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1. Introduction

With an annual average growth rate of 1.48% (BBS 2002), the total population of Bangladesh reached to 130 million in recent years. About 44% of people are 'poor' of which 20% are 'hard core' (BBS 2000) poor. Some 43 m in rural areas are classed as functionally landless (owning less than 0.2 ha of land). Rural poverty incidence in a BIDS survey dropped from 65% in 1987/88 to 54% in 1999/2000, but absolute numbers in poverty still remain high. In the rural areas greater concentrations of poor are to be found in the ecologically vulnerable low-lying floodplain areas. According to the 1995-96 HES (BBS 1997) 75% of landless agri-workers and 45% of fishers were below the lower poverty line as against the national rural average of 40%. Poor people in floodplains require mechanisms that can sustainably improve their access to, and ability to influence the management of, their natural resource entitlements. Better institutions and better quality of participation in the establishment of these institutional bodies are such mechanisms. The ultimate beneficiaries of this research do not have sustainable livelihood outcomes. They subsist from a degrading NR base¹ (inland water, soils, forests), and they rely heavily on common pool resources over which they have little say. They have low incomes and are vulnerable to natural and anthropogenic² environmental stresses and cyclical price fluctuations.

Property rights in these floodplains are complex and are critical to an understanding of the issues and approaches to institutional arrangements and integrated management in Bangladesh. Seasonally flooded land is mostly privately owned and cultivated, but during the monsoon in the moderate-to-deeply flooded lands anyone from the surrounding villages can usually fish provided this does not damage crops. In the dry season water and fish left stranded in ditches become the property of the ditch owner. Water from these ditches is used for irrigation. Larger permanent water bodies including rivers and *beels* (depressions) form the more valuable components of the fisheries and are government property known as *jalmohals* or fishery estates. The fishing rights in *jalmohals* have been leased out to the highest bidder— usually this means they are controlled by wealthy and influential lessees who then hire traditional fishers to catch fish for them.

Bangladesh government policies on wetlands still generally ignore access for the poor and sustainability. Technical and administrative interventions from government and private investments have focused on irrigation, drainage and flood control for agriculture (particularly rice). This benefited farmers, and to some extent wage labourers. But drainage, flood control, and irrigation have adversely impacted floodplain fisheries, which are estimated to have fallen by about 70% in recent years². Participatory assessments indicate that pressure on fish and aquatic resources has rapidly grown and availability per household has fallen. This affects professional fishers (one of the poorest groups in rural society), and the poor in general who have relied on these resources as a subsistence safety net.

Influencing policy requires targeting institutions that are in a position to create and change policies in IFM³ (Integrated Floodplain Management), which can consequently improve the livelihoods of floodplain communities. Part of the findings from different studies relates to the institutions that are appropriate and lessons from recent experience in the water and fisheries sectors that need to be adopted in changing towards IFM policies. This can be based on the understanding of institutions generated by LWI partners and other projects (e.g. CBFM). R8195 is particularly relevant as it assessed institutional barriers to uptake of pro-poor management strategies. The evidence from other projects pertinent as poor

¹ NEMAP(1995). *National Environmental Management Action Plan*. Ministry of Environment and Forest, Dhaka.

² Mirza, M.M.Q. and Ericksen, N.J. (1996). Impact of Water Control Projects on Fisheries Resources in Bangladesh. *Environ. Mgt.*, 20 (4), 523-539

³ IFM projects incorporated all resource management projects in Bangladesh floodplains viz. CBFM, MACH, SEMP, OLP and others.

interaction between service providers and farmers and inadequate information was the problem rather than availability of technologies.

Recent projects have shown co-management and community based management to be the future of floodplain resources management in Bangladesh. However, to scale this up will require breaking through sectoral boundaries and supporting communities in integrating and enhancing their diverse floodplain uses. The NRSP/DFID research project R8195 ('Integrated Floodplain Management: Institutional Environments and Participatory Methods'), drew lessons on institutional developments from fisheries and water resource projects; these need to be communicated in usable ways to national decision makers, project implementers, and user organisations. This project has intended to develop such materials; test, improve and disseminate them, and coordinate and integrate similar uptake promotion activities and materials covering IFM options and participatory processes. Hence this research project undertook activities on: concerning uptake promotion of IFM institutional learning and messages with an expectation that, information on improved institutional recommendations and guidelines will have reached key policy stakeholders, intermediaries, and practitioners through appropriate media.

1.1 Demand for the research

Government of Bangladesh has stated that it plans a four-pronged approach to poverty reduction: (i) promote pro-poor growth, (ii) accelerate the pace of human development of the poor, (iii) provide social safety nets for the poor against unanticipated income shocks, and (iv) inculcate participatory governance and enhance the "voice of the poor" (Bangladesh Development Forum Meeting, Paris, 13-15 March 2002, SIPP/World Bank Appraisal Report, 2003). Thus the Government of Bangladesh emphasized greater agricultural productivity and growth of the rural economy as a key measure to combat with the poverty.

Rural people in Bangladesh are largely dependent on floodplain resources for their livelihood. Floodplain resource systems contain multiple resources, which are being exploited by multiple stakeholders. Over the last two decades, in Bangladesh as elsewhere, donors, government, and NGOs have been testing community-based natural resources management approaches at varying scales viz. sporadic & localised initiatives or as a nationwide approach through co-management arrangements. In addition, increasing interest in the participation of primary stakeholders in the design and management of floodplain initiatives has led to the proliferation of new "resource management institutions" (RMIs) at the grassroots level comprising of local fishers and other resource users. However, experiences of all projects suggested that there have been wider agreement on the acceptability and success of various management interventions (viz. good IFM options) at site levels (grassroots) but the issue of sustainability of management options at local level beyond the project life is still questionable. Enabling institutional arrangements and capacity as well as creation of local level "good IFM institutions" thought to be the way forward in this regard.

This project emphasizes integrating the findings of various other IFM projects with the purpose of promoting improved IFM options and PAPD (consensus building) among the policy stakeholders, intermediaries and practitioners with the aim of having sustainable IFM in Bangladesh. The various findings will then be shared with key decision makers, organisations and practitioners, who can effectively incorporate the IFM institutional messages and recommendations, to create a complete package for sustainable IFM in Bangladesh.

The suggested improved institutional options and recommendations will create an opportunity for building consensus and resolving conflicts among the various users of floodplain resources and contribute to sustaining the floodplain production systems upon which the poorer communities are most dependent.

1.2 Brief on IFM - Promotion of Institutional Options (R8195)

A recently completed DFID research project under the Natural Resources Systems Program, 'Integrated Floodplain Management: Institutional Environments and Participatory Methods' (NRSP/DFID ref. no. R8195) undertook a review of the formal and informal institutional arrangements and their impact on the performance of integrated floodplain management (IFM). R8195 was a two-yearlong project completed in 2004 and generated valuable messages relevant to achieve improved IFM institutional environments.

IFM institution project (R8195) analysed various technical definitions of the "institution" and finally drew conclusion and agreed on a simple and workable use of the word as meaning "*regular patterns of behaviour*" or simply "*ways of getting things done*". In turn, these institutions are comprised of "formal institutions" - visible structures like organisations or committees and "informal institutions" - less tangible entities such as cultural factors, power structures, and religious norms and beliefs.

In reality, these institutions interact, making it difficult to isolate the functions of any given factor in isolation. The performance of the Union Parishad is best understood in relation to its role in society and national and local politics, for instance.

R8195 developed an idealised model of local IFM. Local and community-based NRM initiatives tend to strive for "collective action", "participation", "equity" and "pro-poor" outcomes. There are in-built assumptions in NRM theory that participation (in the design of rules, activities, etc.) can lead to appropriate and so sustainable outcomes. Ideally, this form of management would be self-sustaining so that positive outcomes would lead to continued participation and increased legitimacy.

1.3 Method

At the outset of this project, communicable messages from R8195 and other IFM projects were extracted. A communication plan was submitted in draft with RD1. The communication plan and strategy was finalised based on the communication needs assessment survey administered during the out set of project. It is noted that CNRS had been implementing a similar NRSP project (R8306: Uptake Promotion of IFM) where the major focus was also on uptake promotion of IFM options, with the DoF as one of the prime TIs. We found it logical to integrate the relevant NRSP uptake activities to effectively reach the target audiences, many of which are similar for various NRSP projects (R7868, R8195, R8223, and R8306) and thus proposed packaging the IFM institutional recommendations and options generated from R8195 with the R8306 promotional activities.

In addition, the project has developed a communication plan to effectively reach the target audiences. The project team followed the basic principle for communicating messages to target audiences was the involvement of the target institutions and their intended audiences from the beginning of the project while developing and disseminating the messages.

The outputs of the communications needs assessment survey have been used in this project. These included personal communication through interactive meetings, field visits, targeted workshops, round tables with policy makers and practitioners, training and end of project workshops. To reach the key audiences (policy makers and planners) policy briefs have been developed on IFM institutions, though initial analysis indicates that participatory meetings and email are the preferred media.

The project used different communication channels and media to reach target audiences at different levels in the hierarchy, preferably using media that are effectively able to target both higher-level policy stakeholders as well as meso- and micro- level practitioners and users. A draft communications plan has been prepared which outlines initial thoughts on media types and channels, and the different audiences (linked to communication strategy of R8306).

Instead of separate project communication efforts, this research also used MACH (IFM project of USAID/Winrock International) and CBFM-2 (Fisheries project of DFID/WorldFish Center) communication channels to reach the target audiences through inserting a section on institutional options in their packages on floodplain fisheries management.

Field level government officials, NGO staff, and local government bodies and Department of Fisheries have been targeted with messages, which have been tested and found effective in R8306, and their views on promotion of IFM institutional options incorporated. To communicate with the audiences at field level, we stimulated the meso level planners and managers to channel the institutional messages down, through their respective training and extension programs. Appropriate media products, as learned from need assessment exercises, such as posters, policy brief, power point presentation, training module and guideline have been developed, tested and disseminated.

1.4 Target Institutions

Various government agencies, notably DoF and LGED, have been implementing NRM related development projects at the grassroots level have been the target institutions for the project. However, DoF was the prime TI of the project on promotion of IFM institutional options.

The DoF is currently implementing various projects in the floodplains including DFID/World Bank assisted FFP (Fourth Fisheries Project), DFID assisted CBFM-2 project and USAID assisted MACH project. All these projects are implemented through CBOs at the community level managing fisheries and other aquatic resources in floodplains, for the sustainable livelihoods outcomes poor resources users.

In all these DoF projects, commendable progress is made in technical aspects compared to social and institutional aspects, and thus the technical achievements made during the project life, are likely to collapse soon after the phasing over of project support largely due to weak institutional capacity built during the project, mainly due to less attention given to social and institutional issues, coupled with limited knowledge on institutional aspects (process and methods).

WorldFish Center (technical coordinator of the CBFM-2) and its partners were also treated as TIs of the project. IUCN and its partners implementing SEMP, and working with CBOs for sustainable NR management in the wetlands were also targeted as TI to have benefited from institutional recommendations and out comes.

CNRS has been selected as implementing and technical partner of USAID assisted SOUHARDO project of CARE Bangladesh. SHOUHARDO has a total of 47 implementing partners with a prime objective to develop local institutions for achieving sustainable food security through empowerment and capacity building in sustainable livelihoods, practicing good governance and realizing their rights and entitlements with a broader institutional framework. Output of the project has been shared in forum organized by SHOUHARDO and found the project as a potential TI.

2. Results

This research aimed to achieve the following outputs:

Output 1:	Materials for effectively communicating recommendations on IFM institutional issues and methods to reach TIs developed.
Output 2:	Institutional lessons within IFM - CP related best practices integrated and promoted (participation, resource options, and institutions).
Output 3:	Guidelines and recommendations revised based on usability and uptake assessment in Bangladesh.

The objectively verifiable indicators for these outputs included:

<p>Output 1. OVIs</p> <p>1.1 Media types identified and developed for IFM institution messages that are appropriate for Bangladesh TIs (practitioners and policy level) by June 2005 (e.g. leaflets, guidelines briefing papers, theatre scripts).</p> <p>1.2 At least 2 papers prepared and submitted to peer reviewed journals covering findings of R8195 and related projects by Sep 2005.</p> <p>Output 2. OVIs</p> <p>2.1 Institutional recommendations incorporated in IFM options and PAPD related promotional materials and activities by Jul 2005</p> <p>2.2 Modular materials (training, practitioner) covering all related NRSP PAPD and IFM suite findings and including institutional findings developed by Aug 2005</p> <p>2.3 At least 30 decision makers in TIs reached with messages on IFM institutions by Sep 2005.</p> <p>2.4 At least 300 practitioners with institutional findings reached through links with R8306, etc. by Sep 2005</p> <p>Output 3. OVIs</p> <p>3.1 At least 1 GO and 1 NGO tests use of materials and give feedback by July 2005.</p> <p>3.2 Institutional findings used by 1 TI in at least 1 case by Sep 2005.</p> <p>3.3 Materials revised based on feedback from event participants and piloting TIs by Sep 2005.</p>
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The current research is a follow up activity for uptake promotion of IFM institution messages that have been derived from previous NRSP research projects (R8195: IFM institutional environment and participatory methods). At the outset of the research effort, the project team concluded that previous projects had mainly taken the five IFM projects (in water and fisheries sector) as cases on which to develop research findings. However, it was thought that incorporation of learning from some other projects (e.g. fourth fisheries project- a national level project implemented by the DoF) could contribute positively for making worthwhile comparison, and as such, included in this research project. Thus project team extracted messages from previous NRSP project (R8195) as well as other IFM projects in Bangladesh (Appendix 1). It was revealed from the previous research that the ideal institutional setup for IFM is absent in Bangladesh. Institutional barriers that are hindering IFM are identified and accordingly the policy recommendations made to face the challenges and barriers. Institutional barriers are shared with DoF and they agreed with the barriers identified and accepted as common and relevant. Project team made presentation on IFM institutions before the body mandated for developing Bangladesh's inland fisheries strategy and they agreed that appropriate recommendations would be taken in the national inland fisheries strategy as well as to be incorporated in future projects of the DoF.

IFM institution lessons and messages were extracted by the project team from R8195 and other IFM projects have been initially grouped under 11 thematic areas. These thematic areas have been shared with 62 national and intermediary level target stakeholders. They showed their interest in contributing and sharing these in future. Thematic areas and key issues related to the IFM institutions are as follows:

Themes	Key Issues
Organisational Development	Legal Identity, Assessment of NGO capacity, Capacity Building of NGO/GoB agency staff, Strategic Planning, Governance and Accountability
Institutional Arrangement	Pro-poor rules and policies, Modes of intervention, Acknowledging local institutions, knowledge and adaptability.
Pro-poor focus	Inclusiveness, Equitable outcomes, Maximization of benefits, Sustainability.
Project Design and Planning	Site selection, Flexibility/structure Vs. process, Process documentation incorporated, Inclusion of independent, evaluation, Participatory Planning
Partnerships	CBO-Local Government, Local Government-Local NGOs, National level Government Agencies-NGOs, CBO networking and communication.
Community Based Natural Resources Management	Participation of the poor, Flexibility in developing CBM institutions, Capacity building of CBOs, Constitutional Issues, Elite Capture.
Up Scaling	Empowerment of CBOs through process Approach and Training on Financial Management, Importance of Exit Strategies, Communication for Influencing Policy, Sharing best practice lessons on Approaches and Models, Identifying local Champions.
Gender Equity	Enabling Participation, Documenting contribution, Awareness of contribution, Capacity building.
Monitoring and Evaluation	Process approach to documentation, Sharing of feedback with stakeholders, Monitor progress in institution building and resource management.
Governance and Accountability	Compliance with the rules and policies, collective decisions, social and financial auditing, poor institutional arrangement.
Conflict Management	Local power structure, kinship, shifting values, lack of good governance.

Institutional lessons on IFM, mostly derived from project experiences and grassroots level examples, are referred. It was found that the policy framework in IFM institutions was not addressed by previous research projects, a matter that could be addressed as part of a future endeavour.

An idealised cycle of inclusive and pro-poor IFM has been drawn. Four generic messages, supported by examples explaining key barriers in institutional arrangements, are the main components of the cycle. The four generic messages are as follows.

- i. Collective Support (adherence to new processes, participation & awareness),
- ii. Facilitation & Guidance or Autonomous Management
- iii. Equitable Benefits (intersecting livelihoods, cost-effective)
- iv. Consensus and Enthusiasm.

A lesson-sharing meeting was held between three ongoing IFM projects (FFP, MACH, and CBFM-2) and it was found that many institutional barriers are present in these projects. It was therefore agreed that the institutional barriers that are valid for MACH and CBFM-2 would be looked at with due consideration that both the projects have only one year left to run. In the discussion meeting it was emphasised that the role and influence of informal institutions was not adequately considered in the project-based local level institutional framework. Determining the nature of informal institutions requires long-term in-depth study, unfeasible for the projects. Thus the meeting recommended that the role and influence of informal institutions, and how they can be utilised in a framework can be further evolved. It is also noted that many key messages related to IFM institution were shared in different forum by RLEP and FFP.

The research emphasises analysis of institutional learning of recently completed / presently ongoing IFM projects. Institutional learning from MACH, CBFM-2, FFP, RLEP, and CARE-RLP projects have been analysed. Analysis revealed that the institutional learning includes NGOs, CBOs, DoF, local CHAMPION, etc.

To identify the need of communication messages and preferred media types at the different levels (micro, meso and macro), a communication needs assessment survey (CNAS), has been carried out and, based on the CNAS findings, a communication plan (Annex BI) has been devised. It is noted that most policy level actors and intermediaries contacted during the CNAS showed interest in being involved in the process in the future. Feedback from policy and intermediary stakeholders on the lessons showed that institutional promotion of IFM options, institutional arrangement, and development of institutional capacity are the prime types of option. CBFM-2 plan to use the findings of the CNAS in developing a communication plan and strategy for the CBFM-2 project. A summary of the CNAS has been provided in the following chapter and details of the CNAS have been annexed with this report (Annex BII). The revised communication plan has been annexed as BI.

This research aims to develop a training module based on the IFM institutional messages highlighted in R8195 for IFM institution practitioners. Initially, draft IFM institution training modules were developed, covering challenges of IFM, challenges of IFM institutional sustainability, role of linkages in influencing IFM and key lessons and the best practices. The module has been developed inline with the DoF 'open water fisheries management training module'. The training module has been forwarded to reviewers and been shared with the DoF training cell members and open water fisheries management practitioners in a daylong workshop (workshop proceedings in annex BVIII). As per the recommendation of workshop participants, the training module has been edited and finalized. A brief summary of the training module has been described in the next chapters and the detailed module has been annexed with this report (Annex BVI). Other than the training module, a policy brief, a poster and two papers have been prepared as promotional materials.

The project target was to develop two papers based on R8195. Of the two journal papers, one is more generic, targeting an academic audience, whilst the other is a "Bangladesh paper" for a more specific, local practitioner-based audience. A summary of the papers is described in the following chapters and detailed paper has been annexed with this report (Annex BIII and Annex BIV). It is noted that IDS is keen to post the abstract of generic paper (Annex B IV) on their ID21 service.

Some promotional materials have been developed under the project. IFM institution training module, guideline, policy brief, posters, and fact sheets are being developed as promotional materials. It has been decided by the project team that promotion materials developed for this research project (R8495) will be included in the resource pack to be developed under another NRSP project 'Better options for IFM: Uptake Promotion' (R8306). It should be noted that the key institutional lessons are included in the R8306 policy brief and two fact sheets developed to be incorporated in the IFM package. A draft briefing paper (policy brief) has been distributed to 12 national- and 40 intermediary- level stakeholders and their comments received, based on which the policy brief has been finalised. A draft poster has been distributed among 30 intermediaries and 62 CBOs, and the poster has been tested (Annex IX: Testing report) at the different level upon which the poster has been finalized (Annex B VII: policy brief and poster). It was found during testing and sharing meetings that all contacted policy and intermediary persons (DoF, DAE, LGED, Cooperative, Social welfare, BRAC, PROSHIKA, CARITAS, IUCN, ITDG, IC, NACOM, WARPO) showed keen interest in being kept in touch with the process.

3. Communication Plan

Recently conducted DFID/NRSP funded research (R8195) on "Integrated floodplain management (IFM) - institutional environment and participatory methods" highlighted a number of interesting observations and lessons, relevant to all levels of IFM management. "Integrated Floodplain Management (IFM): Promotion of Institutional Options (R8495)" is a short follow-up initiative (May – September 2005, extended to November 2005) which attempts to communicate the lessons learnt and future challenges, to identify relevant Target Institutions (TI's) in Bangladesh.

This communications strategy tries to provide a guideline on how best to communicate the findings from the project R8195 to the identified stakeholders. This paper focuses on the process of planning the strategy, which also gives an indication of why certain types of communication products are selected over others, the lessons drawn from other strategies, analysis of target institutions, and the need to identify champions to influence policy. The culmination of the strategy is its Communications Plan. The final plan identifies the specific communication activities with their purposes, the timeline of each activity and some indicators of measurement (see Annex BI).

Key policy level stakeholders:

1. GoB institutions associated with policy generation and practice of natural resource management (NRM) in the floodplains (DoF, LGED, BWDB, DAE)
2. Implementing agencies, national NGOs, and donors involved in NRM. The project refers to these stakeholders as Target Institutions (TIs).

The Communications Plan contains a timeline and detailed indicators of achievement for each communication activity, which together will contribute towards the achievement of the overall objective of the strategy. Each training session or workshop organized under the strategy should collect end of session comments of participants on the effectiveness and usefulness of lessons through design of a good evaluation sheet. The analysis of the data should be used for development of communication materials for IFM projects in future. The communications plan is presented below.

	Activity	Means	Purpose
Aug	Lessons Paper	Develop an evidence based master document. Synthesize a brief lessons paper.	Sensitize the National level policy stakeholders and other TIs about the institutional issues of IFM
Sept	Translation of the Lesson Papers	CNRS in-house translation service	Sensitize local and district level stakeholders and national NGOs
Oct	Posters	Most useful messages will be selected from the lesson paper	To use as support in workshops and training sessions. Disseminate to different IFM institutions.
Nov	IFM Institutions guidelines	Developed from the master document.	To use as support in developing IFM institutions. Disseminate to different IFM institutions.
	Identification of champions in different institutions	The communication needs survey collected names of champions.	Invite in workshops. Link up with their existing work and strategies
	Creating linkages	Link up with the campaign on Community Based Management Lessons of IFM incorporated or used in Communication strategies of CBFM2 and MACH	Wider use of lessons. Sustainability of information. Wider impact on policy
Dec	IFM Institutions Training Module	Developed from the master document and Training module of R8306.	To use in training sessions with local level officials and NGOs.

	Activity	Means	Purpose
	Conducting training at the local level	Develop training manual. Organise local level training at CNRS project sites	
	Preparation of dissemination list	Champions list. List of organizations involved in natural resources.	Wider dissemination
Jan	National level lesson sharing workshop	Invite participants from the champions list of target institutions.	Sharing lessons with target institutions. Influencing policy stakeholders.
	Archiving Information	Post in CNRS website. Make linkages and find room for IFM lessons in other websites on natural resources	Create wider awareness on IFM. Sustainability of information

4. Communication Needs Assessment Survey

A recently conducted DFID/NRSP funded research on “Integrated Floodplain Management (IFM) -Institutional Environment and Participatory Method” undertook a review of the workings of some formal and informal institutions that influence access to common pool resources and have bearings on the impacts on the performance of IFM and distribution of benefits.

This survey work has been conducted to learn more about the nature of information demand with respect to IFM Institutional promotion options and how the lessons of existing IFM institutional lessons could be shared with the Officials of different tiers of government and with the CBOs at the grass root level.

At national level, 12 respondents of different organization participated in this study. Officials of departments at both thana and District levels were also involved in this survey. The study sent a pre-structured questionnaire (*Annex B II*) to government officials, whilst focus group discussions were held with CBO groups.

The results were, overall, positive, with much valuable information gathered from all participants. It became clear that CBO members saw leadership as the most important factor in promotion of institutional options, also identifying networking or linkages with other organizations, regular / monthly meeting, good financial management, and constitution as important. In case of the media preference, Television, Meetings / Workshops, and Training were identified as the preferred media.

In order to promote the institutional options, officials suggested developing an institutional arrangement, learning about related lessons, developing institutional capacity, and creating formal institutions to promote IFM and target stakeholders.

Policy people ranked organizational development as key institutional issue followed by pro-poor focus while intermediaries voted for community based resources management as key issue followed by local level institutional arrangement.

5. Journal paper

The research aimed to prepare two journal papers based on the findings of previous NRSP research on institutions (R8195). Accordingly two journal papers have been prepared. The titles of journal papers are “Developing local institutions for management in Bangladesh” and “Acknowledging the informal institutional setting of natural resource management-

consequences for policy-makers and practitioners". Full journal papers are annexed with this report as Annex BIII (Bangladesh paper by Dr. Parvin Sultana) and Annex BIV (more generic paper by Roger Lewins). Key findings of the papers are described below.

5.1 Developing local institutions for management in Bangladesh

This paper has been prepared by Dr. Parvin Sultana, one of the team members of R8195. The paper highlighted that for the most part, informal institutions are treated as exogenous forces which change the benefits to using alternative formal structures, and formal institutions are treated as mere functional substitutes for informal elements governing exchanges. Recent developments in Bangladesh have focused on the space in between these two levels, creating new local community institutions.

The paper revealed that there are wider interactions, which affect institutions in integrated floodplain resources management: the interactions between central government, government agencies responsible for water management, and local user communities.

This paper focuses on the room for negotiations and interactions of interests between the three stakeholders, central government, government agencies responsible for water management, and local user communities, which can result in unexpected outcomes.

In developing countries the development of institutions for different aspects of floodplain management is mainly at the local or project level. Government support and initiatives in this sector are largely project-based, since they depend, to a considerable extent, on external funding.

The paper summarises five case study projects and locations: two initiated from the water sector (one large scale and the other small scale) and three from the fisheries sector (one taking an integrated watershed approach, one an integrated floodplain management approach, and the last more narrowly focused on enhancing fish production). All face issues of overlapping interests among stakeholders competing for and sometimes complementing one another in their uses of water, land and other floodplain resources.

The major features of the five projects are shown in the following summary matrix:

Characteristic	Projects				
	KJDRP	SSWRDSP	MACH Project	CBFM ⁴ Project	Oxbow lakes project
Sector	Water	Water	Fisheries	Fisheries	Fisheries
Implementing agency (GoB)	BWDB	LGED	DoF (NGOs and local government)	NGOs and DoF	DoF
Scale	Large	Medium	Medium	Small	Medium
Implementation period/Status	1994-2002	1996-2002 (phase-1)	1998- due in end 2006	1995- due in end 2006	1991-1997 (management rights of lakes for 50 years)
Role of NGO	Motivational, organisational	Motivational	Consensus building, RMI and credit group formation	Awareness, motivational capacity building, RMI formation	RMI formation, credit, technical advice (DoF)
Type of project/ purpose	Water management to reduce drainage congestion for agriculture	Water management for agriculture	Wetland restoration, mainly for fishery	Sustainable fishery	Fishery enhancement
Project objectives	Increased crop production, restoration of fisheries,	Increase crop production, create employment	Sustainable management of aquatic resources of floodplain eco-	Improving the local common fishery	Experiment in the co-management of stocked oxbow

⁴ Goakhola-Hatiara Beel under CBFM project in Narail district

Characteristic	Projects				
	KJDRP	SSWRDSP	MACH Project	CBFM ⁴ Project	Oxbow lakes project
	creation of non-farm employment	opportunity, food security	system, major in fisheries development		lakes
Type of management	Co-management	Community based management (membership)	Co-management upper tier and community based (representative) lower tier	Community based (representative)	Community based (membership)
Main interventions of the project	Desiltation of canals to relieve water logging, protect intrusion of saline water	Improving flood protection, drainage and irrigation	Wetland habitat restoration, Jalmahal management, micro-credit, wetland reforestation	Fishery conservation measures, fish sanctuary, micro credit, IFM	Aquaculture in natural lakes
Tier of local institutions	4	1	2 (plus LGC)	2 (plus an advisory committee and a cluster committee)	3 (plus DoF)
Functional tier	2	1	2 (plus LGC)	2 (plus an advisory committee and a cluster committee)	2 (plus DoF)
Registration	Cooperative Department	Cooperative Department	Social Welfare Department	Cooperative Department	Cooperative Department
Institutional development activities	Election, annual budget and plan, involved in design, implementation	Received training, Election,	Participatory planning (PAPD), Training, conflict management, democratically select office bearers	Received training, networking body, conflict management,	NGO organized groups and micro-credit support
Transparency and accountability of RMIs	Apex level federation is not accountable to anyone, lack of fund is a problem, Regular meeting, regular AGM	AGM, record keeping but audit irregular	AGM, audit, record keeping, regular meeting, oversight by co-management body	Regular meeting, resolution, account keeping	According to constitutions: AGM, elections, audits, but not now followed
Community wide support	Absent	Absent	Partial	Present	Absent
Compliance with local wetland use rules	Not applicable (but do collect fees to maintain structures)	Not applicable (but do collect shares and repay loans)	High but local conflicts and partial end to use of some fishing gears	High, community adopted norms for conserving fish	High, excluded others from fishing, share catches
Limitations	25% HHs involved in Local institutions	66% HHs involved, AGM held in 51% institutions, attendance was 50%, lack of social capital, participation of community in resource management	RMO membership could be criticized as lacking transparency	Separate sluice gate management committee formed by BWDB	Involvement of women is weak

Characteristic	Projects				
	KJDRP	SSWRDSP	MACH Project	CBFM ⁴ Project	Oxbow lakes project
		and planning was poor, fisheries and CPR were not considered			
Responsibilities of Local institutions after project	O&M of structures and drainage canals (mainly for crop) (khas resources and Jalmahals)	O&M of the infrastructures (khas resources)	Integrated management of floodplain resources, benefit sharing) (khas Jalmahals)	Integrated floodplain management, fisheries conservation (private floodplain)	Collection & deposition of lease value, participation in fishing, pond maintenance (khas Jalmahals)
Linkages	Co-management exists above local CBM level, Accountable to Coop. Dept. for accounts and record keeping, Technical support from BWDB	Cooperative dept.	Co-management exists above local CBM level, Union Parishad, local government agencies/administration, social welfare department	Sluice gate management committee, FFS advanced by DAE, UP, UZ Jalmahal Committee	DoF
Members (in decision making/ fund management)	Mainly farmer, some fisher and landless (Farmer and elite dominated)	Mainly marginal farmer and landless (Many cooperatives taken over by elites)	Multiple stakeholders but mainly fishers (fishers have been taking main role)	Mainly subsistence/part time fishers and land owners (farmers), union parishad representatives	Fisher (dominated by leaders and investors)
Source of fund for maintaining organizational expenditure	Khas resources management and members subscription	Creation of revolving fund, members savings, micro-credit operation	Provision for endowment fund	Members subscription	Share/ toll from catch, Members subscription
Institutional Sustainability	Project ended. Some WMGs registered. WMAs self financing from land handed over indefinitely by BWDB. Infrastructure remains with BWDB. Functioning registered two tiers of institutions (many).	Project ended. WMCAs registered. Self-sustaining through credit and shares. Trees for future income. Infrastructure handed over permanently. Registered organizations are functioning and doing O&M activities (very few).	Project ongoing. RMOs registered. Endowment fund planned to cover co-management. RMOs part effective in collecting use fees. Some norms well established. Water bodies handed over for 10 years. Expected to be functional (many).	Project ongoing (under CBFM phase-2). BMC registered. Private land. All types of stakeholders are benefiting, and adopted norms. Homogenous community. Sustainability aspect is not clear.	Project ended. 80% of LMGs and 50% of FFGs functioning despite limited support role of DoF. Water bodies handed over for 50 years. Functioning (democratic practice is absent, benefit distribution is not equitable)

The above matrix does not show any clear picture about the indicators contributing in institutional sustainability, but it generates evidence of some aspects of local level floodplain resources management institutions (RMIs). It is learnt that RMIs are being built by the projects to serve project purposes. There is no common guideline or policy support for developing RMIs. There are many instances of overlapping of RMIs in a single floodplain (e.g. in Goakhola-Hatiara floodplain, CBFM formed fisheries management organization, Department of Agriculture Extension formed farmer's organization, LGED formed small scale water management group while BWDB formed sluice gate management body). Many community people are members of more than one body, which have been incurring high transaction costs. There is also lack of coordination and integration and, to some extent, conflict also. Government of Bangladesh on principle agreed that there would be a four-tier local government structure: village level (lowest tier), union level, upazila level, and district level (highest level). Unfortunately, as yet, only union level local government bodies have been found to be functional. Functional village level bodies could play an appropriate role as the RMI, avoiding duplication, saving transaction costs, and maintaining proper integration as the authorised body. However, analysis of the above matrix show that there are two major factors important for sustainability of the RMIs: generation of funds for the RMIs and members subscription, and access right to the khas resource management.

5.2 Acknowledging the informal institutional setting of natural resource management-consequences for policy-makers and practitioners

This paper has been prepared by Roger Lewins, team leader of R8195. This paper aimed to better transfer the usable messages to those who are most closely engaged with NRM and development. The discussion was held based on two pre-dominant theoretical schools (NIE and CPRs) and highlighted that reduction of transaction costs is the key to sustainability of natural resource management institutions. This paper also discussed the role of the informal institutional environment and its interaction with new structures, which can open a new avenue for policy-makers and other facilitators. It depicts that formal institutions (as structures) and informal institutions (as processes) can help form a basis for the discussion, monitoring, and evaluation of NRM institutions.

A limitation has been identified, in that, both the NIE and CPR schools have tended to overlook the impact of pre-existing and informal institutions on new or NRM-specific institutions, while multiple forms of control, based on tradition and cultural norms, influence resource use. It has emphasised that institutions of various kinds, ranging from the informal (e.g. social norms) to the formal (e.g. the rule of law), interact to form a matrix within which people live their lives. It is described in the paper that applying the distinction between structures and processes, the performance of these RMIs is likely to be a function of RMI design, *de facto*, interaction between RMI and existing institutions, and thus interaction between RMI and intended beneficiaries in the biophysical setting.

The informal institutional environment of Bangladesh, including *Samaj* (society), *Salish* (village level arbitration system), *Mathbar* (local leader), has also been discussed in the paper. It is noted that informal institution, particularly the *samaj* and the *salish*, dominate people's lives and livelihoods in rural Bangladesh. The paper suggested that pre-existing institutions (such as mosque committee) should be incorporated within policy or project design and approached, or at the very least, properly acknowledged.

Based on Bangladesh experience gathered from NRM intervention projects, an idealised cycle of inclusive and pro-poor IFM institutions is suggested in the paper, which includes Collective Support, Facilitation & Guidance or Autonomous Management, Equitable Benefits, and Consensus & Enthusiasm.

6. Guideline

The guide aims to provide a concise and relevant reference providing an overview of IFM and the local institutions created to implement IFM options. It also provides evidence based advice and recommendations for improvements in IFM implementation, in the form of learning experiences from previous / ongoing IFM projects / piloting sites.

There are a number of recommendations to be made for institutions at all levels of the management process, based on observations of existing institutions. Integrated Floodplain Management is by no means a completed framework, and there remains much scope for enhancement and improvement of the implementation process. Key to this is the effective dissemination and adoption of 'best practice' methods and a forum conducive to this is needed for the continued development and strength of IFM. The following areas have been found key to successful project management:

6.1 Stakeholder Involvement

If institutional arrangements for IFM are chosen through participatory processes that emphasise the role of poorer users, the organizations can match the situation and local elites control over resources can be limited.

Because the water management project institutions target "water users", those RMIs tended to reflect the interest of powerful landowners and farmers, rather than fishers or labourers, for instance. Access to these institutions and to the benefits appeared to be concentrated among landowners.

6.2 Cooperation

Diversity of people's interests and land uses in floodplains raises the likelihood of conflict that can only be addressed through extensive stakeholder negotiations covering rights to exploit resources and engage in different uses of floodplain, but also setting conditions not to exploit others in their use of a resource.

6.3 Motivation of Elites

Bigger, strongly subsidised, and highly productive resource bases are more vulnerable to elite capture. Thus, the role of the elite and pre-existing modes of management must be much better acknowledged by facilitating agencies. Government and NGO staff must be made aware of the potential problems and power relations. Local elites, however, also represent an interface with local government and a mechanism to access resources on behalf of "constituents" which may be made use of by local facilitators.

Poor people can mobilise collectively themselves, but tends to be short term and around a specific opportunity or need (for example, mass fishing, embankment rehabilitation). The transaction costs of trying to mobilise other poor people are too high, so inevitably in RMIs local elites or leaders from within the user community will take a leading role, the emphasis in institution building should be making those leaders responsive and accountable.

6.4 Long-term frameworks

Long-term frameworks are needed to strengthen floodplain management institutions and to create an integrated perspective for managing water and land resources. Finally, it is critical for the sustainability of new community organisations and their improved management that links be encouraged between RMIs, local government (Union Parishad) and the local administration (Upazila). Local administrative and government bodies play a vital role in terms of knowledge dissemination, technical and management support, and creating linkages between CBOs and support organisations / NGOs. The short-sightedness and goal

driven approach of many NGOs can often undermine sustainability aspects of their intervention. It is up to the local government institutions to make sure they succeed.

7. Training

The project team has prepared a training module on “Institutional Integration for Sustainable IFM (Integrated Floodplain Management)”. This is a brief description on the training module along with comments and feedback on the module derived from a workshop. The module was reviewed after the workshop suggestions.

7.1 Background

Floodplains are multiple resource systems with many different types of users and multiple stakeholders. A technical report on ‘natural resources system management in Bangladesh’ produced by ITAD Limited based on an in-depth assessment, identified lack of stakeholders participation as the main constraint towards sustainable management of natural resource systems, especially the floodplains. Thus the report emphasized involving all stakeholders, and building up productive linkages among them, for sustainable uses of floodplains with greater benefits to the communities, and to the industrial and agricultural activities.

This technical report recommended developing a short-duration training module to increase awareness and develop skills of government and NGO staff and others associated with institutional integration and linkages in sustainable IFM. This training module is the outcome of this recommendation.

The module contents session plans, handouts and presentation slides for each of the sessions along with well-defined training goal and objectives, list of materials required to conduct the training.

7.2 Targeted Participants of the Training

All the institutions with involvement and influence over IFM projects are targeted participants of this training. They may be NGO staff, Government officials, (such as Fishery Officers (at different levels such as UFO, SUFO, and UDCC), Agriculture Extension Officers, Employees of Water Development Board, Engineers, and Administrative Officers of LGED, etc.) Lease holder of floodplain water bodies, CBO members, local elites, etc.

7.3 Aim of the Training

The overall aim of this training is to increase the awareness of the targeted participants re the importance of institutional integration in IFM projects for sustainability. The course will equip participants with knowledge and skills in identifying institutions, analyzing their roles and interests, and integrating them in IFM projects in a win-win situation. Also the aim of this training is to share the lessons learned and best practices in IFM with the participants, that have been synthesized from a recently completed DFID research project, “Integrated Floodplain Management - Institutional Environments and Participatory Methods (R8195)” so that participants can consider the lessons learned and best practices to apply in their own context while designing new IFM projects.

7.4 Specific Objectives of the Training

After attending the training on this module, the participants will be able to:

- Define the concept of sustainable Integrated Floodplain Management (IFM) and identify various problems / barriers in floodplain resources systems.
 - Define ‘formal’ and ‘informal’ institutions and identify various stakeholder institutions directly and indirectly have linkage and influences on floodplain resources systems.
 - Explain the importance and nature of institutional participation and linkage in sustainable IFM.
 - Prepare force field analysis of positive and negatives roles of the influencing institutions, and identify effective strategy to integrate institutions in sustainable IFM.
1. Familiar and apply the best practices and lessons learned on IFM in their own context.

7.5 Sessions and Total Training Hours

Session	Topic	Time
Session 1	Introduction and getting acquaintance	1 hour
Session 2	Defining and understanding ‘Floodplain’ and ‘Integrated Floodplain Management’ (IFM)	2 hour
Session 3	Barriers and Challenges in Sustainable Integrated Floodplain Management (IFM)	2 hours
Session 4	Identifying Resources and Stakeholders of different Forms of Floodplain Resource Systems	2 hours
Session 5	Identification of Negative and Positive Roles of the Stakeholders and Force Field Analysis of their Roles	3 hours
Session 6	Integrating stakeholder institutions: Key lessons learned and best practices from IFM projects	2 hour
	Total Training Hours	12 hours

7.6 Discussion on the Training Module

A workshop was organized on “Role of Local Institutions in IFM: Barriers in Policy Process” from the project Promotion of Sustainable Institutions for Integrated Floodplain Management (NRSP/DFID R8495) by CNRS. The workshop held at CNRS, Banani office on 5 January 2006 from 10 AM to 1 PM. This training module was presented in the workshop for discussion.

The participants of the workshop were 16 persons from DoF, MACH Project, ICZMP, CWBMP, WorldFish Center, CNRS, and the project consultants. The comments and feedback given by the workshop participants are presented below:

1. The comprehensive Fourth Fisheries training module can be reviewed before finalizing this module;
2. Target people can be DoF, DAE, LGED, BWDB and involved NGOs;
3. Study and research results from different organizations can be incorporated;
4. Stakeholders analysis, definitions of institution and organizations can be included;
5. A pilot course should be conducted before finalizing the module;
6. Concerns about other aquatic life and wildlife should also be included in the module;
7. More GoB officials need to involve in the process.

Later the module was reviewed to comply with the suggestions.

8. Experience of Fourth Fisheries Project

Experiences from Development Process of Local Management Institutions (LMI) to implement Community Based Co-Management of Fisheries Resources in Fourth Fisheries Intervened Water Bodies

Background

The Fourth Fisheries Project (FFP) is the largest development project of the GoB Department of Fisheries, in the fisheries sector. It has a wide range of activity areas, of which open water resource management is one of the key components.

Fourth Fisheries has 49 selected water bodies and number of partner NGOs. The approach to implement management interventions for these water areas adopted is community-based management. Accordingly, Local Management Institutions (LMIs) were developed at both village and water body level by the partner NGOs with local DoF offices. These Local Management Institutions are usually known as Fisheries Management Committee or FMCs. To establish Community Based Co-management of these resources, a number of steps were followed with each of the water body based communities:

Step 1: Project Briefing and Presentation

The degrading resource situation, importance of conservation and enhancement of fisheries resources in the open water areas and the project aims and objectives regarding these issues were presented to the local community and discussed. Then their opinion in this regard was sought. If the community agreed on the necessity of doing something for the proposed water area and showed interest in participating in the project activity then next step was followed. If not, the site is dropped.

Step 2: Organizing the Community and LMI formation

The villages dependent on the water body and the stakeholders were identified. The benchmark survey of the selected water body was completed and a fishers' list made. Then the community was organized through two tier forums. One at the village level called Fisheries Sub Committee (FSC) and another at water body level, which is represented by the FSCs and called Fisheries Management Committee (FMC). The FMC is the focal body for a water body, through which all the proposed management interventions are to be implemented. The FMC is entrusted with, among other responsibilities, dealing with the DoF, leasing authority and others, mainly as and when needed on behalf of the user communities.

Step 3: Orientation and Skill Development of LMIs

The knowledge and concepts of the LMI members (here FMC and FSC) on organizational processes and resource management techniques are developed through training, workshops, and meetings at the grassroots level. Once it is felt that they are capable of making a Fisheries Management Plan and Activity Plan for their community and the water body, they are facilitated to formulate those. In the beginning, the partner NGOs and the DoF local office assisted and facilitate them in formulating these documents.

Purpose of LMIs in Resource Management

The objective of ICF strategy is to attain sustainable management of the inland capture fisheries for the local fishing and user communities through collaboration of all concerned partners, which is self-explanatory, and expressing the needs of developing community based co-management approach for the open water resources.

It was found, however that Community Based co-management of Fisheries Resources is only functioning through development projects. There was no effective initiative to introduce such programs under DoF's normal revenue activities.

There was a lack of proper co-ordination among the concerned government and non-government agencies / organizations in managing capture fisheries resource. Development activities adopted by any GO/NGO agencies that directly or indirectly affect the capture fisheries need prior discussion and sharing with DoF / MoFL. Unfortunately this does not happen. As a result capture fishery along with the fisher community suffer, e.g. the structures of FCD/I projects

From a financial point of view, the introduction of community-based co-management of fisheries resources through a project is not feasible compared to do the same in the rest of the water bodies under a normal DoF revenue program.

As per the above recommendations, DoF is undertaking the following actions:

- Establishment of an effective capture fisheries wing with necessary staff strength and revenue budget allocation;
- Formation of Upazila Fisheries Committee (UFC) with detailed ToR for the Committee and the sub-UFO / UFOs regarding capture fisheries management (proposal already sent to MoFL);
- Documentation of training manual for capture fisheries co-management approach and development of staff strength in this sector;
- Increased coordination and cooperation among GO/NGO agencies in this sector.

Based on the findings and recommendations of the ICF Strategy, an action plan has been prepared. The department has the plan to implement this action plan through a program with the assistance from GoB as well as donor funds. It is expected that the execution of these actions will in turn establish community-based co-management of inland capture fisheries resources.

9. Limitations

During the implementation of the research, the project team faced number of constraints that affected the achievements of the project. The project period was felt to be too short, compared to range of activities to be carried out. The project demanded many workshops with policy level people. Arranging workshop with policy-level operators in order to gain feedback is time consuming.

Recent FMSP (R8486) and NRSP (R8306, R8495 communication synthesis study) projects have targeted similar audiences (at the national level) thus the target audience were reluctant to spare their time.

CNAS conducted at grassroots, intermediary, and policy level, covered a wide area (6 districts). Tools development, orientation of survey staff, administration, compilation, analysis, and reporting took about 2 months, thus delaying CP media selection process.

Development-feedback-revision-test-finalization is the process of materials development. There is an acute shortage of time to follow the full process.

Due to replacement of one of the communications specialists' mid-project, preparation of the training module was delayed.

Due to time constraints, project failed to organize any training with the DoF Upazila level staff members within the stipulated timeframe. However, DoF on principle agreed to organize trainings using this module.

10. Conclusions

Integrated floodplain management (IFM) has a great role to play in the sustainable management of common property wetland resources. This CPR contributes greatly to the livelihood of rural poor in Bangladesh. It is now clear that state's role in CPR management has been shifting from control to facilitation, thus the potential benefit of new governance mechanisms has been developed based on mutual trust and cooperation amongst agents⁵. Indeed, external contextual factors have a very important role in CPR management⁶. The external contextual factors have dimensional variation include physical, biological and institutional/social contexts in Bangladesh, thus the norms of informal institution at the local level have to be coordinated with the formal institution to control the external factors of CPR i.e. IFM.

There is a great necessity to develop guidelines, tools, and methods for use in planning the management of fisheries / wetlands; to assess the development and infrastructure proposals of various agencies that may affect fisheries and wetlands; and to help assess the performance of community organisations and leaseholders in implementing management plans. This may include, for example, Participatory Rural Appraisal, Participatory Action Plan Development, Environmental Impact Assessment, and Institutional Analysis. Providing training in these to relevant levels of central and field level officers and to UARC members is essential. (Fisheries strategy)

There is a risk of too many institutions in a village, and duplication requires a coordinated institutional arrangement. Presently, development projects are forming purposeful committees/CBOs/ RMI to achieve their project goals and it has been observed in some cases that there are 4 different village level bodies in one village. This is occurring despite huge transaction costs, and community members are not serious as they see it as a half-hearted uncoordinated effort. Community people become involved for the direct short-term benefits. Implementation of the lowest tier of local government (village level) may solve coordination problems.

The national Inland Capture Fisheries Strategy of the DoF/GoB, now under finalization, emphasises institutional development, sustainability, and networking of fisheries CBOs. The project has thus directly addressed the issue through promoting the IFM institutional options for sustainable and pro-poor resource management through strong local institutions. Project team made presentation before the team (comprised with the senior DOF personnel) involved in developing the national inland capture fisheries strategy and it is expected that IFM institution recommendations are to be incorporated in the strategy that would contribute in mainstreaming the research output.

⁵ (Ostrom, E, 1999. Coping with tragedies of the commons. Annual review of Political science, 2, 493-535)

⁶ (Edward, M. and Steins, N. 1999. A Framework for Analysing Contextual Factors in Common Pool Resources research. Journal of Environmental Policy and Planning 1 (3):205-221).

Appendix 1: Messages extracted from R8195 and other projects

Generic messages and lessons generated by Project R8195 Extracted by Roger Lewins (project leader of R8195)

Background

This input to R8494 is intended to present an overview of the findings from R8195 and provide a basis to develop communications and training materials for national and international audiences.

The review will focus on those issues which are broadly universal (i.e. that relate to many aspects of NRM in the development context, not just the floodplain of Bangladesh).

Extracting key messages

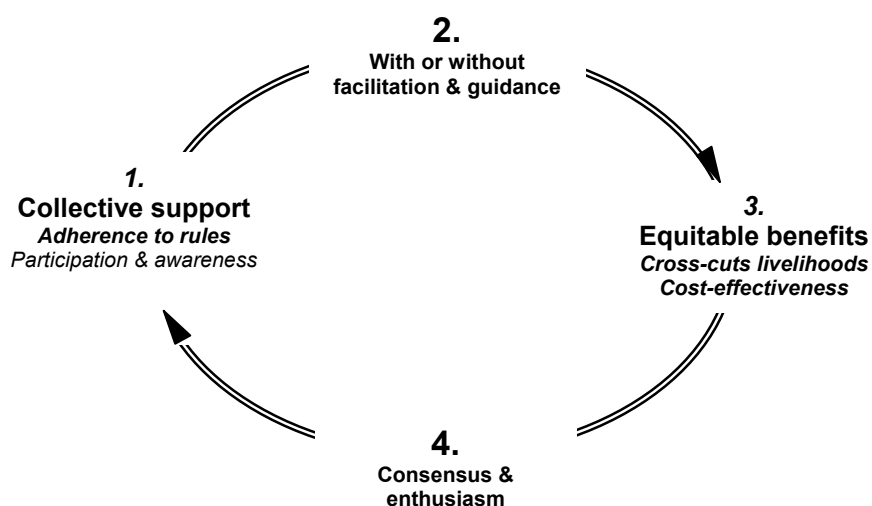
Project R8195 attempted to summarise the key findings and important messages generated from a range of analytical approaches and project activities. A key product of this review was the drafting of four Discussion Papers that highlight in simple terms some key findings from the project. The papers were an attempt to distil distinct messages from the wide range of activities conducted during the project and provide the basis for exploring additional material for an international research or academic audience.

Discussion Paper 1 (*The institutional framework of IFM in Bangladesh*) attempts to deconstruct the theoretical treatment of the “institution” versus the “organisation” on behalf of a non-academic audience. The objective was to simplify and standardise the language used in discussion of these issues (these concerns are discussed internally by CBFM partners) and to outline the types of problems that relate to formal and informal institutions. Finally, general recommendations are provided with respect to the mode of interaction, the type of local knowledge required and the type of activities less likely to cause conflict.

Key issues to communicate internationally:

- The need to distinguish between organisations and institutions
- The need to distinguish between formal and informal institutions
- Stressing the need to observe processes rather than structures (i.e. behaviour & performance rather than constitution, rules of use etc. in isolation)
- Highlighting the “fuzzy” nature of governance – the discrepancy between *de jure* and *de facto* NRM.

Discussion Paper 2 (*Local resource management institutions - common problems & potential solutions*) develops this theme in more detail and is intended for project managing stakeholders (donors and WorldFish Center, for instance). The narrative makes use of the idealised model (below) to explain common problems and potential solutions. These solutions are derived from the findings of the current project and are supported by experience from other projects where necessary.



Key issues to communicate internationally:

- The fragility of this model of local participatory planning and projects with respect to pro-poor focus and sustainability outside facilitation and support
- The key apparent causes of this problem (perception & understanding of project/policy objective etc) but,
- Especially unsuitable management activities that can be commandeered at the expense of the poor (subsidised access to waterbodies for “genuine fishers” etc.)
- The range of approaches already applied to avoid these key problems drawing from others’ observations and R8195 (see Table below)

Idealised Project Stage	Frequent problems	Potential strategies (to be widened to global examples)
1 Collective Support	Pre-intervention indifference Post-intervention decline in support	Simple, public examples (sanctuaries, field demonstrations etc.) Cost-effectiveness for participants & broad beneficiary range
2 Facilitation	Declining dialogue & interaction Limited group organisation, participation & RMI-formation skills	Roles for pre-existing institutions (e.g. WMAs, LGED, local initiatives etc.) or new, consolidated RMI-LGO linkage Vetting of local NGO partners Training of local level staff (community organisation, power issues & the approaches below)
3 Equitable Benefits	Resource capture by non-targets (for instance, landowners or, in some cases, men) Negative impacts on some stakeholders	Ensure early inclusive planning Increase facilitator awareness of power issues (“processes”, RMI formation etc.) Avoiding strongly subsidised inputs for production & access arrangements Low-cost, smaller scale interventions Reduced geographic coverage (smaller participant clusters) Working with pre-existing informal institutions (LIs, samaj etc.). Change from sectoral to livelihoods focus (stressing delivery & interaction across groups & acknowledging potential impacts on all local stakeholders) A change from technical service provision to a rights-based approach
4 Consensus	Intervention-induced conflict	Early use of participatory planning & consensus building Dispute-resolution as an integral function of project RMIs Utilisation of salish

Frequent institutional problems and potential solutions at the local level.

Discussion Paper 3 (Guidelines for *documenting “processes” within NRM*) draws from methodologies developed in parallel NRSP projects (R7562, R8103 and R8306) and a presentation prepared on behalf of the CBFM team in August 2003. The relevance of the RMI as an interface between local concerns and interests and those of external agencies is emphasised and the need to understand the difference between project prescribed (“logframe-type”) activities and actual practice and outcomes on the ground is stressed.

Key issues to communicate internationally:

- Resource user organisations are a means to an end only, they must be judged in relation to their pro-poor and NRM relevance
- This performance relates to their position with respect to pre-existing institutions (power relations, de facto access arrangements) and introduced institutions (project or government staff, other management bodies etc).
- There is a need to capture performance and impact of projects and their institutions in a systematic and repeatable way.

- This can be done by viewing the relationships and interaction between new management structures and existing ones. This is done by developing lines of enquiry that can be repeated with different stakeholders, triangulating opinion and attitudes to change.

Note: If the process documentation methodology is to be developed for international audiences it needs to be positioned in relation to other, related, approaches - in particular generating narratives (stories) of change through Rick Davies's Most Significant Change (MSC). The method deployed in the projects above directed and the story types were predetermined to match the log-frame requirements of the project.

Discussion Paper 4 (*Up-scaling IFM*) outlines some general options for up-scaling in NRM before addressing project-specific concerns through feedback from managers in the context of IFM in Bangladesh (see Table 3 above). In line with the other discussion papers, local level bottle-necks and potential strategies are the focus but policy constraints are also discussed (particularly in relation to the fisheries sector). The paper concludes by identifying a potential new role for meso-level institutions in service provision and project management if government does follow through planned decentralisation.

This paper and related Outputs from R8195 are more relevant to O1A1 because suggested up-scaling strategies are intended to fit with Bangladesh administrative, research and project structures.

The importance of re-positioning the approach to institutions in NRM

Annex A of R8195 includes an overview of the current theoretical treatment of institutions in NRM and in the developing world. Central here was the way in which previous attempts at "getting the institutions right", in this case the "rules" of use and management structures, is being superseded by a growing recognition of the vast range of institutions that already exist to allow or prevent access to NRM benefits for the poor. The review drew strongly from the work of Frances Cleaver and Tom Franks but other literature will need to be examined to ensure the messages are placed within the context of current debate and approaches.

In the context of Bangladesh, project R8195 revealed an interest in the distinction between organisation, institutions, formal and informal institutions but this needs to be clarified very carefully to avoid confusion (a task of O1A1). This is a very important first step for both national and international material however, because it immediately opens up the importance of process documentation and switching attention from blue-print design to actual practice and performance.

Developing a coherent message for an international audience

The meaning of the Outputs of R8195 are best understood when viewed together and the observations above could all be incorporated into a paper for a development audience. For instance, the theoretical background should be explained in relation to changing perceptions of the institution, frequent failings and problems on the ground.

This introduces the purpose of R8195 and sets up a discussion of the crucial role of informal institutions as processes and of ways to capture them (process documentation etc.). The final section could deal with corrective measures or recommendations to avoid frequent problems.

This paper would develop the issues covered in the Discussion papers in greater detail, drawing on examples from Bangladesh only where necessary. The sequence of issues types to communicate would relate to Paper1, Paper 3 and finally Paper 2.

Review recommendations, options, and findings of R8195 for practical and policy messages for Bangladesh

Extract by Dr. Parvin Sultana (Consultant of R8195)

Key Lesson Summary

A common understanding of the objective should be to explore ways to adapt and communicate the guidelines to ensure understanding across a wider audience.

Policy and communication

- Inter-agency collaboration improves service delivery and increases access to services, including with local NGOs and private sector agents. Ways need to be found to sustain collaboration arrangements and to harness win-win situation or “pull” relationships rather than “push” ones.
- High-level exposure is important and can be achieved by setting communication as a project output and integral part of a project activities but it does not necessarily lead to sustained macro-level policy reform.
- Means of communicating findings to policy makers need to be identified.
- Clarification needed on “policy influence”.
- Donors need to integrate their funding cycles and policy priorities and coordinate programmes across the wider policy stakeholder matrix targeting all tiers of government agencies.
- Ways to adapt and communicate the guidelines into new projects/programme to ensure understanding across a wider audience is needed

Community management Institutions

- If institutional arrangements for IFM are chosen through participatory processes that emphasise the role of poorer users the organizations can match the situation and local elite control over resources can be limited. For example, smaller well defined resource bases (e.g beels) can be managed by particular target stakeholders (e.g. fishers), but wider community participation is needed for larger more complex resources.
- Diversity of people’s interests and land uses in a floodplain context, raises the likelihoods of conflict that can only be addressed through extensive stakeholder negotiation that not only involve rights to exploit a resource and engage in different uses of floodplain, but also not to exploit others in their use of a resource.
- Long-term frameworks are needed to develop or strengthen Integrated Floodplain Management institutions for managing water and land resources.
- The role of the elite and pre-existing modes of management must be much better acknowledged by facilitating agencies. While government and NGO personnel must be made aware of the potential problems and power relations that might develop locally, it is important that the potential these individuals represent (an interface with local government, a mechanism to access resources on behalf of “constituents”) are not overlooked by local level facilitators.
- The elite who organise action, either by mobilising their 'clients' (servants, employees and *somaj* supporters) and /or employing wage labour, while poorer people (those without natural capital) look to access opportunity both through patrons and in the wider labour market. Also, while poorer people can mobilise collectively, this tends to be short term, and around a specific opportunity for all involved (e.g. 'mass angling', embankment rehabilitation work paid for by BWDB). The transaction costs of trying to mobilise other poor people are just too high otherwise.
- Co-option by non-target groups was most evident where inputs and access to resources were subsidised by the implementing agency.

Local / community institutions

- There had been numerous 'local initiatives' (e.g. 'public cuts' in the embankment) which demonstrated that active local Water Resources Management (WRM) was being practiced but the problem of post-project O&M institutional failure continued to be an issue.
- Since water is multifunctional, a common resource 'is a person's to use but not to hold', and there can be externalities for other's livelihoods from its use, there has to be a degree of collaboration over Water Management (WM) at most scales. For example, in fields the problem of seepage means that farmers in a command area of an irrigation channel need to collaborate over their choice of crops (cutting off supply if they want to grow onions, increasing it if they want to grow rice). At greater scales farmers and fishers need to collaborate over their use of flood water for irrigation or for the fishery. 'Public cuts' are just one of the most striking of this range of WM practices.
- Many 'local initiatives' such as the opening and closing of 'public cuts' are small-scale and instigated by the interest group primarily concerned. Local WM initiatives are traditionally taken by farmers and *bee/* leaseholders and, importantly, no formal organisation is involved. Collective efforts to raise embankments generally occur at a moment of crisis (e.g. an immediate threat of flood), and most of such initiatives were highly vulnerable to flash floods. Normally those who are most likely to be affected mobilise, and this can be several thousand people, headed by a committee, with contributions in labour and in the raising of funds from villages in relation to their socio-economic condition and likely proportional benefit from the work.

Process documentation

- Process documentation functioned to analyse local and pre-existing, informal institutional networks (power relations, *de facto* access rights, the role of the mosque and the elite etc.) and confirmed that new resource management institutions are vulnerable to co-option by the more wealthy and to complete collapse for several reasons. Most obvious of these was the inability of RMIs to sustain activities after project end and to operate independently of external facilitation. This was found to relate to incentive (an end to financial or NRM advantages derived by external inputs and support) and the limited relevance of structures outside of the NRM initiative).

Lessons related to institutional issues in floodplain management from other projects

Extract by Dr. Paul Thompson (Consultant of FFP and MACH project)

Linkages and networking

Encourage the forging of links between FCBOs, the local government (Union Parishad and Upazila Parishad) and the local administration (Upazila). This is critical for the sustainability of new community organisations and their improved management. The FFP did not pay sufficient or early attention to this aspect. FFP.

Ensure the representation of FCBOs in Upazila level committees either through the formation of Upazila Fisheries Committees to guide and oversee co-management or through the existing Upazila Development Coordination Committee. FFP

More cooperation is required among a range of government agencies and NGOs to build social capital among the wider community. There are overlapping and competing responsibilities and interests that should be coordinated at national and local levels. Similarly, NGOs in particular, and also government agencies need positive attitudes if CBOs are to become self sustaining. RLEP

In most cases, Local Government has not been formally involved in the project activities, and this is a missed opportunity, in some CBFM-2 sites informal support from the Union Parishad has been important in resolving conflicts.

For community-based management of wetland resources a strong link with a suitable local government committee is needed and in MACH these were important. MACH

Coordination and links beyond the individual CBOs are being recognised as important. In FFP each case of CBM is isolated, but CBFM-2 was designed to establish CBM in adjacent waterbodies in floodplains and to make links for coordination between local institutions, which is showing promise. RLEP

Role of NGOs

NGO facilitation in CBM is necessary for social mobilization, credit, broadening livelihood options and alternative income generating support, but a limitation is that NGOs usually do not want to confront local elites in support of poor people in fear of post-project adverse reaction. RLEP

NGO skills and commitment to helping advocate the rights of poor people, challenge local elites, and overcome conflicts cannot be assumed. The 'projectisation' of CBM development tends to mean that NGOs contracted by projects to implement CBM recruit new staff for the job who may lack the range of skills and experience needed, and that support is time bound. RLEP

Few NGOs or staff have skills in establishing sustainable FCBOs. Medium-size and large size NGOs perform better than small NGOs but still need training. FFP

Assess carefully the experience of NGOs recruited to support FCBOs. Where either the organisation or the local team members cannot demonstrate a clear understanding of the tasks at hand, they must be trained before they start to work with the community. FFP

Bear in mind that most NGOs recruit *new staff inexperienced* in forming sustainable community -based organisations. To ensure balance, they should have experienced staff. FFP

Assess the training needs of NGOs and their staff at the time of recruitment. Ensure that they are provided whatever training is needed. FFP

Consider the FFP experience with NGOs. By late 2004:

- *Small NGOs -- 74% of the sites where they started work were unsuccessful in establishing community-based fisheries management.*
- *Large NGOs -- 30% of sites where medium and large NGOs worked were unsuccessful. FFP*

Local NGOs should be backed up by closer support and mentoring from regionally based technical assistance (TA) staff, or from a more experienced NGO team. FFP

In FFP and CBFM-2 in almost all cases the NGOs have not been willing to challenge local elites, especially local and even national NGOs do not want to make these elites annoyed because they are politically backed and have power to oust those NGOs from the area. Even some local NGOs in FFP were "owned" by or linked with local elites. Therefore at best the NGOs have to negotiate with local power structures and at worst they may be a way for local politicians and rich people to gain more resources and dominate people. RLEP

In FFP and CBFM there is no evidence so far that NGOs will continue to support CBM without project funding. In all the projects - FFS, CBFM-2 and CARE-RLP - NGOs are involved for 5 years - the project period. RLEP

The capacity of the NGOs - their resource availability and staff capability – have been problematic, particularly in FFP where it was assumed that NGOs experienced in facilitating CBM could be readily found; but in practice many, particularly local NGOs, hired new staff and had little idea of how to work outside of their more familiar group-based credit and training. RLEP

Project experience indicates the need for flexibility in developing CBM institutions to fit each local combination of resource base and communities (CBFM-2), and the problems of expanding CBM following a single model (FFP). Government agencies prefer to have a fixed guideline for implementation and cannot easily be flexible. But the same projects also found that often larger NGOs were also not flexible and preferred to follow one common approach for their easier management, but some sites may not fit with that model. RLEP

Department of Fisheries

Local DoF staff need clear responsibilities, appropriate training, and support from a central inland capture fisheries set up. FFP

Organise staff training on their roles and responsibilities plus budget allocations as required. FFP

Ensure that at the national level, the organisational set up (a) has specific staff for inland capture fishery management and (b) adopts community-based approaches so that lessons learned are institutionalised. FFP

Facilitate registration of FCBOs with the concerned authority (social services or cooperatives as appropriate) through local DoF staff. FFP

Community-Based Organisations (CBOs)

No single CBM model (community based organization (CBO) structure and resource management rules) can be prescribed because communities and resource bases are so diverse, and attempts to follow one design have found this a serious constraint. CBM should be seen as a way of thinking or broad approach, the detailed outcome and institutional arrangements for this are space, time and socially bound. RLEP

Without formalising CBOs there is a risk that benefits will be lost when projects end. RLEP
The wider community and FCBO members must expect and demand transparency and accountability from their representatives. FFP

Leadership needs capacity -building in basic skills. *Ensure adequate formal and on-the-job training for FCBO members*, so that they build their capacity to run the organisation and manage fishery resources. This should include training on organization and leadership development; conflict resolution and consensus building; fisheries resource management; and financial management. FFP

Facilitate exposure/exchange visits by FCBOs to appropriate and successful CBFM sites. Such training would also be useful for concerned DoF and NGO staff. FFP

Entitlement to FCBO membership should not automatically be extended to all members of the community. Alternative models that limit the scope for elite capture have been tested in the Community Based Fisheries Management Project Phase-2 (CBFM-2), and their recommendations should be followed. The same model is not appropriate for all sites. A high quota or target percentage for membership from active fishers should be adopted (in FFP a rule specifying 80% fisher-based organisations increased the relevance of FCBOs and reduced the phenomenon of elite capture). A low ceiling for membership by rich non-fishers should be followed. FFP

Establish a clear relationship between village level and central (water body) level in the FCBOs. The FFP experience was that too much power was given automatically to the executive committees (Fishery Management Committees - FMCs), often making the village level fisheries sub-committees (FSC) largely irrelevant. The concept that FMC members represent their village and are accountable to their FSC should be established in the practice of such two tier FCBOs. Greater power for the FSCs would make it harder for a sub-group to capture the FMC. It would encourage wider participation. FFP

Fisheries sub-committees should be based on fishers and resource users. *Village sub-committees should not be open to all villagers for membership.* FFP

Pay attention to constitutional arrangements governing the operation of the FCBOs before and during their creation. Such as: who should be allowed to participate, voting rights, eligibility of different types of stakeholders for key posts (Chairman, Secretary, Treasurer) and the mechanisms by which post holders are elected. The FFP learnt some lessons in the process of addressing these issues but followed one fixed model. The Oxbow Lakes Project II and the CBFM-2 project provide important pointers on what arrangements are appropriate in different circumstances. FFP

To limit elite capture of water bodies, acquire a sound understanding of local society, spend time building the strength of fishers within FCBOs, and avoid early high cost interventions. FFP

FCBOs require continuing support to ensure that the activities of the executive are made *effective and transparent* and remain so. Early and comprehensive assistance is needed to develop members' routine skills such as book-keeping, holding meetings, keeping minutes, making management plans, savings mobilisation, etc. This must be matched by awareness among members of the standards of transparency they are entitled to expect. A procedure should be put in place for removing failing executives. FFP

Elite dominance of water body management and local institutions formed under the project was a persistent problem in many of the sites. Any project that promotes objectives like

those of the FFP, must be based on a considerably more informed and sophisticated appreciation of the sociological realities faced by fishers in rural Bangladesh. FFP

The early Village Development Committee concept followed in FFP made the basic units of the FCBOs open to all. It did not focus on fishers and fishery management. This gave an *opportunity to powerful non-fishers* to get into the committees and FCBOs, influence decisions and take control of resources. This should be avoided by focusing efforts on strengthening the role of poorer fishers in FCBOs. FFP

High value resources with high returns from exploitation attract elites. Particularly, subsidised stocking of water bodies. Interference by, or reliance on finance from elites can be removed or significantly reduced by focusing on low-cost interventions e.g. sanctuaries in unleased waterbodies and smaller, non-stocked, water bodies, and alternative means to boost the livelihoods of the poor, e.g. through credit and saving schemes and alternative income generating activities. RLEP

The absence of an institutional approach to exit strategies is a further demonstration of the prominence of 'structures' thinking over 'processes' thinking. Both FFP and CARE-RLP focus on *structures* (Fishery Management Committees and Farmer Field School groups), rather than *processes*. A process-oriented approach is concerned with empowering communities through a flexible approach to building capacity in the processes necessary for them to undertake CBM. RLEP

Conflicts and conflict-resolution

Projects should avoid sites plagued with community conflicts or court cases. Where a conflict exists between different groups or factions, time and concerted effort are needed to *resolve the conflicts and arrive at a consensus*. The chances of a project succeeding are far brighter when the communities are well-defined and the water bodies are free of conflicts. FFP

Champions

CBM should build links with local champions who are sympathetic to the interests of the poor and with local government. Such people can provide support to CBOs in times of conflict and improve sustainability when NGO support is withdrawn. RLEP

There is growing recognition of the scope and need as part of community management to identify local champions. Projects should identify local champions – elites, opinion leaders and local representatives - that are less exploitative and are sympathetic to the interests of poor user groups and to wide community level benefits rather than elite capture of resources. Such people can provide a valuable link with existing local institutions and can troubleshoot for the community based organisation when project based NGO support is weak or no longer available. RLEP

Existing community institutions (such as *samaj* and *matbor*), which are rooted in local power structures, have been widely ignored by sector based projects. RLEP

Monitoring and assessment

Progress in institution-building and resource management should be monitored by a semi-independent agency, along with impact trends, against a clear set of indicators. FFP

Projects should try to classify water bodies according to the progress of management by FCBOs. This would be a useful monitoring exercise. Feedback should be provided to project partners and staff (DoF, NGO, TA) participating in co-management, so that their work improves. FFP

Independent evaluation should be included in project design to provide feedback to implementation partners. FFP

Independent evaluation is needed to develop a deep understanding of issues and to document the process. This requires academically strong leadership committed to providing quality and unafraid of controversy. The results must be fed back to the partners and staff (DoF, NGO, TA) facilitating the process. FFP

Scaling up

Availability of local resources for scaling up is limited. So far government and NGOs depend heavily on external project funding for scaling up. RLEP

Government is interested in technologies more than social issues. However, donors are interested to see participation of beneficiaries in CBM. In between these two perspectives NGOs play an important middle role, but this is also a source of tensions and potential conflicts. NGOs are also not always the answer as they have limited capacity themselves to expand CBM. RLEP

There is an issue of what scale of resource communities can manage. Typically it is argued that communities are more able to manage resources and take decisions when the resource unit and community are matched and relatively small. This is because the exchange of information, sharing of experience, and decision making between actors that helps CBM work is reasonably straightforward at the single community scale. RLEP

However, CBM within tightly defined boundaries denies the realities of Bangladesh's densely populated floodplains. The common resources (waterbodies) become part of a massive interconnected system in the wet season. Communities are also socially and economically linked. How best to manage such a large system? RLEP

It has been argued that for a large resource, such as a large floodplain-river system, top-down management decisions are needed, yet there are many communities dependent on such resources so this is just the type of situation where top-down approaches have poor compliance. Linking up local CBM offers the most promising potential solution. RLEP