

NATURAL RESOURCES SYSTEMS PROGRAMME
FINAL TECHNICAL REPORT¹

DFID Project Number

R 8195

Project Title

Integrated floodplain management - Institutional environments and participatory methods

Project Leader

Roger Lewins²

Organisation

ITAD Limited
12 English Business Park
English Close
Hove BN3 7ET

NRSP Production System

Land / Water Interface

Date

6/8/04

¹ This document is an output from a project funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.

² Independent consultant, Community-based management - monitoring & evaluation, 20 Scott Road, Oxford OX2 7TD (Original project leader Julian Barr (ITAD); passed to Roger Lewins in September 2003).

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Acronyms and Local Terms

ADB	Asian Development Bank
AIGA	Alternative Income-Generating Activity
AMOD	Aid Management Office Dhaka (now called DFID-B)
AusAID	Australia Aid Agency
Banchte Shekha	Bangladesh NGO (target group is women)
BCAS	Bangladesh Centre for Advanced Studies
<i>baor</i>	A bounded ox-bow lake, particularly abundant in the southwest of the country
<i>beel</i>	A shallow lake-like waterbody that may be seasonal or permanent.
BMC	<i>Beel</i> Management Committee
BRAC	Bangladesh Rural Advancement Committee (large NGO)
BRDB	Bangladesh Rural Development Board (of GoB)
BWDB	Bangladesh Water Development Board (of GoB)
CAP	CAP Country Assistance Plan (of DFID)
CARE	Co-operative for American Relief Everywhere (large NGO)
CARITAS	Large NGO
CBFM	Community Based Fisheries Management
CBIFM	Community Based Integrated Floodplain Management
CBOs	Community Based Organisation
CBD	Community Based Development
CDD	Community Driven Development
ChWMC	<i>Chawk</i> Water Management Committee (of CPP project)
CIDA	Canadian International Development Agency
CPP	Compartmentalisation Pilot Project (an FCD/I project under FAP 20)
CPR	Common Property Resources
CRED	A small local NGO
CSP	Country Strategy Paper (of DFID)
CWMC	Compartmentalisation Water Management Council (of CPP project)
CWMO	Compartmentalisation Water Management Organisation (of CPP project)
DAE	Department of Agricultural Extension (of GoB)
DANIDA	Danish International Development Agency
DFID	Department for International Development (UK development agency)
DFID-B	Department for International Development Bangladesh
DFID-UK	Department for International Development (London Headquarters)
DoE	Department of Environment (of GoB)
DOF	Department of Fisheries (of GoB)
DWMP	Dampara Water Management Project
E C	European Commission
EIA	Environmental Impact Assessment
EIP	Early Implementation Project (of BWDB)
EMG	Embankment Management Group (as under BWDB projects)
EU	European Union
FAO	Food and Agriculture Organisation
FAP	Flood Action Plan
FCD	Flood Control and Drainage system
FCD/I	Flood Control and Drainage/ Irrigation system
FFG	Fish Farming Group (as under DoF projects)
FFP	Fourth Fisheries Project (of DoF)
FMC	Fisheries Management Committee (as under DoF projects)
FSCs	Fisheries Sub-committees (as under DoF projects)
FUG	Forest User Group
GDP	Gross Domestic Product
GEF	Global Environmental Facility (an international funding instrument)

GIS	Geographical Information System
GNAEP	Greater Noakhali Aquaculture Extension Project
GNP	Gross National Product
GO	Government Organisation
GoB	Government of Bangladesh
GPP	Guidelines for People's Participation (of BWDB)
GPWM	Guidelines for Participatory Water Management
<i>gusthi</i>	A clan group
<i>haor</i>	An extensive area of inundated land (haor areas are prone to flash floods)
HDI	Human Development Indicators (of UNDP)
HH	Household
HYV	High Yield Variety (rice, wheat, corn)
ICLARM	International Centre for Living Aquatic Resources (now the WorldFish Centre)
IFAD	International Fund for Agricultural Development
IFM	Integrated Floodplain Management
iPRSP	Interim Poverty Reduction Strategy Paper
IWRM	Integrated Water Resource Management
IUCN	International Union for Conservation of Nature
<i>jalmohal</i>	A discrete waterbody, registered by MoL for the purposes of leasing and rent generation
LCG	Local Consultative Group (of Donors in Bangladesh)
LCS	Landless Contracting Society (as used for infrastructural work)
LEB	Locally Elected Body
LFT	Lake Fishing Team (as under DoF projects)
LG	Local Government
LGRD	Local Government and Rural Development (of GoB)
LGED	Local Government Engineering Department (of GoB)
LGI	Local Government Institution
LIs	Local initiatives
LK	Local knowledge
LLCP	Landless Contracted Parties (Landless employed for building works)
LMG	Lake Management Group (as under DoF projects)
MACH	Management of Aquatic Ecosystems through Community Husbandry
<i>mastaan</i>	Individuals that control access to, and distribution of, resources by threat
<i>mathbor</i>	Respected individuals (sometimes elders) granted the capacity to resolve disputes on behalf of local communities (see <i>salish</i>)
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MFL,	Ministry for Forestry and Land (of GoB)
MoA	Ministry of Agriculture (of GoB)
MoFL	Ministry of Fisheries and Livestock (of GoB)
MoL	Ministry of Land (of GoB)
MoLGRD&C	Ministry of Local Government, Rural Development and Co-operatives (of GoB)
MoWR	Ministry of Water Resources (of GoB)
MWRM	Multipurpose Water Resource Management
NFA	National Fishermen's Association
NFEP	Northwest Fisheries Extension Project
NFMP	New Fisheries Management Policy (of GoB)
NFPo	National Fisheries Policy (of GoB)
NGO	Non Governmental Organisation
NORAD	Norwegian Agency for Development Co-operation
NR	Natural Resource (e.g. land, water, fisheries)
NRM	Natural Resource Management
NWMP	National Water Management Plan (of GoB)
OLP	Oxbow Lakes Project (of DoF)

O&M	Operation and Management (of infrastructure)
PAPD	Participatory Action Planning for Development (a consensus-building methodology)
PIPs	Policies, Institutions and Processes - representing the broad “institutional” environment for Sustainable Livelihoods
PMU	Project Management Unit
Proshika	Large NGO
PRSP	Poverty Reduction Strategy Paper (also abbreviated iPRSP)
REB	Rural Electrification Board (of GoB)
RMC	River Management Committees (as under DoF projects)
RMG	Resource Management Groups
RMO	Resource Management Organisation (a generic term for local institutions managing NRs)
RNFS	Rural Non-Farm Sector
SCWMC	Sub-Compartment Water Management Committee (as under CPP project)
SCWMO	Sub-Compartment Water Management Organisation (as under CPP project)
SED	Small Enterprise Development
<i>salish</i>	A locally-legitimate, informal judicial system for the resolution of minor disputes
<i>samaj</i>	An informal but pervasive local institution – a type of “brotherhood” that exerts power and influence by emphasising social and religious duty
SIDA	Swedish International Development Cooperation Agency
SL	Sustainable Livelihoods
SRP	Systems Rehabilitation Project (of BWDB)
STEPM	Social Technical Economic Political (appraisal) Methodology
SUFER	Support for University Fisheries Extension and Research
SWAp	Sector Wide Approach
TFO	Thana fisheries officer (at the local level)
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNO	The Upazilla Nirbahi Officer, selected from the Union Parishad Chairmen and representing the lowest <i>bureaucratic</i> tier of government.
UP	The Union Parishad, the lowest tier of government, consisting of twelve elected members and representing approximately 25,000 people
USAID	United States Agency for International Development
VDC	Village Development Committee (as under projects of different GoB agencies)
VO	Village Organisation (as under projects of different GoB agencies)
VRMC	Village Resource Management Committee (as under the MACH project)
WARPO	Water Resources Planning Organization (of GoB)
WATSAN	Water and Sanitation (projects)
WB	World Bank
WM	Water Management
WMA	Water Management Association (as under BWDB projects)
WMC	Water Management Committee (as under BWDB projects)
WMO	Water Management Organisation (as under BWDB projects)
WMU	Water Management Unit (a hydrological unit under a WMO)
WRM	Water Resource Management
WUA	Water User Association (as under BWDB projects)
WUC	Water User Committee (as under BWDB projects)
WUG	Water User Group (as under BWDB projects)
WUO	Water User Organisation (generic term for project and non-project bodies with any water management role)

A note on acronyms

There are several interrelated terms applied to local level NRM institutions. Unfortunately, they are further complicated by project-specific nomenclature.

CBO

Meaning “community-based organisation”, this is a general term for local level bodies which may or may not perform a NRM function. They are generally described as “informal” in that they are rarely registered or legally acknowledged. Examples include credit management groups and fisher cooperatives and unions (samities). They may be essentially “self-help” in nature and may arise spontaneously in relation to a perceived need or may be organised and facilitated by an external agency. The term has been avoided in more analytical sections of the report because of the problem with the notion of “community”.

LGO

“Local government organisations” represent those bodies (organisations) with defined bureaucratic or service-provision responsibilities. In the context of Bangladesh and this report, the term is used to describe government bodies at Upazilla level and below (e.g. the Upazilla Development Coordination Committee and the Union Parishad).

RMO

Meaning “resource management organisation” this is a non-specific term for all bodies (organisations) with expressed NRM functions and responsibilities. It is generally used to represent local level organisations.

RMI

This acronym means “resource management institution” and is the preferred term here in discussion of formal and informal, local NRM institutions. As such, it may represent both visible and structured institutions of government or IFM interventions or informal institutional arrangements such as local initiatives.

Where appropriate, the project-specific title and acronym is applied (e.g. the Beel Management Committee within the community-Based Fisheries Management Project, the Lake Management Group within the Oxbow Lakes Project or the Resource User Group within MACH). As distinct bodies with specific management responsibilities and membership these groups are best described as RMOs.

1 Executive Summary

The overarching purpose of the project was to uncover the institutional arrangements most likely to achieve pro-poor and sustainable integrated floodplain management (IFM). The longer-term purpose was to influence the overall approach to IFM-related interventions by government and NGO stakeholders by developing the level of institutional awareness (knowledge and understanding of local level features that threaten sustainability and pro-poor initiatives, for instance).

Research activities included desk-based review of donor, government and NGO experience and approaches with regards to sectoral integration, livelihoods and prospects. This was supplemented with a series of field-based reviews of past and present institutional structures for floodplain management (in this regard, project activities included the review of collapsed and surviving post-project resource management institutions). Process documentation was a central component of field-based activity because it was designed to reveal real modes of interaction (between facilitators and primary stakeholders, for instance) and the level of understanding and support for new institutions and management activities. The methodology was presented to target organisations and applied to parallel NRSP projects (see below).

The range of approaches allowed for triangulation and the feedback was combined to provide suggestions and recommendations for alternative approaches (Annex A: Section 4).

Communication activities centred on the development of discussion papers outlining the institutional environment of rural Bangladesh, approaches to track and document change and potential approaches to avoid problems and build in sustainability.

The outputs included discursive material on current constraints and opportunities of donor, government, NGO and indigenous approaches to floodplain management and in-depth review of the “quality” of a range of resource management institutions in relation to transparency, equity, representation and pro-poor focus. The character and function of the participation process in floodplain management was also discussed and contributed towards a key output - alternative arrangements for IFM.

Target organisations have been made aware of key institutional factors, especially at the local level, and the project has succeeded in relation to at least two of its purpose level OVI (the capacity to identify appropriate environments and the sensitisation to pro-poor methods in two target organisations). There is evidence that WorldFish Center will attempt to implement a monitoring system designed to collect standardised information relating to the performance of CBFM-2 Resource Management Committees, while target organisations such as ITDG-Bangladesh and CNRS have modified the process documentation methodology to record change within their action research sites.

At programme level, the project outputs relate well to purpose. While the project did not intend to feedback directly to primary stakeholders, new knowledge has been delivered to institutions serving the poor (in this case, DoF, CBFM-2 partners and ITDG-Bangladesh).

2 Background

The project Goal was prescribed by the NRSP-LWI Logframe, and was: *“Improved resource-use strategies in floodplain production systems developed and promoted”*. However, in more detail, the higher level objective of the project is concerned with identifying factors that lead to more sustainable community-based management of floodplain natural resources, particularly common pool resources.

This theme was identified as a logical progression in the series of NRSP-funded LWI projects on the Bangladesh floodplains. Previous research had scoped the nature of floodplain production systems (R6383), and investigated the livelihood strategies and resource use patterns in the most common in floodplain production systems, in which there are small waterbodies and large areas of arable land that are seasonally inundated to create open water fisheries (R6756). R6756 demonstrated the interdependence of land- and water- based production systems (both physically/ecologically and socially), and the greater dependence of poorer households on, and thus the significance of, open-water fisheries. These fisheries are commons, and are managed under a range of forms of access, from entirely open (such as flowing rivers) to exclusive and strongly policed (such as small, stocked, beels and baors). These two findings – the management of (aquatic) commons affecting the poor, and the interdependence of floodplain production systems led to the development of a methodology for building consensus in floodplain resource management (R7562). The methodology essentially leads to the production of a consensually agreed action plan for resource management. It does not extend beyond that point to consider in detail linkage with existing institutions in the community or government domains, nor how the action plan may be enshrined into a local institution for its enactment and future management. This is the entry point for the current project.

Beyond the LWI series of floodplain research projects, there has been an increasing trend towards both donor (multi- and bi- lateral) and GoB floodplain natural resources management projects taking a community-based management approach. This has been seen, for example, in SEMP (UNDP), CBFM/CBFM-2 (Ford Foundation / DFID), MACH (USAID) and water sector projects funded by the Dutch, CIDA and ADB. This trend has been given impetus by recognition of failures in past projects that have not given resource users sufficient opportunity to participate in the management of the resources which are critical to their livelihoods. This is particularly so in the water sector, where BWDB have as a result developed the Guideline for Peoples' Participation, and thence the Guidelines for Participation in Water Management. The drivers for this trend for community-based management are several: principles of subsidiarity, a desire to reduce transaction costs (particularly to government), a belief that local participation in resource management leads to more sustainable resource management, and a belief that local participation in resource management provides: i) more appropriate resource management because it is location specific, ii) opportunities for the poor to have a voice in the management of the resource, and iii) opportunities for the poor to derive a greater benefit from the resource.

This shift towards community-based management has taken a number of avenues in establishing resource management institutions – structurally most have created local management committees and/or resource user group, but the rules and patterns of behaviour in managing the resource have been highly varied. While the projects themselves may take an action research (i.e. learning) approach to a community-based management (eg CBFM-2), and there have been a number of reviews of individual projects (eg Soussan, 1998 and Thompson & Sultana, 1999), what is missing is:

- a framework for interpreting the variety of resource management institutions
- a generic understanding of how these institutions function
- an assessment of the salient features of the successful institutions

Therefore, in addition to progressing the LWI series of floodplain projects, this project aims to provide lessons for improving the understanding of and approach to institutions for community-based floodplain resource (and other natural resources) management.

3 Project Purpose

The project Purpose, as per the Logframe, was:

“Methods for implementation of management opportunities relevant to the poor, including community participation in integrated sustainable management of terrestrial and aquatic floodplain resources developed and promoted by identification of the institutional environments that support effective pro-poor floodplain natural resources management”.

The purpose was designed to contribute to the over-arching NRSP theme for Bangladesh floodplains of integrated floodplain management (IFM). More specifically, the change that the project was intended to achieve was to create a pool of researchers and managers in Bangladesh more knowledgeable about sustainable institutional arrangements in community-based IFM projects and programmes, and thereby improving the effectiveness of those projects and programmes. The record of project and programme-related institutions for resource management is disappointing (structures collapse on project end or are modified for the purposes of elite and influential stakeholders rather than the poor) and the project was intended to produce knowledge to develop pragmatic alternatives to past approaches and their shortcomings.

The intention was also to meet the Programme-level purpose of providing new knowledge to institutions serving the poor – in this case, most immediately via the project target organisations (DoF, WorldFish, ITDG-Bangladesh and the NGOs Prohsika, Caritas, Banchte Sheka).

4 Outputs

The project was designed to achieve three Outputs:

1. an understanding of the factors important in establishment and maintenance of IFM.
2. an understanding of the factors underlying successful implementation of IFM plans.
3. equipping relevant staff in the project’s selected Target Organisations with the knowledge to better to understand, assess and facilitate institutional arrangements for IFM.

With respect to the first two Outputs, methodologies and findings were interrelated and in this regard, project activities were intended to analyse overlapping issues and concerns with a range of tools (process documentation, transaction costs analysis, focus group discussion with the poor etc.) and to triangulate observations. These two Outputs are also interrelated because, by definition, suitable and sustainable institutional arrangements will provide the right context with which to enact change through the adoption of plans or initiatives*.

The project has been successful in identifying the more appropriate institutional arrangements for IFM *and* conditions that are likely to result in failure (Output 1). Themes and suggestions for appropriate future interventions are synthesised in Annex A: Section 4 and in the Discussion Paper guidelines produced on behalf of target organisations (Annexes B-xvi-xix).

An idealised model of inclusive and pro-poor IFM was found useful in cross-checking past research findings and experiences with the findings from project activities and in communicating common problems and potential opportunities to target organisations (Figure 1.).

*With respect to Output 2, the lack of participatory planning led the project team to replace the term “plan” with “initiative” (most interventions are donor and government led and with a sector focus).

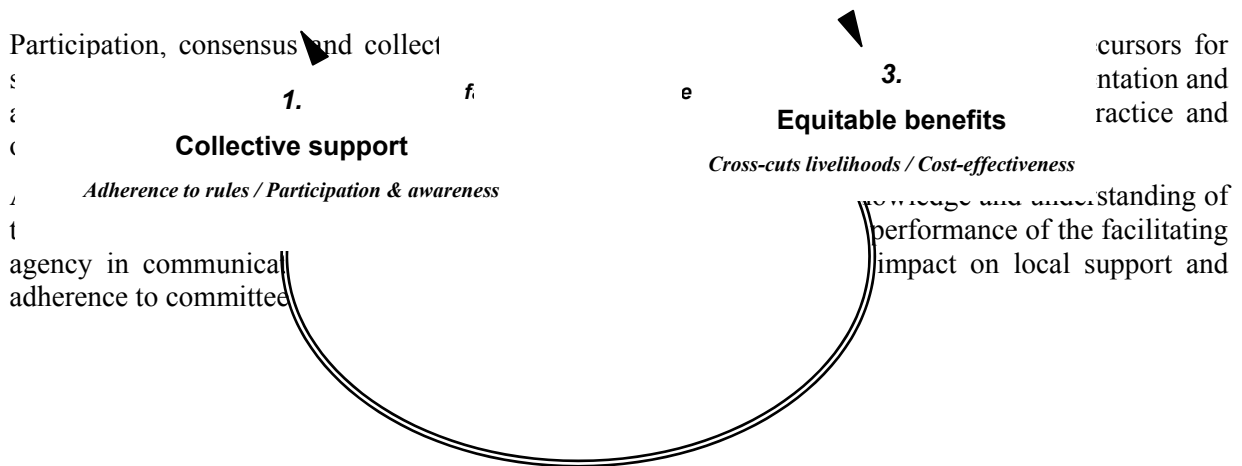


Figure 1. An idealised cycle of inclusive and pro-poor IFM.

The following table is adapted from the discussion of “alternative approaches to IFM” (Annex A: Section 4) and outlines common problems occurring at various stages of the above project cycle, together with potential solutions. In general, a greater awareness of informal institutions and local level power relations (together with an understanding of how these may help or hinder agency objectives) is required by implementing agencies. While the constraints to institutionalising new management arrangements are well covered in the NRM and development literature, there is little evidence that local facilitating staff consider these issues important to record or, in fact, to react to*. Similarly, although pre-existing management arrangements at the local level may meet some objectives of donors and sector agencies simultaneously, these appear to be overlooked or may be disrupted by new IFM-related interventions. Of particular interest are those well-established informal institutions that often deliberate on NRM issues. Mosque committees, for instance, may resolve local disputes and issues of access to resources and will utilise their social legitimacy to introduce and enforce quite complex management arrangements. Output 3 specifically attempted to disseminate knowledge of these types of issues and to demonstrate methods to uncover and track them in the project context (see later).

*This problem is not exclusive to local facilitating agencies, however. The record of donors has also been poor in this respect. The large scale water management projects that were *de rigueur* in the 1980s were found to have underestimated the function and significance of local initiatives for water management (Annex A: Section 2.1.1, for instance). In retrospect, the design of the Fourth Fisheries Project stocking component was bound to create conflict and threaten the sustainability of activities.

Idealised Project Stage	Frequent problems	Potential strategies
<i>1</i>		
<i>Collective Support</i>	Pre-intervention indifference	
	Post-intervention decline in support	Simple, public examples (sanctuaries, field demonstrations etc.)
		Cost-effectiveness for participants & broad beneficiary range
<i>2</i>		
<i>Facilitation</i>	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)
<i>3</i>		
<i>Equitable Benefits</i>	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, <i>samaj</i> etc.).
		Change from sectoral to livelihoods focus (stressing delivery & interaction across groups & acknowledging potential impacts on <i>all</i> local stakeholders)
		A change from technical service provision to a rights-based approach
<i>4</i>		
<i>Consensus</i>	Intervention-induced conflict	Early use of participatory planning & consensus building
	Dispute-resolution as an integral function of project RMIs	
		Utilisation of <i>salish</i>

Table 1. Frequent institutional problems and potential solutions at the local level.

Analysis of the pro-poor impacts of IFM initiatives suggest that the character of the management approach and initiatives (the objectives, activities and the identity and capacity of the facilitating agency) are more important in shaping outcomes than the intended design of supporting institutions. Table 2 summarises the attempt to disentangle the impact of these activities and approaches from the institutions, themselves, and again reveals the tendency for co-option by wealthier (non-target) individuals. It was also possible to identify positive and negative impacts on access by the poor to different forms of capital (assets) at four of the case study IFM-related initiatives (Annex A: Section 2.4). Significantly, the example of a “local initiative” demonstrated a relatively even spread of benefits between the poorest and other residents. This case study was presented to target organisations to demonstrate the type of pre-existing institutions with IFM-related functions but which are rarely considered reported by implementing agencies (see discussion of Output 3 below).

Case Study	Intervention Type	Institutional Structure	Intervention / Institutional impact on poor
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SEMP

Large NGO-facilitated, CBM project

Village Resource Management Committees to run AIGAs and awareness activities etc. **Intervention:** Some AIGAs, community-based sanctions & seasonal harvesting controls limiting access to the poorest

Institutions:

Representation by richer individuals (opportunity costs?) & mismanagement of credit

Jalmohal Project

DoF stocking project at distinct jalmohals (support with lease & inputs)

Jalmohal Management Committee to manage membership and stocking activity **Intervention:** Increased production but reduced access to many poor fishers & violent conflict with newcomers.

Institutions:

Legitimises exclusion of poor and consolidates role of elite newcomers.

CPP

Large, structural water project implemented by BWDB

Remnant Chawk Committees to organise O&M, timing of operation **Intervention:** Increased labouring opportunities but reduced fishing area. Inundation of poor homesteads outside compartments.

Institutions:

Relatively little impact – decisions made annually by landowners (highland vs lowland farmers interests).

LIs at Charan Village

Collective drainage management (cuts & repairs), farmer / fisher cooperation
Informal allegiances & annual verbal agreements between stakeholders

Intervention / Institutions:

Extended farming (labour) & fishing season & increased production.

Table 2. Institutional and intervention impacts on the poor - summary table.

SEMP = Sustainable Environment Project (IUCN/BCAS); Jalmohal Project = DoF stocking project; CPP = Compartmentalization Pilot Project (BWDB); LIs = Local initiatives (autonomous, local IFM interventions).

One of the key products of Output 2 was a review of present project performance in relation to spread and up-scaling from project managers, themselves (see Annex A: Sections 3.2.2 and 3.4, for instance). The key findings merited the development of a discussion paper and helped communicate potential solutions to commonly encountered limits to coverage and uptake (Annex B.10). Again, local level issues and dynamics were frequently identified as obstructive, although feedback (from non-government project managers) also highlighted the need for more appropriate, enabling policy, particularly in relation to ownership, leasing and revenue generation in the fishery sector (Table 3.). Fewer “meso-level” constraints were identified and this may relate both to the

Scale	Up-scaling strategy	Project manager feedback (problems/solutions)
Macro	↑ Political commitment	CBFM - Greater GO, NGO support & links
	Policy change	CBFM – change to leasing policy
	Capacity building	SSWRDP – ↑ GO (BWDB) focus & skills (via training)
Meso	Replication	Jalmohal Project – ↑ sites through negotiated leases
	Good knowledge –sharing	CBFM – improve problems in record-sharing
		SSWRDP – knowledge-sharing with related projects
Local	Appropriate incentives	CBFM – need to spread benefits
		Jalmohal Project – deliver gains to “genuine fishers”
	Building sustainability	CBFM – ↑ efficiency project activities (e.g. CBFM lease vs other uses)
		Jalmohal Project – spread benefits for ↑ support
		SSWRDP – work with existing WMOs & build links to LGOs & RMIs
		IPSWMP – ↑ distribution of benefits
		Ensure adaptability CBFM – flexibility in models & NGO activity
		SSWRDP – ↑ flexibility of NGO partners

Table 3. Project manager feedback in relation to potential up-scaling strategies

(CBFM = Community-Based Fisheries Management Project, Jalmohal Project = DoF stocking project; IPSWMP = Integrated Planning for Sustainable Water Management with BWDB; SSWRDP = Small Scale Water Resource Development Project (SSWRDP) of LGED). See Annex B-vi for greater detail.

In summary, although government structures (inter-departmental issues, the centralised nature of government etc.) were found to inhibit sustainable and equitable IFM the most consistent nationwide institutional bottlenecks and constraints to sustainable IFM operated at the local level (see Annex A: Section 3.4 and Annex B-xii, for example).

A review of the participation process within IFM consolidated the findings of other activities within the project (e.g. the review of donor, government and NGO approaches to IFM under Annex B-viii) and can function as a stand-alone product of Output 2. Drawing on typologies of participation from the literature it was possible to classify past and present floodplain management interventions with respect to the application and function of the participation process. Four “types” were identifiable, stereotypical of fisheries, water, environment and indigenous, pre-existing arrangements. The use of “participation” was found to relate to sectoral or agency objectives, rather than objectives of local poor (Table 4). The facilitating agency will have its own organisational objectives and there is a danger that participation becomes a tool to roll-out fixed intervention models and appease donors, simultaneously.

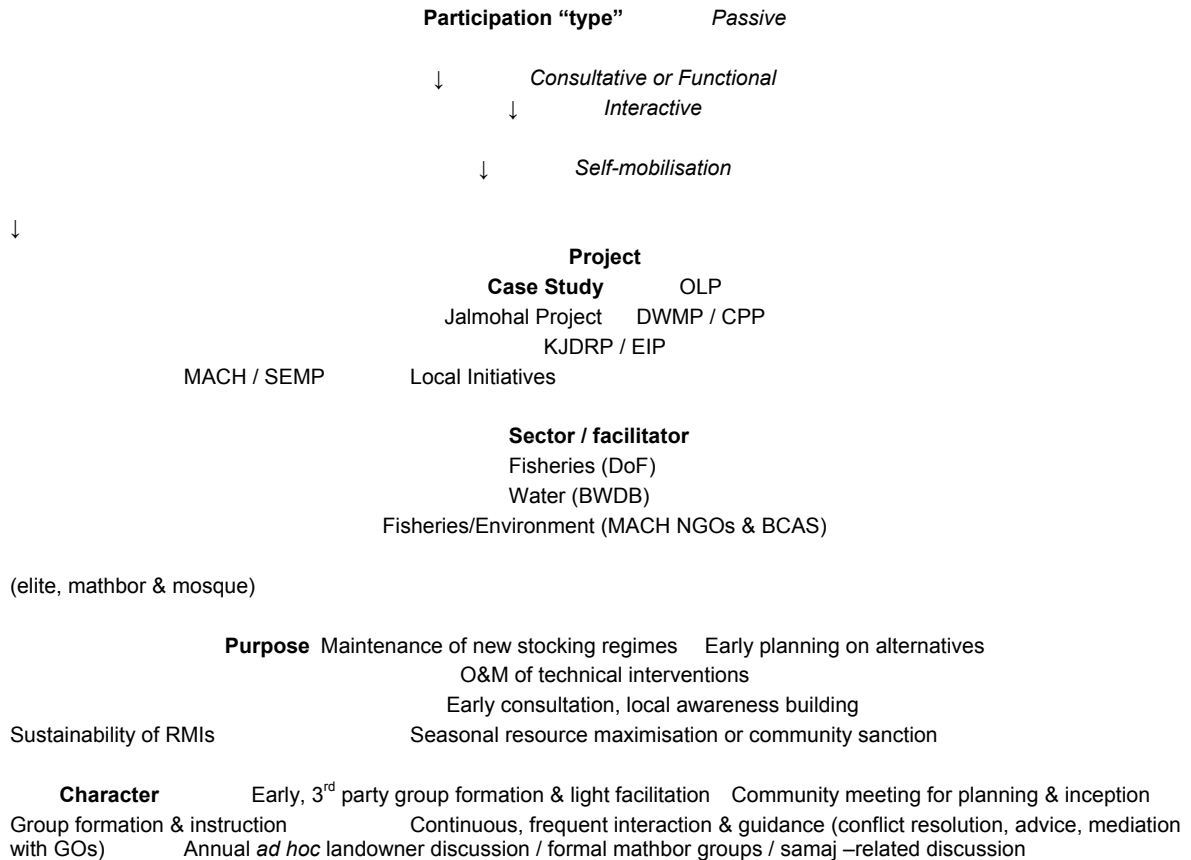
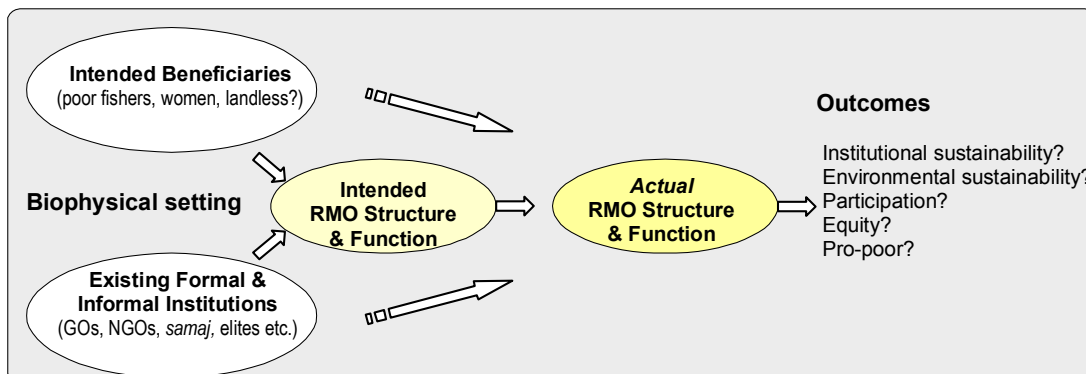


Table 4. The application of the participation process to floodplain management in Bangladesh.

Process documentation revealed *de facto* management institutions (“ways of getting things done”) and the constraints to project and externally initiated approaches. In turn, these constraints related to the limits of most formal, local government institutions as they stand and the limitations of most introduced forms of resource management institutions (RMIs) and resource management organisations (RMOs). The performance of new institutions is likely to be a function of their design but perhaps more importantly, their setting with respect to biophysical context and pre-existing social and political environment (Figure 2).



A key output of process documentation, and a recurrent theme running across the project activities, was that the role of the elite and pre-existing modes of management must be much better acknowledged by facilitating agencies. For instance, analysis of processes within local initiatives revealed a high level of compliance and mutual gains from indigenous approaches to floodplain management while interviews with a range of local stakeholders revealed disruption of other informal approaches to water management and the allocation of access by large, externally-driven interventions. 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. In fact, project grey literature and discussion with staff, suggests that these issues are rarely considered significant or important to report. This issue was taken forward in the development of discussion papers and presentations for target organisations.

Process documentation functioned to analyse local and pre-existing, informal institutional networks at this level (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 (Annex A: Section 4.1). Co-option by non-target groups was most evident where inputs and access to resources were subsidised by the implementing agency and in this respect, poorly-conceived stocking projects such as DoF’s “Jalmohal Project” provided stark examples of how project activities can quickly disadvantage the poorest (Annex A: Section 2.3.2).

The only example of institutional sustainability within projects uncovered at the case studies was at the Oxbow Lakes Project (OLP) sites. Donor support for OLP ended in 1997 but a complex and mutually-beneficial relationship between credit-providers, DoF staff and local RMI (Lake Management Group) members has ensured the continued stocking and management of the lakes. However, these relationships were not intended or foreseen by project designers. For instance, DoF staff support local stocking for modest shares of catches while Muslim *mastaan* have infiltrated the intended Hindu Lake Management Groups. The *mastaan* have worked to consolidate the Management Groups through threat of violence but also function to redirect and reduce the distribution of benefits to local residents. This three-way relationship is underpinned by a MoL and DoF policy that provides preferential leasing arrangements to these supposedly “genuine fisher” groups (Annex B-ii; Box 1 depicts this relationship and how it was

revealed in piloting the approach for the benefit of the research team).

With respect to Output 3, research methodologies developed for local level institutional analysis have been communicated to target organisations via two workshops, training to CBFM-2 and advice and inputs to R8306 and R8103. Four discussion papers (Annex B-xvi-xix) have been developed to deliver material and initiate debate on general IFM issues, corrective measures at local level, guidance on documentation and on up-scaling projects. The discussion papers attempted to compile the findings of the project activities and to respond to target organisation feedback in relation to demand *before* project findings were presented. Project partner CNRS are currently developing these papers for distribution in booklet form.

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.

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 (Figure 1 above) 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.

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.

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.

The next objective should be to explore ways to adapt and communicate the guidelines to ensure understanding across a wider audience (workshop feedback suggests current products are most suited to research and local level practitioners, rather than a policy/government audience, for instance) and to ensure uptake within new programmes. There is a need to move beyond conventional forms of project monitoring that list visible outputs and to encourage facilitators to think of longer-term objectives. Dialogue reveals genuine interest in tackling institutional constraints and a demand for advice.

5 Research Activities

The project activities were divided between: i) desk-based review of national and local level issues supplemented, where possible, with interview, and ii) field survey and analysis of local institutions and IFM structures. The majority of research activities were applied across nine case studies, chosen to represent a range of past and present fisheries, water, environment and autonomous forms of floodplain management.

Desk-based review drew from relevant material on donor, national and NGO experience and approaches with an emphasis on the last two decades. It was possible to commentate on trends in development objectives (moving from technical interventions to livelihoods and rights-based approaches and the growing emphasis on governance and government reform) and, following the emphasis on community-based NRM, performance and impacts at the local level (Annexes B-i, viii, ix and x). In this latter regard, desk-based review over-lapped and consolidated the focus of the field surveys. Project and donor literature was also used as a basis to critically assess the role of participation and to develop a simple typology of its use (mode of interaction, purpose etc.) in relation to floodplain management (see Annex B-vii). Although the modes of interaction between government, facilitating agencies, local government and local resource management institutions were discussed in detail across a range of examples, models and typologies were *not* elaborated by the research team. Instead detailed histories of floodplain interventions were presented and stereotypical forms of facilitator-primary stakeholder interaction were developed in a discussion and typology of the role of participation. In this regard Activity 1.1 led to the development of discursive material rather than models (Annexes B-viii-x).

By reviewing project grey literature it was possible to identify four forms of participation in floodplain management (Annex B-vii). The character of participation was scrutinised in relation to purpose, approach, structures (groups, committee types) deployed and the eventual impact. It was possible to link and compare experience and approaches in Bangladesh with theoretical treatments and generic typologies of the participation from the scientific literature.

Constraints and opportunities to up-scaling IFM were investigated with semi-structured interview with managers of four floodplain management projects (Annex B-vi). Managers identified the factors they perceived as bottle-necks to the expansion of their interventions (impact and coverage etc.) and the potential to remove these constraints was discussed. The methodology was designed to elicit potential approaches to up-scaling and current project performance in this regard. It was possible to list opportunities and constraints according to scale (national, meso-level and local factors).

Preliminary field-based activity focussed on the collection of community criteria for successful IFM and IFM institutions (Annex B-v). Focus group discussions were used to check for differences between stakeholder groups and between biophysical settings. The findings helped form lines of enquiry for process documentation.

Process documentation was intended to reveal and record the *real* modes of management across the full range of case studies. A series of semi-structured interviews with secondary stakeholders (project staff, committee members or local government representatives) and questionnaires with primary stakeholders (target and non-target groups) were conducted to uncover the level of understanding, support and commitment to various floodplain management interventions. This methodology was communicated to target organisations (Annexes B-ii and xviii).

An analysis of pro-poor outcomes of floodplain management was conducted in four of the case study sites using a focus group approach (Annex B-iii). Management interventions and approaches were discussed with a random group of residents before repeating the approach with locally-identified

“poor”. The effects of the interventions were discussed in relation to differential impacts on the poor and local residents, more generally. Applying this approach, it was possible to uncover quite hidden positive and negative externalities for the poor.

Transactions costs analysis was conducted with resource management institutions within four case study sites (Annex B-iv). Questionnaires were developed to collect the costs of constructing rules, enforcing decisions, record-keeping, seeking advice etc. The time spent ensuring these transactions are realised was converted to financial costs to the individual (the opportunity cost of relinquishing normal livelihood activities) and an attempt was made to collect and present this data according to stake and role in management (fisher, committee member etc.). Some methodological weaknesses were apparent, however, and these are acknowledged and discussed elsewhere (Annex A; Section 2.2.3).

The attempt to distil the factors that contribute to success or failure of institutional arrangements was based on feedback from all the above activities (Annex A: Section 4). Most of the findings reinforced observations derived through process documentation - local level issues and potential arrangements were a focus. It was possible to derive a table of common problems encountered at nation, meso-level and local level and to provide potential solutions to ameliorating or removing these obstructions.

Finally, formal communications activities encompassed a preliminary workshop with CBFM-2 partners (including the target organisations; DoF, WorldFish, Proshika, Caritas, Banchte Sheka, CNRS) and ITDG-Bangladesh to introduce concepts, project purpose and to elicit feedback on suitable outputs and their format. The final project workshop presented project findings to a wider audience and was used to distribute Discussion Papers with guidelines on critical IFM issues. The Discussion Papers drew from project findings and collectively were intended to reach government, NGO practitioner and research organisation audiences (see Annexes B-xii-xix).

6 Environmental assessment

6.1 What significant environmental impacts resulted from the research activities (both positive and negative)?

None – the research activities have been field and office based interviews and desk review.

6.2 What will be the potentially significant environmental impacts (both positive and negative) of widespread dissemination and application of research findings?

All of the projects reviewed for their institutional approach to community-based resource management are environmental management projects in the broader sense – e.g. water resources management and fisheries/wetland management. If our findings are applied in projects that foster more sustainable resource management institutions, then it may be expected that, at the end of a long chain of causality, there would be positive environmental impact (e.g. on aquatic biodiversity).

6.3 Has there been evidence during the project’s life of what is described in Section 6.2 and how were these impacts detected and monitored?

No – though a number of the projects are monitoring environmental indicators of their own impact, which are probably easier to attribute than the chain of causality indicated above.

6.4 What follow up action, if any, is recommended?

None in the context of environmental impact; follow-up should be on uptake promotion to further promote the research findings in the development community in Bangladesh.

7 Contribution of Outputs

The project intends to engender long-term change in approaches to floodplain management across a range of stakeholders. The intention was to change the approach to floodplain interventions and the design and function of supportive resource management institutions by identifying and communicating alternative approaches to key players and facilitators (government, NGO practitioners and research-based organisations). In this regard, the project attempts to deliver the programme level output “*improved resource-use strategies in floodplain production systems developed and promoted.*”

The Outputs and findings of the project identify limitations with past and current approaches to floodplain management (and NRM, generally) in the context of Bangladesh but provide some pragmatic solutions to recurring problems. Research activities were directed towards uncovering those issues that consolidate or effect opportunities for the poor and the intention was to help promote those institutional arrangements that can provide equitable and pro-poor outcomes on a sustainable basis. Efforts were made to help identify those structures that promote equitable and transparent decisions and activities and, in this regard, poor primary stakeholders will be the long-term beneficiaries of project outputs via improved facilitation.

At purpose level, it is likely that WorldFish Center staff (and other CBFM partners) have developed a better understanding of the issues related to institutional performance and have knowledge of approaches to document institutional performance of the Resource Management Committees within CBFM-2. As Project Director, Dr Paul Thompson linked with this project and was proactive in establishing a format for routinely recording institutional performance across project sites and in developing the approach and thinking of project staff in regard to the long-term purpose of project-based institutions. In this regard it is expected that at least two target organisations (WorldFish and the CBFM partners including Proshika, Caritas and CNRS) have been “*sensitised to pro-poor community participation methods in their floodplain NR management programmes, and the implications of their adoption*”. The approaches communicated to WorldFish staff and partners (especially process documentation) are intended to build “*the capacity to identify appropriate institutional environments/structures*”.

The project outputs have also influenced organisations currently involved in action research, through interaction with project staff and formal inputs to parallel NRSP projects. ITDG-Bangladesh has incorporated documenting formats developed during this project in order to record the formal and informal institutional effect of PAPD and are likely to apply similar approaches in future projects. In addition, CNRS is applying a diary reporting format to track social/institutional acceptance of new modes of IFM and this has been developed in conjunction with this project and linkage between ITDG and CNRS staff and cross-visits to project sites.

With respect to future opportunities and needs, project Outputs must be disseminated to policy and government level stakeholders more fully. Feedback from Fourth Fisheries Project staff suggests that existing materials (especially an introductory presentation to institutions in rural Bangladesh and their impact on projects) and discussion papers will be useful in informing senior DoF staff. The discussion papers represent a key mechanism to disseminate the knowledge acquired during this project and attempt to represent both the methods applied and some of the underlying concepts required in

considering the right type of institutional environments for IFM. Dialogue with target organisations within CBFM revealed great interest in, and a demand for, this type of knowledge and it reasonable to assume that the demand by practitioners and implementing agencies will increase as donors continue to request more rigorous evidence of pro-poor change and efficiency in coverage.

8 Publications and other communication materials

8.1 Books and book chapters

None

8.2 Journal articles

8.2.1 Peer reviewed and published

None

8.2.2 Pending publication (in press)

None

8.2.3 Drafted

Local initiatives in NRM: potential lessons for externally-facilitated approaches. To be submitted to “Local Voice” – a Bangladesh journal for indigenous knowledge research.

8.3 Institutional Report Series

None

8.4 Symposium, conference and workshop papers and posters

None

8.5 Newsletter articles

None

8.6 Academic theses

None

8.7 Extension leaflets, brochures, policy briefs and posters

Lewins, R. 2004. Discussion Paper 1: “The institutional framework of IFM in Bangladesh – briefing note. Project R8195 Final Technical Report: Annex B-xvi.

Lewins, R. 2004. Discussion Paper 2: “Local resource management institutions – common problems and potential solutions”. Project R8195 Final Technical Report: Annex B-xvii.

Lewins, R. 2004. Discussion Paper 3: “Guidelines for documenting “processes” within NRM. Project R8195 Final Technical Report: Annex B-xviii.

Lewins, R. 2004. Discussion Paper 4: “Up-scaling IFM initiatives – constraints and opportunities. Project R8195 Final Technical Report: Annex B-xix.

8.8 Manuals and guidelines

None

8.9 Media presentations (videos, web sites, TV, radio, interviews etc)

None

8.10 Reports and data records

8.10.1 Project technical reports including project internal workshop papers and proceedings

Dixon, P. 2004. Institutional arrangements in local, informal floodplain management. Project R8195 Final Technical Report: Annex B-i.

Dixon, P. 2004. A review of government, NGO and sectoral issues relating to IFM – the wider institutional context. Project R8195 Final Technical Report: Annex B-viii.

Dixon, P. 2004. Livelihoods, integration and opportunities for IFM – the interventions of donors reviewed. Project R8195 Final Technical Report: Annex B-ix.

Dixon, P. 2004. Resource integration, cross-sectorality and livelihoods – the experience and potential of six FM case studies. Project R8195 Final Technical Report: Annex B-x.

Kuperan, V. and Jahan, K. 2004. Transactions costs of institutions for IFM in Bangladesh – the case of project resource management institutions. Project R8195 Final Technical Report: Annex B-iv.

Lewins, R. 2004. IFM and project outline – introductory PowerPoint presentation to the target organisations. Project R8195 Final Technical Report: Annex B-xii.

Lewins, R. 2004. IFM introductory workshop – structure and proceedings. Project R8195 Final Technical Report: Annex B-xii.i.

Lewins, R. 2004. Final workshop PowerPoint presentation. Project R8195 Final Technical Report: Annex B-xiv.

Lewins, R. 2004. Final workshop– structure and proceedings. Project R8195 Final Technical Report: Annex B-xv.

Lewins, R., Alam, M. and Sultana, P. 2004. Process documentation of IFM institutions. Project R8195 Final Technical Report: Annex B-ii.

Lewins, R. and Robens, S. 2004. Participation in IFM in Bangladesh. Project R8195 Final Technical Report: Annex B-vii.

Lewins, R., Alam, M. and Robens, S. 2004. Gauging the pro-poor orientation of IFM outcomes. Project R8195 Final Technical Report: Annex B-iii.

Sultana, P. and Alam, M. 2004. Local stakeholder criteria for successful IFM – a review of performance. Project R8195 Final Technical Report: Annex B-v.

Sultana, P. and Lewins, R. 2004. Up-scaling IFM institutions – evaluating constraints and opportunities. Project R8195 Final Technical Report: Annex B-v.

8.10.2 Literature reviews

None

8.10.3 Scoping studies

Sultana, P. and Alam, M. 2003. Assessment of potential case studies of functioning and documented water management / floodplain / fishery management institutions. Project R8195 Final Technical Report: Annex B-xi.

8.10.4 Datasets

None

8.10.5 Project web site, and/or other project related web addresses

None

9 References cited in the report, sections 1-7

BWDB. 1994. *Guidelines for People's Participation*. Draft. Dhaka: BWDB.

MoWR. 2000. *Guidelines for Participatory Water Management*. (GPWM). Dhaka: MoWR

Soussan, J. 1998. *Community Partnership for Sustainable Water Management, Experiences of the BWDB Systems Rehabilitation Project*. University Press, Dhaka.

Thompson, P.M. and Sultana, P., 1999. *Overview of the Community Based Fisheries Management Project: achievements and implications in DoF 1999: Community Based Fisheries Management and future strategies for inland fisheries of Bangladesh*. Dhaka: DoF.

10 Project logframe

Narrative summary	Objectively verifiable indicators	Means of verification	Important assumptions
GOAL			
<p>NRSP-LW Output 2: Improved resource-use strategies in floodplain production systems developed and promoted</p>	<p>By 2002, new approaches to integrated natural resource management which explicitly benefit the poor validated in two targeted areas</p> <p>By 2004, these new approaches incorporated into strategies for the management of floodplain resources, including common pool resources in one targeted country</p>	<p>Reviews by Programme Manager</p> <p>Reports of research team and collaborating/target institutions</p> <p>Appropriate dissemination products</p> <p>Local national and international statistical data</p> <p>Data collected and collated by programme manager</p>	<p>Target beneficiaries adopt and use strategies</p> <p>Enabling environment exists</p> <p>Budgets and programmes of target institutions are sufficient and well managed</p>
PURPOSE			
<p>Methods for implementation of management opportunities relevant to the poor, including community participation in integrated sustainable management of terrestrial and aquatic floodplain resources developed and promoted by identification of the institutional environments that support effective pro-poor floodplain natural resources management</p>	<p>By 2004, two formal target organisations sensitised to pro-poor community participation methods in their floodplain NR management programmes , and to the implications for their adoption</p> <p>Two target organisations demonstrate capacity to identify appropriate institutional environments/structures to achieve IFM by 2004</p> <p>Two target organisations demonstrate IFM goals in their strategies by 2004</p>	<p>Annual and other reports of target organisations.</p> <p>Survey of TOs contracted by DFID/NRSP</p> <p>Strategy documents of TOs</p>	<p>National commitment of country authorities to devolution reflected at the local level.</p> <p>Ability of government to elicit flexibility in the attitudes of vested interests.</p> <p>The wider political, regulatory & social environments demonstrate change that supports institution building for resource management.</p> <p>A local champion is able to continue to promote or demonstrate the value of the project outputs after the end of the project</p>

Narrative summary	Objectively verifiable indicators (OVIs)	Researcher (lead / assist)	Completion date (milestone)	Means of verification	Important assumptions
OUTPUTS					
1. Factors determining the establishment and maintenance of sustainable institutional arrangements for integrated floodplain management (IFM) assessed and understood	1.1 By (<i>milestone</i>), report on institutional arrangements in local, informal floodplain resource management institutional bodies produced 1.2 By (<i>milestone</i>), report on models of relations within, and vertical and horizontal linkages between extant formal and informal, local and national institutions produced. 1.3 By (<i>milestone</i>), an analysis of the transaction costs involved in the establishment and maintenance of different IFM institutions. 1.4 By (<i>milestone</i>), analysis of equitability, transparency, accountability, process quality and sustainability in selected IFM institutions, based on process evaluation, produced.	PD / CNRS & MA KV & PD KV RL & MA	Dec '03 Dec '03 Dec '03 Nov '03	Project report Project report Project report Project report	Target Institutions continue to be committed to institutional approaches to achieve improved floodplain management and better livelihoods
2. The factors underlying successful implementation of integrated floodplain management plans are well understood	2.1 By (<i>milestone</i>), a statement of the criteria for successful IFM implementation, relevant to different stakeholders, produced. 2.2 By (<i>milestone</i>), analysis of durability and scale of implementation of IFM plans produced. 2.3 By (<i>milestone</i>), an assessment of the adoption of participatory planning processes in IFM produced. 2.4 By (<i>milestone</i>), a report analysing resource integration, cross-sectorality and the livelihoods orientation of organisations floodplain management plans and activities, and obstacles to their achievement, produced.	PS & MA PS & MA RL & SR PD & CNRS + PS & JB	Aug '03 Nov '03 Dec '03 Dec'03	Table of criteria by stakeholder type Project report Project report Project report	
3. Managers in Target Organisations are better equipped to assess institutional environments and their potential for successful uptake of IFM strategies	3.1 Building on relationships developed with TOs, a set of draft guidelines for assessing institutional arrangements for IFM jointly developed and circulated for comment, by (<i>milestone</i>) 3.2 By (<i>milestone</i>), guidelines promoted through TOs 3.3 By project completion at least one face-to-face type dissemination activity and one article in an accessible Bangladesh journal/newsletter produced	RL / AM RL / AM RL	Jan '04 Feb '04 Mar '04	Published guidelines Project report & dissemination list Dissemination report and publication	

ACTIVITIES					
OP1 Activities	1.1 Using tools for stakeholder analysis, institutional arrangements and organisational relationships for NRM in Bangladesh and certain other S. Asian NRM initiatives described, and models / typologies of institutional arrangements and organisational geometries elaborated. (was 1.1 + 1.2)	PD + KV	Dec '03	MOVs Quarterly and annual progress to PM. Internal project reports	Project staff can access an appropriate range of floodplain management plans.
	1.2 Transaction costs of different institutional arrangements assessed. (was 1.3)	KV	Dec '03		
	1.3 Factors in success or failure of institution arrangements assessed. (was 1.4)	RL	Nov '03		
	1.4 Framework of alternative institutional arrangements produced. (was 1.6)	RL	Dec '03		
	1.5 Pro-poor orientation of outcomes assessed.	RL & SR	Dec '03		
OP2 Activities	2.1 Local and organisational stakeholders consulted on criteria for success.	PS	Jun '03	Back to office reports	Access to reports of IFM organisations is forthcoming. Those responsible for IFM institutional arrangements are willing to enter into frank discussion. All IFM stakeholders are willing to be interviewed as a suitable time and location.
	2.2 Criteria framework produced. <i>[paired with 2.1]</i>	PS	Jul '03	Dissemination documents	
	2.3 Constraints to upscaling participatory NRM initiatives identified.	PS	Oct '03		
	2.4 Existing solutions to up-scaling problems evaluated against criteria (see Activity 2.1). <i>[paired with 2.3]</i>	PS	Nov '03		
	2.5 Current local, GO and NGO floodplain management plans and activities, and donor strategy documents for the NR sector collated and assessed for integrated approach to floodplain resources. (was 2.6).	PD	Dec '03		
	2.6 Assessment of the pro-poor livelihoods orientation of these plans and strategies. (was 2.7). <i>[linked with 2.5]</i>	PD & SR	Dec '03		
	2.7 Opportunities and constraints to sectoral integration identified. (was 2.8). <i>[linked with 2.5 & 2.6]</i>	PD	Dec '03		
	2.8 Use of participatory planning methods by different institutional bodies assessed. (was 2.5).	RL & SR	Nov '03		
OP3 Activities	3.1 Target Organisations canvassed regarding format of guidelines. Format of guidelines developed jointly with TOs	RL / AM	Dec '03		Budget Staff – UK 31,537 Staff – o/s 27,191 O/hds 22,414 Capital 0 Tvl & subs 15,438 Comm & Diss 5,000 Misc 7,760 Total 104,340
	3.2 Alternative dissemination fora and media identified	RL / AM	Jan '04		
	3.3 Key findings from assessment activities distilled with TOs.	RL	Jan '04		
	3.4 Guidelines produced.	RL / AM	Feb '04		
	3.5 Guidelines promoted through appropriate fora to resource managers.	RL	Mar '04		

11 Keywords

Bangladesh, institutions, organisations, integrated floodplain management (IFM), natural resource management (NRM), resource management institutions (RMIs), participation, common pool resources (CPRs), community-based management, transaction costs, process documentation, NGOs