

Node: Suite Summary^{1,2}

Bangladesh: Improving NRM through CBM-PAPD

Context

Floodplains provide multiple products and services to rural communities and support multi-use livelihood strategies. The potential for conflicting demands on resources (e.g. water use for agriculture versus fisheries) is high, especially given the dynamism of the water resource, and implies a need for integrated management approaches (see Bangladesh Suite 3: Integrated Floodplain Management). Reliance on common pool resources (CPRs), especially aquatic CPRs, is particularly important in the livelihood portfolios of the rural poor on the Bangladesh floodplains. To achieve integrated management of floodplain CPRs, community based approaches have been shown to be effective but there remains a need to better understand the local processes that influence access by different stakeholders to the resource. Mechanisms for building consensus for resource management amongst the competing demands of different user groups are critically important.

Early projects in this Node: suite therefore sought to create an improved understanding of floodplain related livelihoods and to develop a prototype problem census method. Through action research in the original floodplain study location and subsequently in alternative situations in the charlands (riverine islands) of Bangladesh and the coastal fisheries of Kerala, India, the consensus-building method, called Participatory Action Plan Development (PAPD), was developed, tested and refined. This Suite also explored the institutional arrangements necessary to support integrated floodplain management (IFM) and CPR management that can deliver benefits to the poor.

The consensus-building method and institutional arrangements developed in this Suite fed into and facilitated the achievement of the aims of NRSP (see 'Integrated Floodplain Management'). Uptake promotion of products from these two Suites was undertaken using an integrated communications strategy. This included the delivery of appropriate promotion materials and outputs through partners and linked institutions to different levels of policy stakeholders, practitioners and local institutions and councils.

Research Topics

- Within modified floodplain environments, what are the impacts of competition over resources on livelihoods based on fisheries, agriculture and other floodplain resources?
- Can a consensus building method for management of CPRs (involving all relevant stakeholders and making transparent the complementary and conflicting interdependencies between them) be developed and tested through a process of mutual learning?
- How effective is PAPD compared to other participatory planning methods?

¹ This document summarises NRSP's work in one of its Uptake Promotion Node: suites. For further details and links to project and project documents see <http://www.nrsp.org.uk/6.aspx>

² This document presents research funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.

- What are the institutional arrangements that support poverty-focused IFM and CPR management and what is required to promote uptake of consensus building methods?

Projects

Project R6756 (see project links below) examined the bio-physical, socio-economic, institutional, cultural and political complexity of floodplains in Bangladesh and the need for a systems based approach to the management of floodplain resources. To address a strong demand amongst Bangladeshi development organisations for tools and methods to facilitate the implementation of strategies for more sustainable and equitable natural resource (NR) management, the project developed a prototype consensus and systems based workshop approach. This approach was further developed in project R7562 into a methodology for participatory and inclusive community planning of NR management that integrates social and NR management tools. This methodology was called Participatory Action Plan Development (PAPD) and was tested and promoted through action research with three NGOs in contrasting aquatic CPR sites. The project also completed a comparative process evaluation of the PAPD method against consensus building methods used in ongoing co-management projects in Bangladesh.

In order to further test, promote and adapt PAPD to alternative circumstances, NRSP initiated project R8103 that applied the method with communities living on riverine sandbars, or chars. NRSP also co-funded a project (R8294) with the Fisheries Management Science Programme to apply PAPD to coastal fisheries in India. Following R7652, PAPD was adopted independently by development NGOs and the WorldFish Centre (formerly ICLARM) for use in their own programmes in Bangladesh and Vietnam. The method was particularly applied by the Centre for Natural Resource Studies (CNRS) at sites managed by that organisation for the Community Based Fisheries Management Project 2 (CBFM2). This provided an opportunity to evaluate the effectiveness of PAPD against other consensus building approaches (PD131).

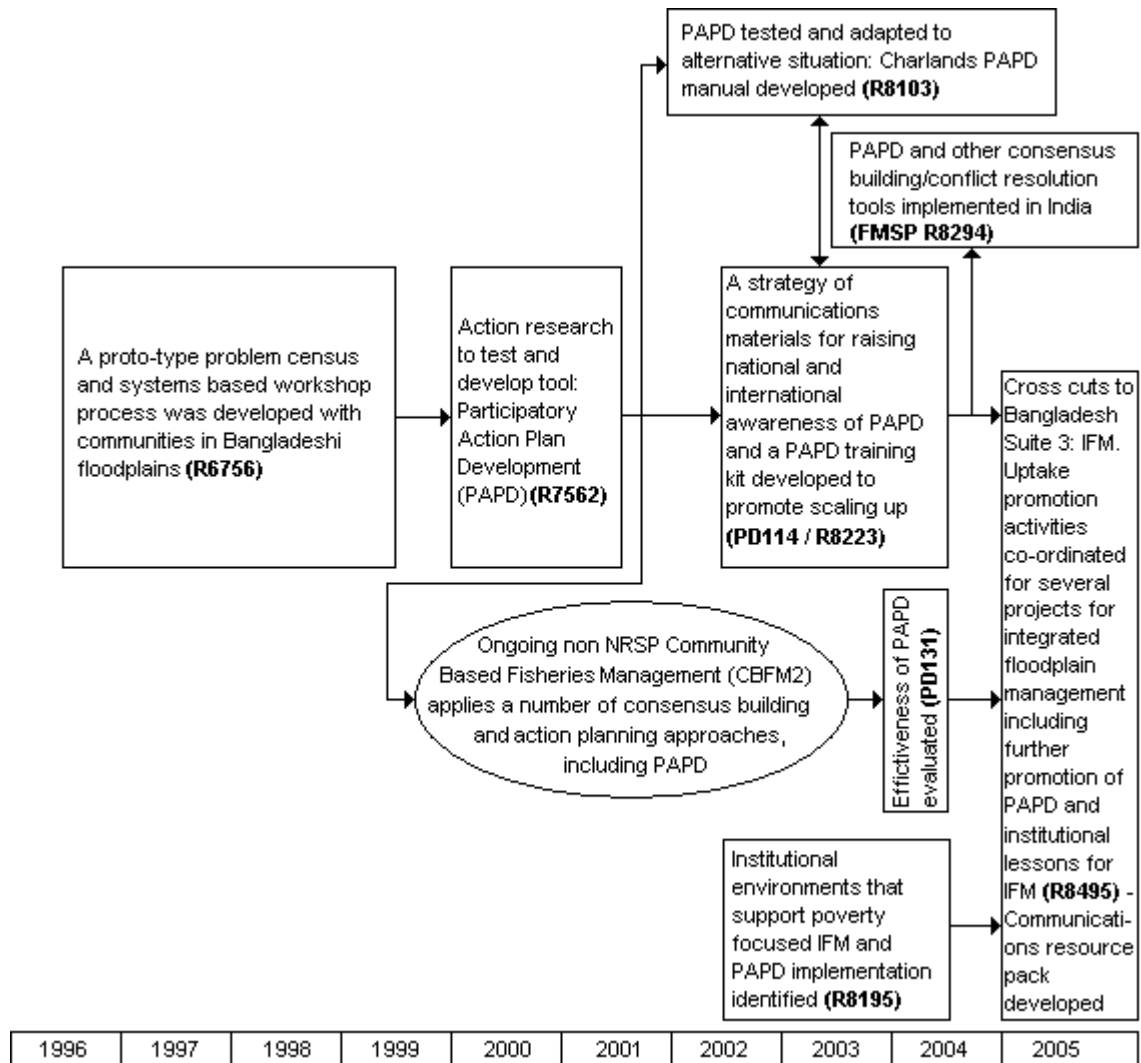
In parallel with this research, and cross cutting to ‘Integrated Floodplain Management’ for which these consensus building methods were highly relevant, NRSP investigated institutional arrangements that would support and sustain more equitable and poverty focused interventions for management of CPRs and IFM (R8195).

In order to promote uptake of PAPD, a short research assignment was commissioned (PD114) which confirmed that there was regular and increasing use of PAPD in Bangladesh, but that there was a need for:

- i) A reference or resource manual on PAPD containing evidence of its use in other locations and situations, and
- ii) A way of promoting the method within identified organisations in order to influence the way they worked with communities in managing NRs.

Project R8223 therefore integrated material from the projects in this Suite to develop communication materials and a PAPD training kit. R8223 also drew on material from ‘Integrated Floodplain Management’ projects (R8306) to compile an integrated communications resource pack.

Project links within Bangladesh Suite 1: 1996 - 2005



Outputs

Findings

Livelihoods based on floodplain CPRs are dependant upon a complex ecological, social, economic, institutional and political environment. Significant potential exists for inequities and elite capture of resources. A focus on agricultural production can have negative impacts on fisheries production, a livelihood that is often important to the poor (see also 'Integrated Floodplain Management'). A demand exists for consensus building methods to address this complexity and inequity and support community-based management.

A prototype consensus building approach, subsequently developed into the PAPD process, was used successfully to build social cohesion for integrated floodplain management. The method involved a short period (around 9 weeks) of intensive stakeholder consultations. PAPD is generic and the approach was found to be applicable to coastal resources in India where it was applied with conflicting groups of traditional and mechanised fishers in an environment where some formal fisheries and NGO institutions already existed providing a starting point for dialogue. The approach was also used in the charlands of Bangladesh. Despite a lack of formal institutions in this location it was possible to adapt PAPD and apply it productively. However, a significantly longer process, up to a year or more, was required.

Within the CBFM2 project, statistical analysis revealed that the PAPD approach delivered significantly greater benefits as compared to other participatory approaches. These benefits included the earlier formation of community based organisations, that met more frequently and were more representative with greater social cohesion; earlier implementation of management actions, with fewer plans unimplemented, more adherence to the rules of management and less time spent on resource management; and more equitable distribution of resource benefits.

The communication and scaling-up of the PAPD approach was found to be complex. The main lessons learnt through the research were that communication and scaling-up required i) a long-term commitment from a local organisation with a trusted track record in applying participatory approaches; ii) use of a wide network of influential contacts; and iii) an understanding of the stakeholders and institutional structures involved. It was also important to thoroughly test all scaling-up and communications materials with stakeholders through a participatory process.

Research messages

- The Participatory Action Plan Development (PAPD) approach is an inclusive consensus building method that addresses the complexity and competing demands of CPR management and can deliver more equitable distribution of benefits.
- The PAPD approach can be adapted to different circumstances and can successfully be applied during a short term intensive period of consultation between the community and facilitating agency, or over the longer term, depending upon the strength of existing local formal and informal institutional arrangements. Weaker arrangements require a longer process.
- PAPD is more effective in achieving desired outcomes from community-based fisheries management than alternative participatory approaches.
- Scaling-up is a long-term process requiring understanding of institutional structures and stakeholders. The characteristics of the promoting organisation influence the institutional change process. The lead organisation should ideally have a wide network of influential contacts, a long-term commitment to the process and a willingness to test materials with a broad range of stakeholders.

Key research products

- Best practice guidelines for consensus management of common pool resources.
- PAPD resource pack - training and facilitators guide and resource materials.
- PAPD brochure - an extension leaflet in English and Bangla.
- The effectiveness of the PAPD method - a comparison of experience in the CBFM2 project. (FTR and papers).
- Project Final Technical Reports:
 - R6756 FTR: Investigation of livelihood strategies and resource use patterns in floodplain production systems based on rice and fish in Bangladesh.
 - R7562 FTR: Methods for consensus building for management of common property resources.
 - R8103 FTR: Consensus for a holistic approach to improve rural-livelihoods in riverine-islands of Bangladesh.
 - R8195 FTR: Integrated floodplain management - institutional environments and participatory methods.

- R8223 FTR: A learning and communications programme for the PAPD method.
- PD131 FTR: The effectiveness of the PAPD method: a comparison of community organisation experience in the CBFM-2 project.

Impacts

Local institutions for IFM and CBFM were strengthened through the use of the PAPD method and improved co-management of CPRs was demonstrated with more equitable distribution of benefits.

In community-managed water bodies under the CBFM2 project, PAPD was associated with:

- A saving of about 100 days in the time taken to form a community-based organisation (CBO).
- CBOs that hold 3-4 times more awareness raising events, include representatives of more stakeholder categories and have poor people comprising 66% of their membership (compared with 33% in non-PAPD sites).
- Participants who rate the improvements in social cohesion significantly higher.
- Participants who perceive more personal benefits and expect more long term community (environmental) benefits to which they ascribe greater importance.
- NR management actions that occur about 100 days sooner after CBO formation (and over 180 days sooner after the start of NGO support).
- An average of about three more resource management actions implemented within approximately two and a quarter years, and fewer plans that were not implemented.
- Many fewer rule breaking incidents and conflicts, despite a similar number of fishing rules in place in PAPD and non-PAPD sites.
- Greater reported improvements in local government attitudes in favour of user community management.
- Participants who spent about 200 hours per year less on resource management.

The voice of the poor was strengthened in sites using PAPD both inside and outside Bangladesh, and the ability of poor people to take part in NR management was increased. For example, on riverine islands (chars) in Bangladesh, government agencies, including the Land Office, District administration and line department agencies, worked with the community and an NGO to develop pilot floodplain management projects using participatory consensus building approaches (R8103). Positive livelihood benefits (e.g. increased food production and income generation) were demonstrated at the study sites from using the PAPD approach in combination with technical NR management interventions.

Through project communication activities, stakeholders at all levels have become more aware of the need for consensus building and of the value of the PAPD approach. Development of a Resource Pack and training materials enabled facilitators from a variety of different organisations to learn how to implement PAPD. For example, the charlands PAPD manual and training materials enabled NGOs to develop pilot floodplain management projects using participatory consensus building approaches. Local NGOs in Bangladesh (CNRS) and the WorldFish Centre (in Bangladesh and Vietnam in 2003 and India in 2005) adopted the method and continued to apply PAPD, including within the ongoing CBFM2 project. In 2004, two charland communities in Bangladesh that had been previously uninvolved in the research adopted and replicated the consensus building methods with little external intervention.

Communications work also had an impact on government. Government agents at charland study sites communicated the needs of the poor to their organisations and key policy makers' awareness of the need to provide institutional support to the poor was raised. For example, in 2004 the State Minister for Planning in Bangladesh was continuously informed by local NGOs, government administration and villagers on the Nandina waterbody management process and subsequently recommended replication of the approach.

Further work

An important area of future work is to evaluate the sustainability and impact of PAPD over a longer time period.