoning revenue maximization would benefit the poor and encourage restoration of the productivity of fishery resources, with little effect on government revenues. In fact the government could expect a revenue gain through indirect taxes. Wetlands, when properly managed for sustainability, provide far more than just fish, but also aquatic plants, grazing, fodder, fuel, etc. which benefit all members of the communities; and with higher incomes local people will buy more goods



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and services on which Value Added Tax is levied. There is already a precedent for this approach, the Ministry of Land has reduced to a nominal rate of Tk 501 per year per jalmohal the lease of certain water bodies that MACH has helped establish as permanent sanctuaries free of any fishing or other uses, and these sanctuaries serve to repopulate the fishery in the larger wetlands they connect. These have had significant benefits to the resource users of the wetlands in the form of increased incomes and food from higher fish yields. The estimated increased yields of fish have resulted in millions of taka of additional incomes which has undoubtedly benefited the local economy and resulted in increased value added tax through additional goods and services purchased.

The Government decided in 2001 and 2003 in principal to transfer jalmohals in a phased process to the Ministry of Fisheries and Livestock, but this did not happen. Were it to happen it would create an administrative burden that would distract from the responsibility for sustainable fishery management which is of primary importance. The experience of MACH is consistent with the recommendations of the Inland Capture Fisheries Strategy that upazila level committees, to be named Upazila Fisheries Committees (UFC), are the most capable body to oversee leasing that is operated to confer rights to limit access to sustainable levels among poor fishers, cutting out profit seeking middlemen. With the UFC chaired by the UNO this retains administrative responsibility with the land administration. The UFCs would have as their member-secretary the Upazila Fisheries Officer and as members other key upazila officers, the relevant Union Parishad chairmen and the leaders of the CBOs involved in managing fisheries. Through regular meetings it would reserve long term use rights to jalmohals to qualified well functioning CBOs, monitor performance, resolve conflicts, and coordinate and regulate developments that might otherwise adversely impact on inland capture fisheries. Some of its key roles are elaborated in the recommendations.

Local community based management can address the different dimensions of poverty. By reserving rights and management for CBOs that have established sanctuaries and limited harmful fishing practices, the productivity of fisheries can be restored to the benefit of the poor. For example, in MACH sites fish consumption of poor households increased by 52% between 1999 and 2004, and fish catches doubled (MACH 2005).

Access limits are needed to restore fisheries, but closed seasons cause a seasonal loss for those dependent on fishing for an income. Micro-credit is a common request from poor professional fishers in this situation. MACH experience highlights the value of training and the opportunities for youth from fishing communities to move into new occupations given the right training, thus reducing future pressure on limited fisheries.



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## RECOMMENDATIONS

The following recommendations are consistent with DOF's Inland Capture Fisheries Strategy:

1. Jalmohal leases should be used as a means to ensure long term access for local fishing communities CBOs such as the MACH RMOs - on condition that they conserve and sustain the fisheries and ensure access for poor fishers, for example by recognizing rights of professional and subsistence fishers, protecting key areas as sanctuaries, and adopting appropriate management plans and actions.
2. The same policy and framework should be applied to all jalmohals "open" and "closed", including rivers, of all sizes, only excluding ponds and tanks that DOF identifies are enclosed all year and are not part of capture or open water fisheries.
3. CBOs that receive reserved access should pay nominal amounts for the lease, set centrally at a token fixed per hectare rate. VAT and income tax should be waived for them.
4. Government checks and assurances on this system should be conducted at the Upazila level in a transparent and accountable way through Upazila Fisheries Committees (UFCs) and their monitoring sub-committees.
5. UFCs would assess CBO proposals against the extent that they involve the participation of user communities, and show ability to manage fishery and wetland resources in a fair and transparent manner. Where there is an acceptable CBO and management plan, the District administration would be required (by central government decision establishing the jurisdiction and responsibilities of the UFCs) to reserve the water body for that CBO for 50 years subject to renewal every 10 years based on the UFC's assessment.

6. If the CBO fails to meet its requirements, the UFC would be authorized to cancel its reserved access and the jalmohal would return to the traditional leasing system until an acceptable CBO and plan are available.
7. The present leasing practice should continue for all other jalmohals until the time that they do have an acceptable plan of support for community based management, or have an acceptable CBO as assessed by the UFC. However, the government should set conservation conditions on all of these leases including requiring leaseholders to establish fish sanctuaries in part of each jalmohal. Some concession for the establishment and maintenance of the sanctuary could be set though reductions in the lease value.
8. Extend reserved community management under UFC oversight by phases. Start with upazilas where there are water bodies that have effective CBOs and expand to connected jalmohals, and in upazilas where there are concentrations of key wetlands and capture fisheries.
9. Once poor fishing communities have secure access to fisheries and appropriate management plans, investment in restoring productivity should focus on excavation to expand dry season fish habitat, sanctuaries to protect fish in that habitat, reducing fishing pressure during critical fish spawning periods, and limits on critical harmful fishing practices (for example, observing a short closed season in the early monsoon and ban on dewatering).
10. Recognising that sustainable fishery management involves limiting access, as an incentive for fishers, to mitigate any seasonal hardship, and to help reduce poverty among fishers; help to enhance fisher livelihoods should be provided. This must be linked with improvements in resource management and should focus on activities that generate non-fishery related income. Livelihood support should include skill training and micro-credit, and must ensure there are adequate market and income opportunities from the new enterprises.
11. To complement the Department of Fisheries, NGOs with skills in establishing sustainable community organizations and in developing non-fishing alternative income sources should be involved as partners.

## CHALLENGES AND NEXT STEPS

1. Reaching an agreement between Ministry of Land and Ministry of Fisheries and Livestock on a change in the leasing policy that adopts the principles in the Inland Capture Fisheries Strategy, thereby gradually giving up maximization of revenue from jalmohals.
2. Keeping land administration of jalmohals with the representatives of Ministry of Land at local government level, but changing the aims and reorienting local officials.
3. Forming UFCs (with the proposed composition and terms of reference agreed by Department of Fisheries, see also MACH Policy Brief 2) in place of the Upazila Jalmahal Management Committees, and transferring responsibility for jalmohals to the UFC, covering planning, monitoring, evaluation, and decisions on access and lease issues.
4. Department of Fisheries developing links with other agencies, both at local and national levels and NGOs that can help fishers organise to take advantage of policy changes, adopt alternative income generating activities, and provide grants for wetland restoration.

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