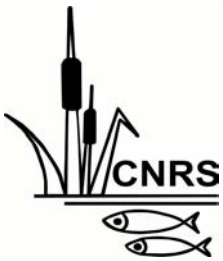
Better Options for IFM: Uptake Promotion
NRSP Project R8306

Final Technical Report
Annex C

Social and Institutional uptake of IFM options – observations derived from project documentation.

Roger Lewins with Abu Sumon, Anisul Islam, Parvin Sultana, Mahbubur Rahman & Habib Ahmed

November 2005



WorldFish Center

Table of Contents

List of Appendices

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.

Executive Summary

This report intends to summarise the work conducted by the project team to understand and track institutional change attributable to IFM options and the project approach at both sites.

The report specifically covers Output 1.7.2.2 - *Process documentation of institutional performance*.

The report covers both the early discussions with the team concerning appropriate project group formation, representation and group function. Particular attention is given to the development of a documentation methodology designed to alert local staff to significant institutional changes. The report summarises the key findings in relation to their possible significance for future IFM uptake and social/institutional feasibility.

Introduction

This report describes efforts to track the uptake of integrated floodplain (IFM) options at the two project sites.

Section 1 describes the rationale in tracking new, independent uptake of IFM options together with social and institutional aspects of this process during and after project activity. The development of a diary-keeping methodology with the project team is outlined.

Section 2 discusses some key observations from the reporting formats and attempts to explain their significance with respect to site-specific characters and the future uptake of IFM external to the project. An attempt is made to summarise the social and institutional significance of the project strategy at both sites and the performance of the reporting format.

Section 1

The documentation strategy took as its starting point the significance of the informal institutional environment that will shape the outcomes of project activities and the long-term behaviour of potential users and other stakeholders. Project R8195 (*Integrated floodplain management – institutional environments and participatory methods*) demonstrated that many IFM-related projects and initiatives overlooked the function of pre-existing modes of management. These forms of management can be broadly termed "institutional" and relate to power structures, vested interests, traditional culture and complex interactions between the mosque, the community and markets.

Many IFM-related initiatives have attempted to introduce new management arrangements via broadly representative platforms such as water user groups (the Bangladesh Water Development Board) or waterbody management committees (the Community-Based Fisheries Management Project). These structures are intended to devolve certain decision-making and planning responsibilities to local stakeholders themselves and are interesting in that they form an interface between desired objectives and intended project activities and the local reality of the poor and their livelihoods. Because these structures, and the new IFM activities they promote, represent an opportunity for a range of stakeholders they tend to exhibit many of the important social and institutional dynamics of the location.

Careful documentation of the establishment and performance of these committees can provide a useful insight to the popularity and prospects of new management arrangements and of their future relevance to the poor.

The documentation methodology adopted here draws from previous guidelines for process documentation (see Lewins, 2003 and Lewins, 2004a) and the use of new resource management structures in revealing important project-to-community dynamics and underlying issues.

1.1 Local institutions and IFM options – potential issues

With respect to the objectives of this project, there are several issues that might be expected to influence the degree of uptake of new IFM options. The most obvious of these relate to productivity and economic returns of alternative cropping and fisheries regimes. Technical aspects of these are well understood by the project partners.

However, there are other attributes of the project sites that might be expected to influence uptake of IFM that relate to social and institutional issues. Existing modes of production and management may appear counter-intuitive in this respect but may function to maintain certain relationships and co-dependencies between different local stakeholders. These modes of management may be difficult to challenge as a result. Local management preferences could be expected to relate to many factors, not all related to cash income or production – local history and preference for certain staples, patterns of land ownerships and employment, *de jure* and *de facto* ownership of fisheries and agricultural land etc.

Of particular interest with respect to the promotion of this project's IFM options is the uptake of *robi* crops (the major focus of the teams at both sites) and how the acceptance of this new approach varies between and within communities. One task of a documentation methodology should be to attempt to uncover important attitudinal features of uptake, how these relate to different socio-economic interests and how these might be significant outside of the project context or post-project. For instance, do land-owners and tube-well owners share similar perspectives of the technology? Is there a relationship between the perceived usefulness of the IFM options, perceived risk and vulnerability? How do apparent cultural preferences for rice as a staple (over and above potato and maize) conflict with the uptake of *robi*?

A documentation methodology was required that specifically attempts to uncover such issues and to direct the field team towards these less obvious and less visible outcomes of the project. Any evidence of new and autonomous uptake of IFM approaches independent of CNRS and WorldFish or serious obstacles to expansion such as new land-use disputes were to be recorded.

With respect to the formal institutional structure of IFM in Bangladesh there are other obvious sets of constraints to up-scaling and influencing practice. Although there are serious limits to achieving change via sector-specific, District and Upazilla level authorities, Project R8195 suggests opportunities do occur (Sultana & Lewins, 2004). In particular, up-scaling through "replication" at the District level appears to fit within the remit and capacity of technical agencies such as the Department of Agricultural Extension (DAE).

1.2 The development of the documentation strategy

Discussions with the project team concerning a social/institutional monitoring strategy occurred in October 20003, during the early crop demonstration phase and prior to the formation of groups. Special attention was given to the manner in which the team would routinely interact with local stakeholders over the life-span of the project and how this might shape the monitoring strategy. It was recognised that the design and representation of project groups, committees, meetings, training etc. might provide a focal point for monitoring social/institutional aspects of IFM and that equivalent structures and processes should be established at the two sites.

The primary function of institutional monitoring in this context was to track the degree of spread of the new IFM options, the degree to which options were supported (or resisted) by primary and secondary stakeholders and the manner in which local stakeholders (particularly the poor) were engaged in their adoption. Diary-type reporting in this context can both capture change and provide feedback on current project activities and dynamics to help review performance and make appropriate decisions during the project.

1.2.1. A potential "interface" between CNRS, WorldFish & the primary stakeholders

It was thought useful to establish some form of interface or platform between the facilitators and the primary stakeholders / participants. This would achieve several objectives simultaneously:

- It would allow or encourage stakeholders to interact and discuss new IFM
- It would provide a "window" on processes (the events, discussions and perspectives of the stakeholders) and provide greater knowledge of issues and acceptability
- It would provide a focal point for several field tools (see below).

It was agreed that PAPD workshops would be conducted at both sites in order to work towards locally-representative IFM management committees. PAPD was also intended to highlight the function of the project, the potential role of local stakeholders and to formulate processes by which local people interacted with project staff and communicated performance and issues. Alternative structures and functions of potential project bodies were discussed with the CNRS team (see Box 1).

Box 1. The *"committee versus group"* debate

Discussion revealed two distinct approaches to the purpose and structure of a committee as interface with the community. One approach would have been to encourage a loose and open discussion meeting once monthly, facilitated by project field staff, but with no distinct internal responsibilities or rules.

The other alternative would have been to jointly establish a working group or committee that had distinct or regular membership with somewhat more formal roles and responsibilities with regards project implementation. It was thought that this might be more meaningful and outlive the external support of the project.

Interface Type	**Advantages?**	*Disadvantages?*
Informal meeting group	Needs or issue based IFM rather than group focus No rules & roles formalised	Questionable incentives Good facilitation required Project & post-project status
Structured group/ committee	Post-project viability Taken more seriously Enables collective actions	Time spent forming group Group becomes new purpose Group adopted by strongest

Relatively structured IFM committees were eventually established at both projects sites. These committees were used as platforms to deliver training and advice and receive community feedback, rather than to allow space specifically for autonomous decision-making etc. (see section 2.2.3)

1.2.2 The draft tools

The diary

The new interface would provide a convenient basis for diary type reporting. This was expected to form the core part of process monitoring but would also be supported with field officer observations outside the meetings. In this last respect, it was agreed that the Field officer should recall "unusual events" that fall outside of the meeting and outside of the reporting criteria outlined (see below). At this stage of the project Field officers were keeping records but the objective of the diary was to order these records and ensure staff observe key attitudinal and social changes (adoption or rejection of IFM options, adaptation etc.).

Four overlapping and key areas were identified for the diary format – Acceptability & Adoption, Participation, Learning and Communication. The over-arching factor is Acceptability and Adoption and this was to complement the KAP survey.

In addition to monitoring the outcome and attitudes of project participants it was important that impacts on less involved stakeholders (labourers or fishers that fail to meet the membership criteria of the Beel Management Committee (BMC), for instance) and their attitudes towards IFM options was somehow gauged. The Knowledge Attitude and Practice (KAP) survey was intended to systematically target other villages in this respect but the diary reports left room for the facilitator to consider the relevance of IFM beyond the active participants (see later). This has obvious relevance to the potential for horizontal spread of IFM options with or without facilitation[1].

The diary format was intended to develop the strategy adopted by ITDG in Project R8103. Here the emphasis had been to aid the field team recognise institutional linkage when it occurred and to think analytically and critically when it did not. Rather than attempting to quantify institutional and social change, the emphasis was on tracking the direction of any social and institutional trends and attempting an explanation.

The draft diary format is provided in Appendix i and the process of piloting outlined in Appendix ii.

Report book /cards

Report cards were drafted to enable PME by the IFM committees, themselves. Indicators were presented pictorially and were based on proxies for "good" institutions and institutional performance identified by floodplain stakeholders themselves (an output of R8195).

The purpose of the diary and the report card is summarised in Box 2.

[1] With respect to vertical uptake of new IFM options, it was necessary to track the uptake of new IFM options by secondary stakeholders such as Upazilla or District-level officials, the DAE and the Department of Fisheries (DoF), for instance. This is documented elsewhere (report on the communications strategy).

Box 2. The role of the process documentation formats.

"In the context of NRM initiatives, "processes" can be described as those activities and relationships that go on to produce NRM "outcomes". In this regard, processes encompass both those formal activities that projects intend to carry out and informal processes that represent the way things tend to be done on an everyday basis."

(Lewins 2004 - Guidelines for Documenting "Processes" within Natural Resource Management – Discussion Paper 3).

Inputs (activities) → **Process** (social/institutional change) → **Outcomes** (visible end results)

	Input (activities)	Process	Outcome
Example	Crop demonstration, awareness-raising etc.	Local negotiation, participant-DAE linkages, disputes etc.	Changed land use, water management, coverage of *robi* etc.
Recording Tool or Format	Weekly Activity Sheet	Diary & Options Progress Report Report Card*	GIS mapping, land-use change, crop diversification, fisheries data.
Information type	List of actions taken	Events & developments related to participation, adoption, modification, consensus & disputes etc. Progress (key changes) on IFM options.	

* The Report Card would become a PME tool for the project committees. Anisul Islam later developed the Report Card according to the indicators of "good IFM institutions" defined in project R8195.

In summary, the process reporting formats[2] were developed with the CNRS team principally to generate knowledge relating to three aspects of the project activities:

1.) an understanding of the process of adoption (how potential local users adopted *robi* or other IFM options, the role of project facilitation and informal, autonomous processes related to uptake);

2.) constraints and opportunities for new management approaches for IFM at the two sites (an understanding of local reluctance or acceptability etc.); and

3.) related to this, the way perceived problems were overcome or negotiated by target groups and the project team.

[2] Originally, monthly diary and major meeting report.

1.3 Piloting and Modifications

Early in the documentation and reporting stage of the project the diary was modified by the team to record change over a one month period because it was felt that uptake, developments or "unusual events" occurred over extended periods. In addition, a proposed "major meeting report" was discarded because discussion and local issues aired during committee meetings was to form the basis for reporting in the diary.

The first completed process monitoring tools were discussed in Dhaka, prior to a field visit to Charan Beel. Several problems were jointly-identified, in particular the issue of interpreting the meaning and significance of observations. These problems were largely a result of lacking understanding of the purpose of the monitoring. Field staff had provided copious notes but with little structure. It was important that the completed diaries contained precise statements relating to "learning", "acceptability" etc. The most important edits to the original diary template were the introductory guidance notes, in particular "emphasise change, both positive and negative" regarding the 4 project options/activities, especially fisheries-related actions. The significance of change was later explained to the Field Officers at Charan.

The field visit was intended to emphasise precisely why issues such as "learning", "communication" etc. are important to the project and how they might be recognised. A formal meeting was held with project participants during which, general comments and observations were recorded by each of the team. This was followed by less formal discussion with non-participants at various places in the village.

A list of observations was compiled by the team, drawing from all accounts of the day. The observations were a combination of people's statements or quotes and the team's observations or thoughts. All observations were discussed and were used to compile an example diary report (see Appendix ii). The group discussed which statements and observations were particularly relevant with respect to social and institutional developments.

Finally, a fictional account was produced to demonstrate how an unusual event, its significance and outcomes, might be reported.

Box 3. Piloting the diary - summary of field team observations. Several of the statements relate to independent uptake, modification, organisation, conflict and linkage with facilitating institutions. The team had previously emphasised the technical constraints to IFM uptake – particularly, the performance of *robi*.

- *"why are we choosing to grow maize?"*
- *"there was heavy rain damage to the seedlings"*
- *"why don't we grow potatoes?"*
- *"why not farm higher land?"*
- *"there is a lack of community initiative"*
- *"there is a problem with costly onion inputs – garlic is preferable"*
- *"the list has increased from 15 to 80 people"*
- *"there were Rabi crops 30 years ago"*
- *"market onion is poor stock"*
- *"Rabi crops are more profitable"*
- *"people learned solutions from the PAPD"*
- *"onion failed due to sandy soil"* - wrong
- *"more participating will reduce individual production cost"*
- *"why did CNRS provide seed outside Charan?"*
- *"we completed a cost/benefit review of mustard and rice"*
- *"we forgot to consider our own labour cost"*
- *"an outsider told us IRRI rice is damaging"*
- There were 36 men and 6 women at the meeting
- A woman said "*we visited Bogra and Natore to see garlic"*
- *"Lau is 6 times more productive than IRRI"*
- *"we need to use insecticide every time we see insects"* wrong
- In the afternoon a man complained *"Why am I not included!"*
- 2 men asked for maize seed *"If CNRS do not provide, we will buy it!"*
- *"we can distribute seed between ourselves"*
- Posna CBFM members asked questions about maize and tomatoes.

Section 2

The monthly diary reports provided an insight into two key aspects of the project:
1) the reaction of local stakeholders to the IFM options and 2) the focus of the local project teams and their understanding of the project focus and the meaning of "IFM".

2.1 Social and institutional feedback of IFM options

For the purposes of discussion the following section clumps feedback related to "acceptability" with "participation" and "learning" with "communication".

- Acceptability & Participation

These issues relate to the attitude of participants and non-participants towards the IFM options. The issues are critical because they indicate the extent to which participants and non-participants may embrace aspects of the IFM options.

- Learning & Communication

These issues are key because they relate to behaviour outside the project activities – the extent to which autonomous modifications or adoption have taken place, which institutional avenues of support are sought by stakeholders without project facilitation and how these may be significant post-project. The issues also relate to "acceptability and participation" because local modifications may reflect local needs and preferences (e.g. for modifications in the IFM management committees or for alternative crop choices).

Together, the criteria were intended to provide an indication to the field teams of the type of features that would demonstrate prospects or obstacles to social and institutional sustainability of the IFM options. The emphasis was to be on those unexpected processes such as autonomous planning or conflict, rather project designed activities and structures that were the responsibility of the project team.

- Retrospective analysis

In addition to discussing the general themes and issues recorded, the team at both sites developed retrospective timelines of the events they saw as significant to IFM. Two timelines were to be produced: one outlining the sequence and timing of key technical and project-driven steps and one outlining the key institutional and social events. This latter timeline was intended to represent both positive breakthroughs and negative changes such as reduced participation or local conflict.

2.1.1 Charan Beel, Tangail

The Charan team were primarily concerned with rolling-out robi as an alternative farming system with reduced dry season water demand. As a result the diary reporting tended to focus on positive developments and breakthroughs related to "acceptability and participation" rather than "learning and communication".

The key social and institutional observations from Charan Beel are summarised in Table 1.

Acceptability & Participation

It is evident that the diary format has helped the local team consider the uptake and sustainability of IFM options from a social and institutional perspective. Of particular interest, is the way in which initial obstruction by powerful interests, especially the low-lift pump (LLP) owners, was managed by the project and how some of these stakeholders were gradually attracted to robi cropping (CNRS provided detailed evidence of the costs and benefits of robi cultivation versus boro).

From an early stage (June-August 2004), large numbers of participants were recruited to the trials for alternative cropping and were "listed" to receive seed and other inputs via the project.

The popularity of robi seemed to be reflected in the attendance and frequency of the committee meetings which increased sharply to 42 (including 6 women) in October 2004 prior to the second winter cropping.

There was evidence of the potential for horizontal spread of robi beyond the direct project participants, however. Individual from neighbouring areas have consulted local people, CNRS and the Block Supervisors (BS) concerning uptake of robi options in their villages. These conversations seemed to be the result of informal, "tea-stall chat" rather than concerted efforts on the part of the project such as the cross-visits and training days with secondary stakeholders.

Although such developments are encouraging from the perspective of sustainability and up-scaling it is not clear to what extent agriculture modifications offer pro-poor benefits and receive widespread acceptance. New robi participants are self-selecting in that they are wealthy enough to be land-owners, farmers or share-croppers.

Encouragingly, the IFM committee convened meetings independent of CNRS to resolve local disputes on several occasions. The fact that one trial field was sabotaged by a neighbouring farmer indicates that there may be strong resistance to robi experiments from some sections of the community and it seems that the project team have discussed the cultural significance of rice to the local people over and above new market opportunities from exotic crops. Some local stakeholders "remain stubborn" in this respect.

The project team have attempted to explain the significance of sabotage or obstruction, however, and most problems seem to relate to misunderstanding of the technology (one farmers' father ruined crops by introducing his animals to the plot, for instance) or jealousy caused by apparent success and free inputs. However, at least 6 farmers abandoned robi and returned to IRRI rice while relations with one of the LLP owners remained poor.

In retrospect, it would have been useful to attempt to deconstruct the types of interests groups attracted to the new IFM options in the reporting and how, for instance, movement between fisheries and agriculture options relates to socio-economic status and occupation - how do wage labourers perceive robi and are these stakeholders directly involved in fisheries management options, for instance?

Learning & Communication

Despite the local emphasis on technical success, the team did manage to record evidence of autonomous modification or planning around IFM. Again, the majority of this reporting concerns crop diversification with a view to reducing the winter water demand of agriculture but events significant to the support and uptake of IFM were uncovered.

For instance, there was evidence that other local stakeholders (non-listed farmers) were exploring robi options and were concentrating on specific crops – especially potato – and were successfully source their seeds independently of CNRS.

Of particular interest from a social and institutional perspective, was evidence that "listed" participants and others outside the project area were engaging with relevant secondary stakeholders such as the UAO and the BS independently of CNRS and the project. Farmers started to commission their own soil tests direct from the Agriculture Office, for instance.

An additional institutional development related to the linkage with markets. A local trader agreed to buy and distribute all maize produced in the project villages and this indicates a level of support for crop diversification beyond the village level but outside formal institutional (government) or project facilitation.

The level of understanding of robi appeared to improve as the project progressed. When mistakes and problems had occurred, the issues were addressed by project staff. The diaries highlight the case of at least 5 farmers that failed to continue the robi experiment due to "lacking skill or funds" but the general indication was that people were willing to learn of new options and attend the various training activities organised by the project. Again, it is not clear how attendance at these formal events cross-cut the range of stakeholders at local level or whether they were self-selecting for wealthier individuals.

The field staff noted that discussion of robi between listed farmers and others occurred informally and that farmers would invite non-participants to inspect their plots and discuss robi.

	Acceptability & Participation	Learning & Communication
June 2004	**+ve:** good response to demos and committee (35 robi farmers over 25 acres – chamara & robi). Appreciation of CBFM early monsoon fisheries control. **-ve:** early conflict between pump-owners and farmers	**+ve:** evidence of technical (IFM) & institutional (committee purpose) knowledge. Project-facilitated links to BS, UFO, UAO & BRRI.
July	**+ve:** demand for ad hoc IFM (robi) committee 3 villages participate in meeting for seed distribution & use of urea.	**+ve:** farmer-farmer discussion & farmer-officials communication
August	**+ve:** 80 residents agree to robi, farmers want additional potato seed to buy independently of project.	**+ve:** 2 farmers outside Charan take up maize. Trader agrees to buy all maize.
September	**+ve:** Formal committee requested. Farmers preserve their own seed. A list of 9 representatives established.	Soil test available to all from Argric. Office. CNRS office visited regularly by individuals.
October	**+ve:** Residents praise robi and 2 extra request membership. Committee increase form 20-36 plus 6 women. "List" increase form 15-80. **-ve:** some trials sabotaged but resolved in autonomous meeting.	Robi success in non-listed groups & larger groups suggested (modification). Farmer-farmer and tea-stall discussion increases. **-ve:** some believe all insects are detrimental.
November	**+ve:** additional farmers attend meetings, 5 farmers' neighbours interested and list expands to 85.	**+ve:** IFM committee talk regularly to CNRS & other farmers. **-ve:** Some farmers remain stubborn.
December	**+ve:** 3 farmers from neighbouring villages express interest. 2 IFM meetings this month. Frequent BS & UAO interaction. 3 of 4 pump owners stop their operation & request involvement.	**+ve:** farmers recognise robi significance via cross-visit
January 2005	**-ve:** 5 robi farmers fail (money & skill). One farmer's family ruins wheat crop.	Farmers inspect each others' crops. Training with BS & UAO. Farmers contact CNRS office.
February	**+ve:** farmers from outside contact CNRS & BS. **-ve:** 6 farmers drop out (replace robi with IRRI), 1 pump owner refuses to stop irrigating land (conflict with CNRS).	
March	**+ve:** 3 villages decide to grow amman, jute & sesame. People decide to register committee & start bank account.	

Table 1. Recorded social & institutional features of IFM - Charan Beel, Tangail *(*CNRS). Observations are selected from the diary reports.

April	**+ve:** farmer-CNRS interaction high due to seed problem. Committee invests in thresher.
May	**+ve:** Committee consolidated & engages with farmers. NNRS-farmer link close due to ongoing irrigation advice. Farmers will cultivate robi next year.
June	**+ve:** People want to join committee. Jute becomes more popular due to market produce (research price themselves).
July	**+ve:** Jute becomes more popular (price rises) and farmers are prepared early for robi.

Table 1 contd. Recorded social & institutional features of IFM - Charan Beel, *Tangail (*CNRS). Observations are selected from the diary reports.

Charan Events timeline – project activities

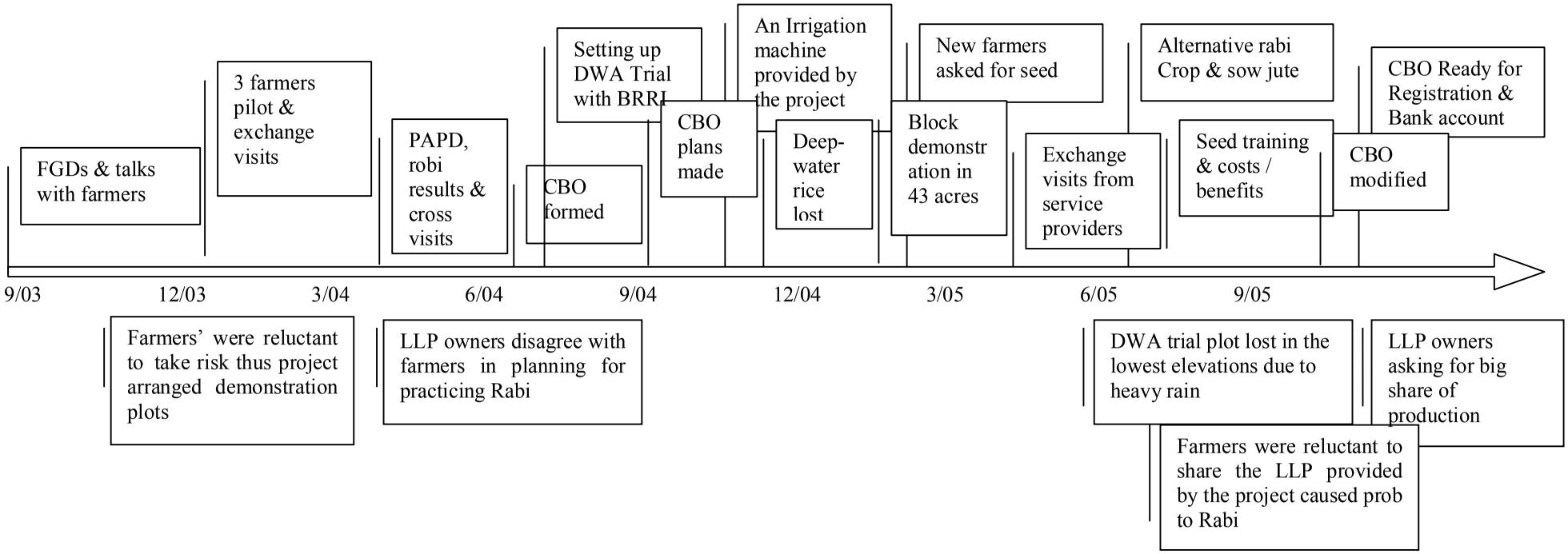
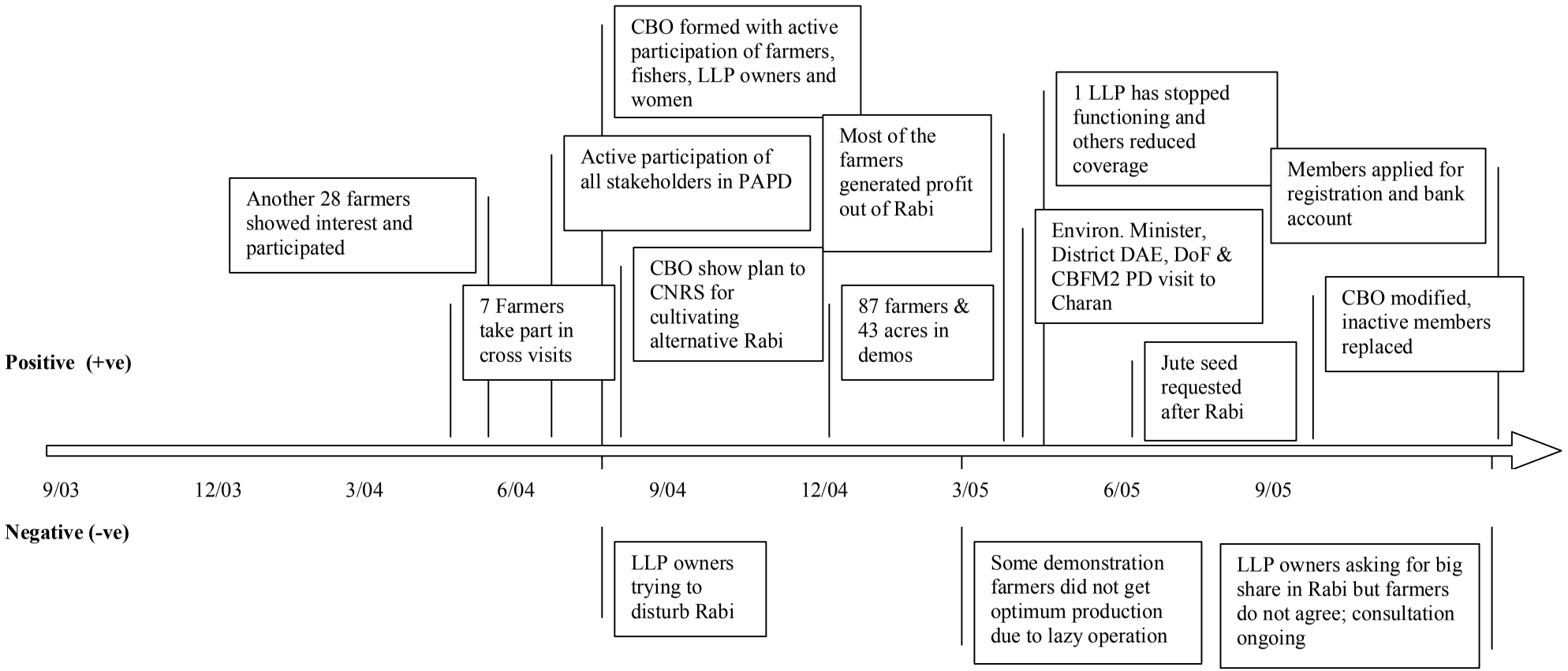


Figure 1. Charan: events timeline – project activities.

Charan Events timeline – social & institutional developments



Institutional change includes: cross-visits, independent visits and meetings with service providers etc.
Social change includes: conflicts & resolutions, uptake, rejection of IFM activities etc.

Figure 2. Charan: events timeline – social & institutional developments.

2.1.2 Goakhola-Hatiara, Narail

Again, the Goakhola-Hatiara team were concerned with rolling-out alternative cropping systems (including aus, amman and Dhaincha as an alternative to jute) and the diary reporting emphasised positive developments and breakthroughs in this respect. However, the Goakhola-Hatiara team did well to incorporate the broader range of IFM options and to consider fisheries related developments under CBFM-2. In addition, the team were careful to record the level of interaction between the project-formed IFM committee and external stakeholders such as the BWDB.

The key social and institutional observations from Goakhola-Hatiara are summarised in Table 2.

Acceptability & Participation

In contrast with Charan, one of the major constraints to alternative cropping related to the suitability of the site's hydrology, rather than the behaviour of pump owners in isolation. Early in the project, the team and local stakeholders jointly-identified the need for a new culvert to help improve drainage. It was estimated that this improvement could extend the area of robi by 100 acres. The planning for this culvert was recorded in the diaries as a feature of "learning and communication" (below) but participation in this issue indicated a local demand for alternative cropping.

With respect to the acceptability of alternative cropping, there was evidence of early enthusiasm for Dhaincha as a jute substitute and robi, aus and amman (good market prices for jute restricted the level of substitution towards the end of the project, however). The total level of participation in robi was less than at Charan but the increase that did occur in uptake of alternative cropping was attributed by the team to the work of the IFM committee (the committee had committed itself to recruitment).

In turn, the committee's desire for registration and their attempt to establish a fund indicates a high level of support to alternative crop choices. It is not clear from the diary reports how widespread this demand or how exclusive the committee is, however. Despite this, the large uptake in robi adoption in December 2004 was attributed to the committee.

The local team recognised the role of the CBFM-2 committee and team in IFM-related management and highlighted an incident where BMC-banned gears were destroyed by local stakeholders. Later in the project, two fish sanctuaries were established and poachers were reprimanded but, apart from the overlap at committee level, it is not clear to what extent fisheries and agriculture issues are considered as "integrated" by the project participants.

Learning & Communication

There was diary evidence of local initiative associated with IFM options and this was linked with the work of the committee rather than autonomous uptake on the fringes of the project (as had seemed to be the case at Charan). These observations related to calls for BWDB advice, the establishment of an IPM school and general planning for the new culvert, rather than the modification of robi techniques.

The majority of the interaction between local stakeholders and service providers as secondary stakeholders was facilitated by the project such as the District level

workshop and exchange visits with Charan (see Figure 3. for the timelines of project proscribed activities) but the demand for the IPM school and the request for technical BWDB advice did indicate increased IFM awareness and the prospect for new links with existing institutions.

	Acceptability & Participation	**Learning & Communication**
May 2004	**+ve:** 3 farmers take up jute.	**+ve:** CBFM committee members & Agric. Officers present at jute training.
June	**+ve:** CBFM committee destroy fixed engines.	
July	**+ve:** IFM committee of 13 formed.	**+ve:** committee plan extra drainage outlet.
August	**+ve:** good interest in Dhaincha versus Jute (good price).	**+ve:** IFM committee consult BWDB engineers & decide to take action.
September	**+ve:** Aus and amman is popular. Committee believe new culvert will increase robi by 100 acres in 2004.	
October	**+ve:** IFM committee want registration & prepare plan. They create a fund, arrange a visit & training & commit to tell others of robi.	
November	**+ve:** evidence of revenue management.	
December	**+ve:** robi adoption due to committee.	
January 2005	**+ve:** robi increase, boro declines. LLPs decrease by 2. 2 new members on committee **-ve:** STWs increase by 1.	**+ve:** Committee members communicate with BWDB for sluice management. Committee request loan from Banchte Sheka. Committee request soil training.
February		**+ve:** exchange visit with UAO, UFO & committee sharing experiences.
March	**+ve:** 5 new farmers attend meetings, Savings system working. 2 fish sanctuaries established.	**+ve:** District level workshop held.
April	**+ve:** Jute increases & ghers increase as shrimp buyers arrive.	**+ve:** Committee request IPM school.
May	**+ve:** Jute popular as price increases. BMC warn poachers. **-ve:** Dhaincha decreases.	**+ve:** all committee members commit to recruiting 10 new recruits (committee share purpose with others).

Table 2. Recorded social & institutional features of IFM - Goakhola-Hatiara, Narail (WorldFish). Observations are selected from the diary reports.

Goakhola – Hataria Events timeline – project activities

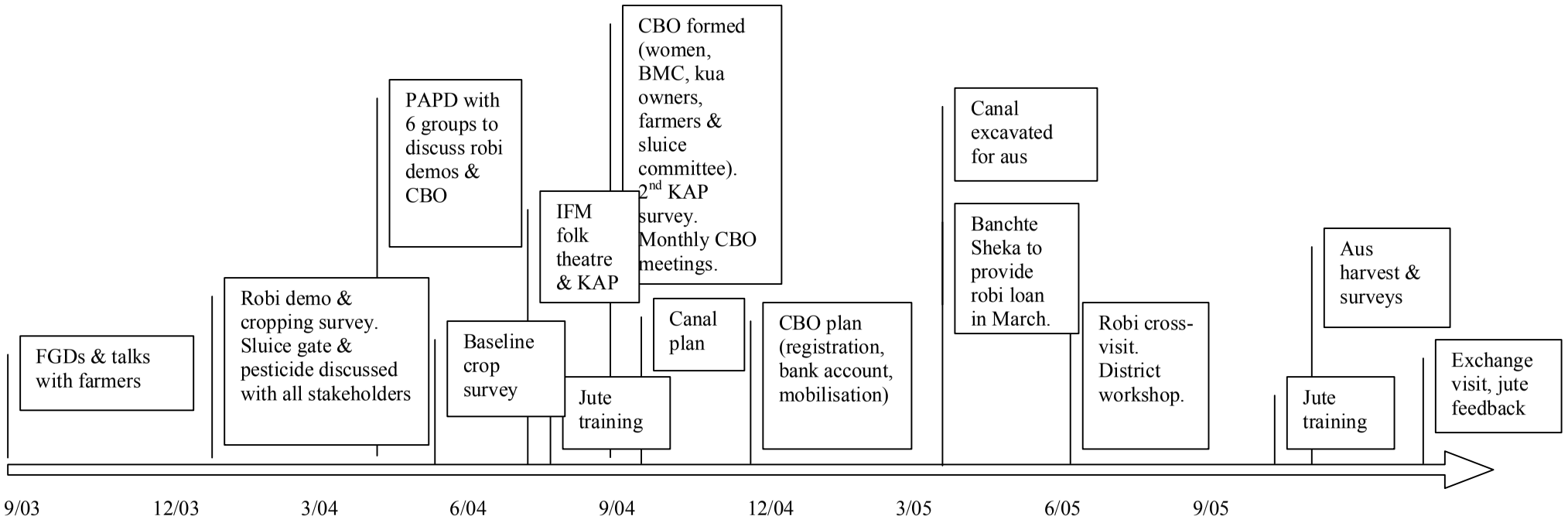


Figure 3. Goakhola – Hataria: events timeline – project activities. A retrospective timeline of key social and institutional events is yet to be developed by the team.

2.2 The focus and experiences of the project teams

2.2.1 The robi cropping focus

Both local teams placed special emphasis on any apparent change in uptake of alternative cropping. In part, this relates to the project design which targeted the introduction of these options at sites with CBFM-2 experience and committees. Issues of direct fisheries relevance were to have been addressed with the local communities in past project activity.

At Charan, the water issue of main concern to the field staff appeared to be the stance and behaviour of the LLP owners and their impact on the potential for robi. The emphasis on robi was complemented, however, by efforts to discuss fisheries impacts by LLP operation and by the inclusion of CBFM-2 participants at some of the committee meetings and training. In this way, the team did stress the linkage between the agriculture and fisheries systems.

2.2.2. The role of institutionalisation

At Goakhola-Hatiara, great emphasis was placed on the development of a formal and structured IFM committee (over half the content of the diary reports was concerned with the status of these efforts). A similarly structured committee was developed during PAPD at Charan and movements towards registration and financial independence were being made towards the end of the project (Figure 2).

However, it is important that IFM facilitators are aware of less formal mechanisms of institutionalisation and the role of independently established linkages between local stakeholders, IFM practitioners and supportive agencies and markets. In this regard, "institutionalisation" of IFM should be seen as process that depends on the stance of local practitioners to IFM. The way these attitudes are distributed within communities will dictate to what degree management changes take place and may reflect the extent to which they are pro-poor.

The institutional structures represented by the IFM committees were developed after the teams had decided to apply PAPD at the two sites.

2.2.3 Observations on the IFM committees and the use of PAPD

The Charan IFM committee appeared to be an important interface between the project staff, participants and potential participants. The focus was to engage with large numbers of "listed" farmers and encourage the uptake of robi. Meetings were sometimes called without CNRS facilitation but the main objective was to instruct people on robi techniques and to correct misunderstandings. In this last regard, the meetings apparently went some way to resolving obstruction from the LLP operators.

The Goakhola-Hatiara IFM committee were apparently involved in broader planning issues with other stakeholders to make room for the robi IFM option - the hydrology of this site required these changes for wider uptake. As with Charan, the committee functioned as an interface between the community and service providing institutions such as Banchte Sheka (a loan for robi was requested from the NGO), the UAO, UFO and the BWDB. The role of the committee here was less as a forum to deliver instruction but rather a platform to enable representatives to plan to accommodate IFM options in future.

Both teams facilitated the establishment of quite complex IFM committees and PAPD provided an opportunity to devise acceptable and representative structures (these structures are outlined in the Charan and Goakhola-Hatiara reports). Once again, the diary and timeline reports indicate that the committees at both sites were seeking registration and were attempting manage their own committee funds.

The application of PAPD was intended to "*explore the multiple perspectives of different primary floodplain stakeholder groups in order to set priorities for sustainable agricultural practices*" (PAPD – IFM Uptake Promotion, March 2004). However, because the field teams focussed on promoting robi, rather than cross-cutting activities to emphasise an integrated perspective on alternative floodplain management, the stakeholders selected for the PAPD workshops were drawn from farming interest groups. The strategy adopted here assumed that ongoing CBFM-2 activities and project-specific local planning (fish sanctuaries, gear bans etc.) were working in parallel to achieve IFM. There may have been an opportunity here to emphasise once again the inter-connectedness of the farming and fishing systems with the broad range of local stakeholders.

PAPD was designed to break down perceived differences in management objectives between the various floodplain users. The workshop process gradually merges the interests of all groups in order to demonstrate prospects for "win-win" interventions that suit all stakeholders. In the context of uptake of IFM options, there is an obvious role here with respect to bringing fisheries and farming stakeholders together to demonstrate the significance of new fisheries management and agricultural options and how they can work to enhance the performance of one another.

2.3 Conclusions

The recording formats were intended to help guide the field teams think strategically about the significance of local developments and how these might effect uptake in the future but they were also intended to provide feedback on the prospects of IFM uptake given the project's local strategy for participation and training. Key to this was the perceived relevance of IFM (and given the project's focus, robi, especially) not just by participants and potential participants but by the community in general. However, it is not clear to what degree robi at both sites is socially feasible in this respect.

In early visits to the project site at Charan there seemed to be a danger that the local project team were more concerned about the process of technical extension (total coverage and uptake of robi) rather than the process of discussing its local significance and acceptability to the range of local interests. The diary was intended to encourage the team's thinking with respect to the significance of local people's attitudes (positions). In addition, the diary required planning or thinking ahead in response to observations and comments made. There are good indications that the diary did succeed in this regard. Despite the piloting phase with the Charan team, given the parallel fisheries work of CBFM-2, it was understandable that the focus of field staff was to promote robi through demonstration. In turn, this would have influenced what constituted "success" or "failure" and hence the reporting.

With respect to signs of institutionalisation, there were encouraging indications of local modification (switches from project-recommended crops to alternatives etc.), uptake and new linkages to existing institutions and service providers independent of the project team. This indicates that robi is both an attractive proposition to some

farmers and that financial, market and technical support might exist beyond the project's life.

Ongoing efforts to institutionalise IFM options can learn from the experiences of the teams and the way in which the processes were documented. Facilitators of such processes must treat platforms like IFM committees as tools for institutionalisation (changing behaviour and practice) rather than as an end-point in their own right. Ideally these committees would work to "make normal IFM" and bring in new participants from the fringes of project facilitated activities - most probably through informal and personal linkage with neighbouring communities or government agency staff. With respect to robi, for instance, the institutionalisation process might see new participants forming their own relationships with traders, seed suppliers and service providers. There is evidence that this has occurred to an extent at both sites and it is important that this achievement of the project is acknowledged.

References

Lewins, R. 2003. Process documentation within the Community-Based Fisheries Management Project: report on the training module for project partners (Dhaka, 25-26th September 2003) and guidelines for future use. WorldFish Center, Dhaka.

Lewins, R. 2004. *Integrated floodplain management - institutional environments and participatory methods*. DFID NRSP Project R8195, Final Technical Report.

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

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

Appendix i

Developing the Draft Process Monitoring Tools (June 2004)
Progress summarised & some proposals for discussion

Defining the purpose of "process monitoring" within the project

The central purpose of monitoring within the IFM is to track the degree of change in practice at the two sites. Some of this change might be captured by visual and physical changes but process monitoring can be used to explain uptake, support or resistance to new IFM across the range of stakeholders and over time. Process monitoring will help build case study reports of the two sites in final reporting but will also allow the project team to react to events at the field as they occur so that new opportunities, or problems, can be reacted to.

A potential "interface" between CNRS, WorldFish and the primary stakeholders

It was thought useful to establish some form of interface or platform between the facilitators and the primary stakeholders / participants. This would achieve several objectives simultaneously:

- It would provide a regular and recognised entry point to the perspectives of the stakeholders for field staff
- It would allow or encourage stakeholders to interact and discuss new IFM
- It would provide a "window" on processes (the events, discussions and perspectives of the stakeholders) and provide greater knowledge of issues and acceptability
- It would provide a focal point for several field tools (see below).

The "committee versus group" debate

Discussion revealed two distinct approaches to the purpose and structure of the interface. One approach would be to encourage a loose and open discussion meeting once monthly, facilitated by project field staff, but with no distinct internal responsibilities or rules.

The other alternative would be to jointly establish a working group or committee that had distinct or regular membership with somewhat more formal roles and responsibilities with regards project implementation. It was thought that this might be more meaningful and outlive the external support of the project.

Interface Type	Advantages?	Disadvantages?
Informal meeting group	Needs or issue based IFM rather than group focus No rules & roles formalised	Questionable incentives Good facilitation required Project & post-project status
Structured group / committee	Post-project viability Taken more seriously Enables collective actions	Time spent forming group Group becomes new purpose Group adopted by strongest

This issue does not arise at the site in Narial. The existing Farmer Field School has been adopted as a place and group to discuss project-related issues. It will be necessary for the WorldFish Research Assistants to record developments at these meetings and outside these meeting (perhaps as discussed within the BMC) as at Charan.

The draft tools

1. The diary
The new interface would provide a convenient basis for diary type reporting. This might form the core part of process monitoring but should also be supported with field officer observations outside the meeting. In this last respect, the Field officer should recall "unusual events" that fall outside of the meeting and outside of the reporting criteria outlined (see below). Field officers are currently keeping records – the objective of the diary would be to order these records and ensure staff are watchful for key attitudinal and social changes (adoption or rejection of IFM options, adaptation etc.).

Four potential key areas were identified for process monitoring – Acceptability & Adoption, Participation, Learning and Communication. All four overlap but cover most of the issues we may be interested in. The key over-arching factor is Acceptability and Adoption and this should overlap with the KAP survey.

2. Report books / cards
It would be possible to leave self-reporting formats for primary stakeholders for issues relating to IFM and, if the group were committee-based, also issues relating to "good institutions". The DFID "Institutions" project has already uncovered locally favoured indicators in this respect. It would probably be necessary to clump some of these related indicators together and introduce a new, project-specific" range of indicators into the format (e.g. "land under IFM options increasing or decreasing?").

For IFM the criteria were:

- Better surface water use
- Increased dry season fishing
- Increased irrigation
- Increased fish & biodiversity
- Plan and management by RMO (including access)
- Sufficient drainage

Which are inter-related?
How relevant are these to Charan and to Narial?
What additional (project) objectives could be added to the list?

Observations:-
"Plan and management" depends on structure and purpose of interface (see table above).

"Better surface water use" and "increased irrigation" are linked and will lead to "increased fish & biodiversity".

Is "sufficient drainage" relevant to Charan, where draw-down is rapid?

3. Special Issues or ""Options" Reports
If distinct problems or bottle-necks are identifiable for the successful uptake of IFM it may be possible to track these key issues over time (dedicating a simple case study report to the behaviour of an obstructive *de facto* sluice gate manager, LLP owner etc.). Discussion revealed that such issues may not be restrictive, however.

An "Option Progress Report" was suggested as an alternative. Field Officers would be asked to observe changes in the uptake of effort control, land retirement, crop-diversification and in the case of Narail, sluice gate management as well.

For each of these options, the Field Officer would be encouraged to report **developments & change**, the **reasons** for this change and the **significance** of this change. This could be half a page of notes per month, per "option" (see below).

4. Weekly Activity Sheet
The activities of the field staff and the project participants also need to be recorded systematically. It should be possible for the Field Officer to note 5-10 key activities per week (fertilizer application, Block Supervisor visit and demonstration etc.), listed as bullet points. This would allow the production of a timeline of key interventions over the project period.

Facilitator (Field Officer) Guidance

Finally it is important that the field officer understand the purpose of reporting and the type of knowledge we hope to collect.

It is important that guidance notes are prepared for each of the survey tools and that a period of piloting is organised to overcome problems and confusion. The team decided that CNRS and WorldFish staff could share in a piloting exercise at one of the sites and that Faruk ul Islam of ITDG-B would provide advice and suggestions based on his experiences with diary reporting for R8103. Faruk may also provide advice on the training methodology – for instance, encouraging the team to suggest hypothetical observations, their significance and their cause, for instance.

Guidance notes could be included in the dairy booklet or could form a separate 2-page manual of suggestions and "problem-shooting".

Field Officer Monthly "Process" Diary

Site: Name: Date:

"Acceptability"
e.g. agreement to carry out IFM related action or not, type of decisions made, disputes arising etc.

Comments:

Why?:

"Participation"

1. Participation in IFM
e.g. change in practice (land covered, plots and no. people)

Comments:

Why?:

2. Participation at meetings
e.g. no. attending, male/female no. and stakeholder type

Comments:
Attendance down from 30 to 16.

Why?:
LLP owners feel nothing to gain from meetings because project not listening to them.

"Learning"
e.g. problem-solving amongst stakeholders, modifications of project advice etc.

Comments:
Women have leant about Robi through trials but are seeking hybrid seed instead of project seed.

Why?:
They want Robi but want faster growth rate in their fields (prone to flooding).

"Communication"
e.g. vertical linkage with secondary stakeholders, horizontal linkage and negotiation between primary stakeholders, other pro-active engagement.

Comments:
1. Two farmers visited CNRS building for advice on behalf of all Robi farmers.

2. UP Chairman has refused to attend any more meetings.

Why?:
1. Wanted advice on pest control because worried about effect on fish and cost.

2. He was not representing stakeholders (little interest) and was criticised at meeting

Unusual Events and Outcomes

Observations

DAE have visited sites, discussed with staff and farmers and took notes.

Explanations

DAE are interested in performance and may try parallel trials next season at other similar sites in Tangail.

Significance

We may receive greater support at site from DAE and build good relationship. IFM nay spread to other beels.

Monthly "Options" Progress Report

Site: **Date:** **FO:**

Effort Control

Developments and changes

Explanations

Significance

Land Retirement

Developments and changes

Explanations

Significance

Crop Diversification

Developments and changes

"large farmer owners have abandoned their onion and potato trial and returned to greater use of LLP".

Explanations

"early returns were poor and farmers expected greater security with rice"

Significance

"others may follow their example, higher water content may cause problems for surrounding Robi plots"

Field Officer Weekly Activity Report

Site: **Name:** **Date:**

Actions taken:-

- Fertilizer was obtained and applied to robi plots.
- Block Supervisor visited to inspect robi plots.
- BRRI asked for information on robi
- Meeting between LLP owners was held
-
-
-
-

Appendix ii

R8306: Capturing social & institutional changes: Refining the diary reporting approach with CNRS staff

Background

Several social and institutional monitoring tools were developed jointly with CNRS in May 2004. Since then several completed Monthly Diary and Meeting Reports have been received from the Field officers and compiled in Dhaka. These initial reports revealed some limits in original design and in the understanding of the Field Officers. In addition, the MTR expressed a need to establish some form of social and institutional monitoring component as soon as possible to properly address Output 3. The two main points raised by the reviewer in this respect were:

- Do the diaries and meeting report formats represent an extra burden on the field team that might distract them from other, practical, activities?

- Would the most significant change (MSC) approach to monitoring project impact be more suitable?

Firstly, it was unfortunate that the MTR visit occurred about one month before the draft tools and sampling methodology were developed in Dhaka (June 2004). Several of the issues raised in the MTR were specifically targeted during this period. In particular, the need to capture change and to develop communicable narratives - or stories - that demonstrate social feasibility and institutional uptake of new IFM practices forms the basis for the documentation approach adopted.

With respect to workload, it was intended that the diaries and meeting reports would be completed once every month. It was felt that this would make the process of writing, compiling and eventually analysing these reports very manageable for Charan, Dhaka and overseas staff. The new reporting responsibility was also intended to re-direct the attention and thinking of local field staff to consider local attitude and the future potential of IFM on an everyday basis (rather than purely the delivery of technical inputs and the success of the crop trials, for instance).

In respect to adopting a MSC approach, this may still be useful. However, the process monitoring approach proposed here does, in fact share several of the characteristics of MSC. Reporting guidance provides “indicative areas of change” such as “acceptability”, “communication” and “learning” rather than indicators as such. Quantitative “yes/no” responses to these areas of interest are not required, rather stories that support the observations and gut-feelings of the Field Officers. The major difference between the approaches, is that the stories are further developed away from the field (by drawing together evidence from the full range of tools) and the stories are required externally for reporting and communication processes rather than just institutional learning. The table below attempts to place the approach adopted in R8103, R8195 in relation to MSC.

Planning based approach	Process documentation (R8103, R8195, R8306)	Evolutionary or Most Significant Changes approach*
Set indicators (yes/no)	Indicators provide "window" for discussion	**Stories (significant changes) are uncovered**
Predominantly quantitative	Predominantly qualitative	**Predominantly qualitative**
Seeks common themes & tendencies	Seeks themes & unexpected outcomes	**Focuses on outliers (the unusual)**
Predictable scope of outputs	Predictable output types but scope driven by staff & participants	**Reported issues open-ended**
Deductive – performance rated in relation to desired & pre-defined outcomes	"Desirable" outcomes form basis of reporting real events and processes	***Inductive* – relevant criteria (stories) drawn from recent and ongoing experiences**
Indicators & frames of reference identified by senior staff	Indicators & frames of reference identified in conjunction with field staff (thought on explanations encouraged)	**Indicators & frames of reference**
Information is analysed centrally	Field staff are encouraged to respond to their own observations (hopes/fears)	**Information is distributed within entire project hierarchy**
Data tabulated and removed from context	Contextual information forms basis of stories	**Contextual information forms basis of stories**
Approach is fixed and repeated	**Approach is well defined but adaptable (re-directed towards key events etc.)**	**Approach is totally adaptive**

* Also known as the "Narrative Approach" or "Story Approach".

In summary then, the purpose of these three days was to:

1. refine the draft monitoring tools developed in May 2004 with CNRS by discussing the diaries and meeting reports that have already been completed (including problems with content, interpretation and reporting) and developing simpler and more structured formats for field staff and for analysis, and
2. to introduce these refinements to field staff at Charan Beel by testing the report formats after interaction with project participants and other local people.

Refining the draft monitoring tools

The process monitoring tools were designed to capture the social feasibility of IFM and the horizontal spread of new approaches in and around the two project sites. Drawing from similar tools developed with ITDG for R8103 the project team had formulated a set of monitoring formats (see: *Better Options for IFM: Uptake Promotion (Project R8306) Developing the Draft Process Monitoring Tools (June 2004)*) of which the diary and meeting reports were key.

Completed dairy and meeting reports were discussed in Dhaka, prior to a field visit to Charan Beel. Several problems were jointly-identified, in particular the issue of interpreting the meaning and significance of observations. These problems were largely a result of lacking understanding of the purpose of the monitoring. Field staff had provided copious notes but with little structure. It was important that the completed diaries contained precise statements relating to "learning", "acceptability" etc. The most important edits to the original diary template were the introductory guidance notes, in particular "emphasise change, both positive and negative" regarding the 4 project options/activities, especially fisheries-related actions. The significance of change was later explained to the Field Officers at Charan. A more concise and explanatory format was developed (see below).

Monthly Process Diary
Integrated Floodplain Management IFM R 8306

RA: Site: Charan, Kalihati Date: 22 – 06 - 04

Responses should relate to the 4 options and can be **+ ve or –ve.**

Emphasise change and new developments.

"Acceptability" (popularity, people's attitude)

Observations:

Why:

Comments (overview of trends & change– both evidence-based and "gut-feelings")**:**

"Participation" (discussions, cropping, irrigation etc.):

Observations:

Why:

Comments (overview of trends & change – both evidence-based and "gut-feelings")**:**

"Learning" (increased knowledge, new practice, independent activity etc.)

Observations:

Why:

Comments (overview of trends & change – both evidence-based and "gut-feelings")**:**

"Communication" *(links with BS, dialogue between people / villages etc.)*

Observations:

Why:

Comments (overview of trends & change – both evidence-based and "gut-feelings")**:**

Unusual Events and Outcomes

Any special *stories* over the last month which are unusual. These may be positive or negative developments in the area.

Observations

Explanations

Significance

Major Meeting Report (Issues Record)

FO: **Site:** **Date:**
Agenda:
Participants: **Chair:**

Discussion

e.g. main points discussed, who said what, suggested activities or plans etc.

Decisions

e.g. any agreements on suggestions made, summing-up etc.

FO summary

Discussion quality:
(was the discussion productive (agreements reached etc.), was it open and democratic, who were the loudest etc.?)

Hopes:
(how might these discussions / agreements benefit the project – work towards IFM?)

Fears:
(how might these discussions and agreements interfere with project objectives?)

Recommendation:
(does any action need to be taken by the team?)

Piloting the new diary

The field visit was intended to emphasise precisely why issues such as “learning”, “communication” etc. are important to the project, how we might recognise them, and how we might provided stories to back our statements.

The approach was to re-introduce the diary format to the team and explain the importance of the categories with respect reaching the project’s objective.

A formal meeting was then held with project participants in which general comments and observations were recorded by each of the team. This was followed up by less formal discussion with non-participants at various places in the village.

Finally, a list of observation was compiled by the team, drawing from everybody’s account of the day.

These observation were a combination of people’s statements or quotes (these were expressed in quotation marks) and the team’s observations or thoughts.

Summary of the group’s observations

- *“why are we choosing to grow maize?”*
- *“there was heavy rain damage to the seedlings”*
- *“why don’t we grow potatoes?”*
- *“why not farm higher land?”*
- *“there is a lack of community initiative”*
- *“there is a problem with costly onion inputs – garlic is preferable”*
- *“the list has increased from 15 to 80 people”*
- *“there were Rabi crops 30 years ago”*
- *“market onion is poor stock”*
- *“Rabi crops are more profitable”*
- *“people learned solutions from the PAPD”*
- *“onion failed due to sandy soil”* - wrong
- *“more participating will reduce individual production cost”*
- *“why did CNRS provide seed outside Charan?”*
- *“we completed a cost/benefit review of mustard and rice”*
- *“we forgot to consider our own labour cost”*
- *“an outsider told us IRRI rice is damaging”*
- There were 36 men and 6 women at the meeting
- A woman said “*we visited Bogra and Natore to see garlic”*
- *“Lau is 6 times more productive than IRRI”*
- *“we need to use insecticide every time we see insects”* wrong
- In the afternoon a man complained *“Why am I not included!”*
- 2 men asked for maize seed *“If CNRS do not provide, we will buy it!”*
- *“we can distribute seed between ourselves”*
- Posna CBFM mebers asked questions about maize and tomatoes.

The group then discussed which statements and observations fitted each category and how some of them were particularly relevant with respect to the categories in the diary.

Finally, a fictional account was produced to show we might report an unusual event and its significance and outcomes.

Monthly Process Diary
Integrated Floodplain Management IFM R 8306

RA: the team Site: Charan, Kalihati Date: 28 – 10 - 04

Responses should relate to the 4 options and can be **+ ve or –ve.**

Emphasise change and new developments.

"Acceptability" (popularity, people's attitude)

Observations:

Acceptability increasing for Rabi (maize, garlic, potato wheat and vegetables instead of IRRI).

Why:

People are praising alternatives ("lau is 6 times more productive).

People are requesting inputs and membership (2 men wanted seeds).

People are criticisng IRRI.

Comments (overview of trends & change– both evidence-based and "gut-feelings")**:**

A positive overall change over the last month – people are interested in future involvement and diversification is increasing.

This might help achieve a long-term change in cropping after the project.

"Participation" (discussions, cropping, irrigation etc.):

Observations:

1.) Participation increased in this month's meeting (normally 20 people – this time 36 plus 6 women).

2.) List has increased from 15-80 over the last month.

3.) Evidence of participation in problem-solving (PAPD).

Why:

1.) a foreigner was present!

2.) observed good alternatives through discussion and exchange visit.

3.) PAPD was deliberately used to engage discussion of options.

Comments (overview of trends & change – both evidence-based and "gut-feelings")**:** We want to spread uptake – uptake is increasing. Debate and local discussion is increasing which may help spread Rabi etc.

"Learning" (increased knowledge, new practice, independent activity etc.)

Observations:

1.) people have suggested larger groups to reduce costs
2.) non-listed people have confirmed Rabi success
3.) community realise market onion is poor stock
4.) some believe insects always harmful (negative)

Why:

1.) people have bee discussing alternative among themselves
2.) neighbours of participants have seen benefits and want involvement
3.) exchange visit demonstrated importance of seedlings
4.) pesticide has been used for many years and still need to educate

Comments (overview of trends & change – both evidence-based and "gut-feelings")**:** There is evidence o learning and individual discussion/planning (technical and management).
This is useful for project because rabi is being modified

"Communication" *(links with BS, dialogue between people / villages etc.)*

Observations:

1.) people are discussing among themselves (villager communication)
2.) Posna CBFM group asked questions about maize to CNRS
3.) an outsider spoke to them about crops
4.) Participants and non-participants ask BS questions

Why:

1.) they are thinking of practical alternatives
2.) outsider interest in maize trials because there is potential for them too
3.) the outsider told them of his bad experience of IRRI in his hometown
4.) interested in technical advice

Comments (overview of trends & change – both evidence-based and "gut-feelings")**:**

Small group (neighbour-to-neighbour or tea-stall) discussion is occurring.
This is modest but better than last month
Communication to other villages is increasing but links with UP etc. could be improved for the benefit of the project

Unusual Events and Outcomes

Any special stories over the last month which are unusual.

These may be positive or negative developments in the area.

Observations

There was conflict between a non-listed and listed man. He damaged the experimental plots and a meeting was held to resolve the problem on their own. The meeting decided to expand Rabi to this man's field and in similar future cases. This was communicated to CNRS afterwards.

Explanations

The man was jealous because of the success of the trials. The community wanted to resolve the problem quickly and to include as many landowners as possible to avoid conflict.

Significance

This shows the popularity of Rabi (but also potential problems in future). It also shows that the community is able to manage Rabi and the related issues/conflicts, independently of CNRS. This is significant for future success after the project has finished.

Final Comments

The piloting provided an opportunity for the team to share thoughts on people's\perception of the project and how this might be important for future success. The observations and comments recorded during the day provided a basis on which to explain changes at Charan.

The formal meeting with listed members was quite instructional with the CNRS team providing technical advice and arguments for Rabi. For the process diaries to work properly it is important the FOs look for clues in people's attitudes and try to elicit their opinion at meetings such as this and in every day interactions with the people.

In this way, the diaries are meant to be completed once only (at the end of each month) but are expected to be compiled from the FO observations, mental notes and written notes collected during the entire month. Once again, the purpose is to uncover changes in learning etc., explaining he direction of change (better or worse) and to try to provide an explanation.