Consensus-building tool brings participatory planning to the floodplain

RIU

Validated RNRRS Output.

Participatory Action Plan Development (PAPD) is giving the community a say in how natural resources are managed. Although this is not a new idea, there are few success stories from the many previous attempts in the Bangladesh floodplain. It's used early on to assist in setting up new institutions or before new phases of a project, and helps identify those features likely to influence their sustainability. PAPD is widely used in Bangladesh in the land–water interface and floodplain fisheries context. It has been adapted for the charlands (river islands), and recently used in areas such as disaster preparedness and agroforestry systems. Outside Bangladesh, PAPD is used by the WorldFish Center in Vietnam, and in coastal India (Kerala) and Cambodia.

Project Ref: **NRSP01:**
Topic: **6. Promoting Success: Partnerships, Policy & Empowerment**
Lead Organisation: **Lewins, A. (Independent), UK**
Source: **Natural Resources Systems Programme**

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Geographical regions included:

Bangladesh, Cambodia, India, Vietnam,

Target Audiences for this content:

Crop farmers, Livestock farmers, Forest-dependent poor,

Document Contents:

Description

NRSP01

A. Description of the research output(s)

1. Working title of output or cluster of outputs.
In addition, you are free to suggest a shorter more imaginative working title/acronym of 20 words or less.

Participatory Action Plan Development for natural resource management and rural development – utilising institutions and building consensus

2. Name of relevant RNRRS Programme(s) commissioning supporting research and also indicate other funding sources, if applicable.

Natural Resources Systems Programme

3. Provide relevant R numbers (and/or programme development/dissemination reference numbers covering supporting research) along with the institutional partners (with individual contact persons (if appropriate)) involved in the project activities. As with the question above, this is primarily to allow for the legacy of the RNRRS to be acknowledged during the RIUP activities.

R7562
CLUWRR, University of Newcastle, UK - Julian Barr (now ITAD Ltd)
CNRS, Bangladesh - Mokhlesur Rahman and Anisul Islam
CEMARE, Portsmouth University, UK – Roger Lewins (now independent)
University of Durham, UK
ICLARM, Bangladesh
BCAS, Bangladesh

R8223
ITAD Ltd. UK – Abigail Mulhall (currently seconded to DFID)
CNRS, Bangladesh - Mokhlesur Rahman and Anisul Islam

R8103
Practical Action UK – Stuart Coupe
Practical Action Bangladesh – Mohamed Ali
Roger Lewins (Independent)
Unnayan Sangha, Bangladesh
University of Stirling, UK

R8195
Roger Lewins (Independent)
ITAD Ltd. UK – Julian Barr
CNRS, Bangladesh - Anisul Islam
WordFish Center, Bangladesh
BARCIK, Bangladesh - Mahbub Alam

University of Durham, UK – Peter Dixon
Parvin Sultana (Independent)

R8495
CNRS, Bangladesh - Mokhlesur Rahman and Anisul Islam
Roger Lewins, Paul Thompson, Parvin Sultana and Esha Hossain (all independent)
PPSBD, Bangladesh - Enamul Huda

4. Describe the RNRRS output or cluster of outputs being proposed and when was it produced? ***(max. 400 words)****. This requires a clear and concise description of the output(s) and the problem the output(s) aimed to address. Please incorporate and highlight (in bold) key words that would/could be used to select your output when held in a database.*

This cluster of outputs was intended to provide new approaches to facilitate community **planning** for natural resource management (NRM) and a better understanding of the factors that help or hinder institutional support for pro-poor change.

There are many social and institutional constraints to identifying and facilitating cross-cutting management options in the **Bangladesh floodplain**. New modes of production have changed the relationship between alternative livelihoods so that primary stakeholders often have conflicting interests and objectives. In this setting, the capacity of projects and programmes to promote **community-based management** and sustained **participation** can be very limited.

Project R7562 (1999-2001) developed and tested the **consensus building** tool "**Participatory Action Plan Development**" (**PAPD**) specifically to support community participation for planning and **conflict resolution**. PAPD works with the diverse range of stakeholders within the "community", in isolation and in plenary, to develop feasible plans and agreements for action. Secondary stakeholders such as local government representatives and technical agencies are involved to add legitimacy and establish political and financial support. Additional outputs included analysis of alternative methods and tools to track and evaluate consensus building with respect to **social capital**.

R8223 (2002-03) developed training materials and briefings that presented the PAPD methodology to a wider target audience, both within Bangladesh and internationally.

Project R8103 (2002-05) aimed to adapt PAPD for use in the Bangladesh **charlands** and to investigate its use in a broader context of **rural development**. There are several social, geographic and institutional features unique to the chars that increase the vulnerability of the poor and act as constraints to poverty alleviation. Char-modified PAPD fits this setting where political and technical support is lacking and aims to build sustainable linkages to service providers and other representatives via community planning and confidence building.

Numerous projects and programmes have targeted community participation through specially crafted **platforms** but despite several decades of donor and government support there are very few examples of resilient project structures or user committees associated with the floodplain. There is now wider recognition that performance relates to **policy**, **institutions** and **processes** and Project R8195 (2002-04) investigated the features that appear

to influence the sustainability of new NRM structures such as perceived local legitimacy and fit with pre-existing informal institutions. The project developed and utilised a methodology to track institutional processes and evaluate performance. Project R8495 (2005) developed these outputs as training and guidance material for a national and international audience.

5. What is the type of output(s) being described here?
Please tick one or more of the following options.

Product	***Technology***	***Service***	***Process or Methodology***	***Policy***	***Other Please specify***
x			*x*		

6. What is the main commodity (ies) upon which the output(s) focussed? Could this output be applied to other commodities, if so, please comment

These outputs currently cross-cut the floodplain production system of Bangladesh, with an emphasis on fisheries, rice and mixed vegetable production.

7. What production system(s) does/could the output(s) focus upon?
Please tick one or more of the following options.
Leave blank if not applicable

Semi-Arid	***High potential***	***Hillsides***	***Forest-Agriculture***	***Peri-urban***	***Land water***	***Tropical moist forest***	***Cross-cutting***
			x	*x*	*x*		*x*

8. What farming system(s) does the output(s) focus upon?
Please tick one or more of the following options (see Annex B for definitions).
Leave blank if not applicable

Smallholder rainfed humid	***Irrigated***	***Wetland rice based***	***Smallholder rainfed highland***	***Smallholder rainfed dry/cold***	***Dualistic***	***Coastal artisanal fishing***
		x				

*9. How could value be added to the output or additional constraints faced by poor people addressed by clustering this output with research outputs from other sources (RNRRS and non RNRRS)? (**max. 300 words**).*

Please specify what other outputs your output(s) could be clustered. At this point you should make reference to the circulated list of RNRRS outputs for which proformas are currently being prepared.

There is intended overlap between this cluster and several outputs from South Asia. In particular, the PAPD methodology has been applied within Project R8306 in order to help facilitate local support for integrated

floodplain management (IFM) and to Project R8365 to develop an action planning approach for the peri-urban context.

New IFM projects require community participation in planning for alternative income generation through PAPD and better institutional awareness will allow facilitators to recognise positive and negative social and institutional developments. Future peri-urban action planning, in South Asia and elsewhere, will benefit from some of the products of R8195, particularly process documentation that enables facilitators to track institutional breakthroughs and follow up new opportunities as they emerge in the planning process. In addition to the existing and direct cross-over with R8365, PAPD principles and strategies for process monitoring may complement the outputs of R8084 and R8334 in India and R8090, Ghana. These outputs could also support the FMSP clusters “Floodplain fisheries management” and “Enhancement of inland fisheries”.

In principle, this cluster should be relevant to other products that aim for participatory planning for NRM in other production systems and other regions. The “Trade-off analysis” of R7408 has similar goals to this cluster and there are certain methodological issues explored here that might complement that approach.

It is important that the outputs of this cluster are seen as complementary because the use of alternative community planning models (R7562 and R8103) should be influenced by an understanding of institutional setting and the ability to monitor process (R8195). The outputs combined enable modification for use in alternative settings and for differing objectives. Finally, although this cluster represents outputs relevant in other regions, greatest value may be gained from developing uptake and understanding by consolidating existing coalitions of partners and users in South Asia.

Validation

B. Validation of the research output(s)

*10. **How** were the output(s) validated and **who** validated them?*

*Please provide brief description of method(s) used and consider application, replication, adaptation and/or adoption in the context of any partner organisation and user groups involved. In addressing the “who” component detail which group(s) did the validation e.g. end users, intermediary organisation, government department, aid organisation, private company etc... This section should also be used to detail, if applicable, to which social group, gender, income category the validation was applied and any increases in productivity observed during validation **(max. 500 words)**.*

These outputs have been taken up and perceived as useful by sets of users at various levels: 1) government / policy; 2) practitioners including NGOs / technical GOs and; 3) local beneficiaries including poor primary stakeholders and other advocates.

An interesting recent development in the application and approach to PAPD has occurred within the Bangladesh government. The DRR required CNRS for advice and training but, with CNRS assistance, developed its own model of community planning based on PAPD – Community Risk Assessment (CRA). The intention here is to

have a government-owned model that can be promoted and established nationally through the Comprehensive Disaster Management Program (CDMP) and implemented by the 16 partner NGOs.

Other government stakeholders have experimented with the PAPD principle across administrative levels, rather than horizontally and at community level. This has particular potential with respect to watershed management (where hierarchical and nested systems may be required) and the Water Resources Planning Organisation (WARPO) has developed two models intended to bridge this gap. A PAPD facilitators guide is intended for local use and single-tier planning whilst a four-tier (village, Union, Upazilla and district) consultation procedure is intended to develop water management plans for the entire district. Similarly, the Coastal and Wetland Biodiversity Management Programme (by the Department of Environment and supported by UNDP) has extended the process to compile a plan for an area comprising 11 Unions.

Institutional methods and guidelines are attractive to government stakeholders and the Department of Fisheries has indicated that guidance might be sought for better implementation and design of community-based structures within its inland capture fishery strategy. The intention is that existing training products of R4895 will be modified in order to help roll-out preferred modes of participation and project structures.

At the practitioner level (the interface with potential beneficiaries of PAPD) in excess of 20 NGOs have applied PAPD since their training in the methodology. This number will increase with the promotion of char-modified PAPD in the next 5 years. In addition to NGO uptake, there is increasing involvement by technical service providers in government. This may be through either informal local support or buy-in to community plans or through more formal institutional commitment to this mode of operation. In the former case, staff from the Department of Livestock Services and the Department of Agricultural Extension in the charlands are personally motivated to support community demand for training, inputs and advice. In addition, local government structures (at the Upazilla level, especially) have legitimised local planning through PAPD by providing their support and representing a bridge between communities and Union level to higher political strata.

Finally, the target beneficiaries have validated the PAPD process by continuing community-level planning and supporting new community activities and structures after the period of facilitation. Char-modified PAPD, especially, is intended to institutionalise the process of local planning and interaction with supportive secondary stakeholders. Communities in the char villages continue to interact with Upazilla Department of Fisheries staff and local government representatives for support and expertise associated with PAPD-facilitated interventions.

*11. **Where and when** have the output(s) been validated?*

*Please indicate the places(s) and country(ies), any particular social group targeted and also indicate in which production system and farming system, using the options provided in questions 7 and 8 respectively, above **(max 300 words)**.*

These products have predominantly been validated in Bangladesh.

Most applications (in terms of total coverage and impact) have focused on the land water production system but interesting new modifications of PAPD have been applied to “cross-cutting” systems i.e. to disaster planning in all regions of the country. The majority of these uses have been within the “wetlands rice based” farming system

although uptake has also occurred in the context of “coastal artisanal fishing” in Bangladesh and India.

Modifications of PAPD (its application to rural development and disaster planning) has occurred relatively recently with training provided to the CDMP partners in October 2006, for instance. The acknowledgement of the relevance of institutional methods and guidelines by the Department of Fisheries occurred in 2005 as a direct result of the uptake strategy of R4895.

At regional to local level, PAPD has been perceived as legitimate where concerted planning projects have operated. These local to district planning initiatives have worked in coastal Bangladesh (with plans to implement 17 more coastal district plans), Hakaluki Haor and in the charlands. In this latter case, the PAPD was legitimised by support from district level officials and the area Member of Parliament.

The tendency in the charlands of primary stakeholders to explore PAPD-related plans and activities after the project, and independently, extended across stakeholder groups. Women from female-headed households continued their group meetings and discussion after PAPD, for instance, and used these new structures to represent the opinion of women in other matters. Other residents continued their informal links with secondary stakeholders such as livestock and agriculture service providers.

Current Situation

C. Current situation

12. ***How and by whom*** *are the outputs currently being used? Please give a brief description* ***(max. 250 words****).*

PAPD is being used by GO and NGO partners within large NRM projects such as CBFM, MACH (Management of Aquatic Ecosystems through Community Husbandry) and ECFC (FAO’s Empowerment of Coastal Fishing Communities). Some NGOs such as Caritas and Banchte Shekha have internalised use of the approach. Partners use PAPD early on to help establish new institutions or before new initiatives or phases in the projects.

PAPD is also used by GOs with broader rural development remits e.g. the Department of Relief and Rehabilitation (DRR) in the Comprehensive Disaster Management Programme (CDMP) supported by DFID and UNDP. In this case, DRR and its 16 partner NGOs are applying a modified version. Government uptake (and modifications) of PAPD here is formal and is to become standard field practice. Other GO users include WARPO (Water Resources Planning Organization), the Department of Environment, the Department of Fisheries and local administrative bodies as planning partners.

Char-modified PAPD is used and promoted by Practical Action in work with small NGOs and service providers in remote areas. Practical Action is using PAPD to identify early opportunities for support to livelihoods diversification and disaster management. PAPD is facilitated by an experienced field team (trained by CNRS and responsible for char-modifications of R8103). The methodology will soon be utilised by large partner agencies including Action Aid and CARE.

There is no routine use of R8195 guidelines but the Department of Fisheries have proposed modification to the training manual for use within their inland capture fisheries strategy.

*13. **Where** are the outputs currently being used? As with Question 11 please indicate place(s) and countries where the outputs are being used **(max. 250 words).***

PAPD is being applied in several systems in Bangladesh. Within the land water interface and floodplain fisheries context, it is deliberately applied across a range of waterbody settings necessitating country-wide coverage: closed beels; seasonal beels; large rivers systems such as the Titas in Brahmanbaria; oxbow lakes of the southwest; open floodplain systems and the north-eastern haor basin such as Hail Haor in Sylhet and; char islands in the north). Its use has extended from isolated waterbodies to waterbody clusters in more recent applications.

In addition to applications with a fisheries focus, recent use in the context of disaster preparedness and planning is occurring at Hakaluki Haor in Sylhet. PAPD is also applied in mixed agriculture and forestry systems such as the Chittagong Hill Tracts on the Bangladesh eastern border (IUCN's HIMAL Project and the Swiss Development Corporation's Livelihoods, Empowerment and Agro-Forestry project).

Several coastal applications of PAPD in Bangladesh are supported by the ICZMP (Integrated Coastal Zone Management Programme) and CARE's SHOUHARDO (Strengthening Household Abilities to Respond to Development Opportunities).

Outside Bangladesh, PAPD is being used with the WorldFish Centre CBFM project in Vietnam and the Fisheries Conflict Mitigation Project in coastal India (Kerala) and Cambodia.

Char-modified PAPD is currently used in Faridpur and Jamalpur districts in the charlands of North Bangladesh.

*14. What is the scale of current use? Indicating how quickly use was established and whether usage is still spreading **(max 250 words).***

PAPD has been applied in all six divisions of Bangladesh and across 19 of the country's 64 districts.

In conjunction with around 12 major associated projects and programmes this coverage corresponds to approximately 40,000 households, each participating directly in PAPD activities. CNRS has directly facilitated over 100 PAPD workshops with partner organisations responsible for about 100 more.

The sectors covered include fisheries, water, forestry (both freshwater swamp and mangrove) and more recently, food security, health and climate change adaptation.

This coverage took about five years (since the PAPD model was formalised and disseminated in R7562) to achieve but with CNRS the main proponent and working through these NRM projects.

The greatest recent area of growth for PAPD has been outside the NRM sectors with new GO partners in the broader context of rural planning, especially disaster preparedness. The CDMP has been developing a modified

version of PAPD with the 16 NGOs mandated to manage the Local Disaster Risk Fund across the whole of Bangladesh, for instance. CNRS is involved in this training but the DRR are now providing additional training to all district level staff.

Practical Action Bangladesh is beginning its application of char-modified PAPD in approximately 50 target villages in Faridpur and Jamalpur (between 2,500-3,000 households). Other partners within the food security project FOSHOL (2006-2011) should bring total coverage to between 160 and 200 char villages. There appears strong NGO demand for training in char-modified PAPD and the manual is currently being used for capacity building in the region.

15. In your experience what programmes, platforms, policy, institutional structures exist that have assisted with the promotion and/or adoption of the output(s) proposed here and in terms of capacity strengthening what do you see as the key facts of success? ***(max 350 words).***

In Bangladesh, close linkage with the national Community-Based Fisheries Management project (CBFM) was key in the promotion and uptake of PAPD and more recently process documentation of institutions. CBFM was a large co-management project coordinated by Worldfish Center and the Department of Fisheries, with a wide range of small to large national NGO partners, each with distinct modes of operation and institution building.

Project R7562 was able to secure institutional buy-in from these CBFM partners by developing PAPD in partnership with the CBFM partners. Post-project uptake was facilitated by two of the key project partners (WorldFish Center and CNRS) and subsequent PAPD and institutional training was delivered to all these practitioners. This large project enabled the efficient dissemination of methodologies and concepts and provided a source of feedback on performance and issues in different settings. It also allowed continuous dialogue with a consistent team of project co-ordinators. In summary, the uptake of PAPD was greatly assisted by being able to engage with numerous potential users simultaneously.

This cluster of outputs emphasises the need for locale-specific approaches and plans but would ultimately be best located within a framework or programme that attempts to provide technical support or assistance in line with local demand. Experience suggests that the institutional change required for local pro-poor planning (new methods, new linkages and roles for community and facilitator) requires time, commitment and ongoing facilitation.

New projects coming on line in the charlands of Bangladesh should provide such an environment. Practical Action will work with new partners to establish PAPD and institutional awareness, in parallel with the delivery of more conventional technical capacity building at community level. This form of partnership will work to promote PAPD to new users and simultaneously add value to ongoing projects or programmes associated with livelihoods diversification and adding resilience in remote areas.

The ability to identify and work with sympathetic partners during the implementation of community plans is crucial. Technical service providers at local and district level (including fisheries, livestock and engineering agencies) have proved surprisingly supportive when confronted with detailed and specific demands for local assistance.

Current Promotion

D. Current promotion/uptake pathways

*16. **Where** is promotion currently taking place? Please indicate for each country specified detail what promotion is taking place, by whom and indicate the scale of current promotion **(max 200 words).***

PAPD uptake is occurring as a result of CNRS links with government and donor projects in Bangladesh, training and support to a practitioner audience (NGO and GO agency), and short briefings to policy stakeholders. Two products of R8223 are key: "PAPD – a tool for building consensus amongst stakeholders: a facilitator's guide" and a four-page policy brief.

The "Charlands Technical and Planning Manual" introduces PAPD to technical GOs and NGOs working in these areas. The principal vehicle is the EC-funded Food Security – Bangladesh project (FOSHOL) to run with Action Aid and CARE from 2006-2011 and the Disappearing Lands Project. Approximately twenty district-level NGOs received training and the module will be used by IRRI and local government partners. Practical Action works with the Charland NGO Network and the Department of Agricultural Extension Liaison Committee to build capacity.

"Voices from the Margins: Consensus Building and Planning with the Poor in Bangladesh", representing the experiences of R7562 and R8103, will be released in March 2007 by ITDG Publishing.

Training materials and guidelines on institutional methods and issues are being provided to the Department of Fisheries and key staff within larger fisheries projects in Bangladesh. Two academic papers for an international audience are in press.

*17. What are the current barriers preventing or slowing the adoption of the output(s)? Cover here institutional issues, those relating to policy, marketing, infrastructure, social exclusion etc. **(max 200 words)**.*

The uptake of PAPD and products to better understand and evaluate local and project institutions is limited by: 1) the level of real government and agency support to pro-poor and participatory processes and; 2) the capacity and expertise to apply such methods. In Bangladesh, relevant policy declarations exist for all sectors but implementation is constrained by institutional issues. A survey of GO and NGO managers of floodplain projects revealed bottle-necks to vertical and horizontal uptake at macro, meso and micro-levels but the most widespread and common problems existed at micro-level at the interface between NRM facilitators and communities. Common problems associated with past interventions include the monopolisation of new opportunities and inputs by elites, new conflict and unsustainable local project user groups or committees. This cluster is specifically intended to include the broad range of primary stakeholders at local level, build awareness of these issues and promote initiatives that avoid past mistakes.

The quality of facilitation in local NRM planning was found to influence the level of community understanding, increasing support and therefore prospects for sustainability. However, field level GO and NGO staff often lack the expertise, motive or authority to react constructively to problems or opportunities as they arise.

18. What changes are needed to remove/reduce these barriers to adoption? This section could be used to identify

perceived capacity related issues ***(max 200 words).***

Although many of these barriers are “external”, and are not unique to the uptake of PAPD, there are several realistic options to increase adoption. A better understanding within agencies of the likely positive and negative developments associated with various interventions can be achieved through targeted training. Training modules are available (for the dissemination of PAPD, char-modified PAPD and guidelines on institution building and monitoring) but an important task will be to earn agency support for these approaches and to achieve this from the managerial to the field level. This cluster would benefit greatly from additional GO and NGO awareness and commitment at national level because effective uptake will require: central support to training; some project re-alignment and; extra field level expertise associated with social and institutional methods. If given such support, this cluster would increase coverage by avoiding the local level bottle-necks to uptake and local public support.

It will be important to establish an environment in which positive developments by one agency or within a sector might be picked up and replicated by others – perhaps by validating or “kite-marking” good practice. Programmes that support cross-sectoral collaboration can help achieve this by bringing national and local staff in contact.

19. What lessons have you learnt about the best ways to get the outputs used by the largest number of poor people? ***(max 300 words).***

The promotion of PAPD to future facilitators of pro-poor planning has been successful in spreading use and reaching greater numbers of potential beneficiaries. In Bangladesh, despite serious shortfalls in accountability, representation and capacity, formal government structures can play a key role in legitimising community planning and subsequent actions. Government platforms and key individuals have been found proactive in seeking financial, technical and legal support for community-led initiatives, partly to establish political capital and achieve local legitimacy. These administrative structures are effective in mobilising support with personal and political linkage to service providers and other useful secondary stakeholders. They are also ubiquitous and their geographic coverage in areas where technical GO and NGO coverage is weak provides an opportunity for supporting PAPD for broad NRM and rural development objectives. Cross-over between administrative representatives and technical agency staff occurs across several levels, providing an opportunity for vertical up-scaling with stakeholders at district level and horizontal spread through replication in other villages.

In parallel with uptake of new methods, there appears to be an important role for a relatively new set of independent agencies or “think-tanks” in Bangladesh. These groups are addressing broader issues of governance, participation and political representation and are raising awareness of alternative modes of local government and sector reform. Many of these groups work with donors and often interface with national government as direct advisors or through publication. Projects R7562 and R8103 drew on this group to extend awareness of PAPD from practitioners (predominantly NGOs and technical GOs) to policy level. This strategy has great potential because these outputs would benefit greatly from a policy and institutional environment that made real space for local-level planning. Finally, it is the government agencies that are acknowledging the limited success of past approaches that provide a platform receptive to improved participatory methods.

Impacts On Poverty

E. Impacts on poverty to date

20. Where have impact studies on poverty in relation to this output or cluster of outputs taken place? This should include any formal poverty impact studies (and it is appreciated that these will not be commonplace) and any less formal studies including any poverty mapping-type or monitoring work which allow for some analysis on impact on poverty to be made. Details of any cost-benefit analyses may also be detailed at this point. Please list studies here.

This cluster places great emphasis on the policies (approaches), institutions and processes that profoundly impact the poor and dictate the way in which capital assets can be accessed or converted to livelihoods. In this regard, the evaluation of impact considered the qualitative evidence of institutional change or the number and scale of new institutional and social linkages. However, the outputs also focus on social capital as central to building in resilience and developing the capacity for decision-making and planning. It is intended that this then leads to management decisions that consolidate financial, physical, natural and human capital.

It was not always possible to assess the longer-term, post-project, impacts on poverty of the outputs of R7562 and R8103 independently from the impact of the large projects in which they were situated. As consensus building methodologies, however, the role of social capital is key and the livelihoods framework provided a means to test the direction of change in relation to capital assets and with respect to institutional developments.

Monitoring of impact of R7562 and R8103 products has occurred both within these research projects and (more indirectly) within larger projects where these products have since been adopted (including baseline and impact surveys on poverty and cost-benefit for overall project activities).

Outputs of R8195 and subsequently R8495 were intended to inform relevant stakeholders of improved analytical methods and institutional issues. The focus here is currently on training for future adoption.

The most comprehensive review of PAPD performance was developed by Sultana (2004) and commissioned by NRSP as PD131. While the cost of community facilitation was comparable (approximately 425 Bangladesh Taka (UK£3.30) per household) longer-term benefits were particularly cost-effective:

- Sultana, P. (2004). *The effectiveness of the PAPD method: a comparison of community organisation experience in the CBFM-2 project*. Final Technical Report PD131. Dhaka, Bangladesh.

The following reports are reviews of impact during the action research but in addition longer-term impact studies have been conducted and published by CBFM and MACH.

R7562

- ICLARM & CNRS (2001). Consensus Assessment Survey. *Methods for consensus building for management of common property resources.* Final Technical Report R7562: Volume 5. University of Newcastle, Centre for Land Use and War Resources Research, UK.

- Lewins, R. and Mallick, D. (2001). Consensus Building Process Evaluation. *Methods for consensus building*

for management of common property resources. Final Technical Report R7562: Volume 3.2. University of Newcastle, Centre for Land Use and War Resources Research, UK.

R8103

- Islam, F, Hossain, K. and Mamun, S.H. (2005). Technical solutions to NRM constraints in the charlands context – a report on project experiences. *Consensus for a Holistic Approach to improve Rural livelihoods in Riverine islands of Bangladesh (CHAR)*. Final Technical Report R8103: Annex B-ii. Practical Action, UK.
- Lewins, R., Coupe, S., Islam, F. and Hossain, K. (2005). Project-related change – consequences for char-modified PAPD. *Consensus for a Holistic Approach to improve Rural livelihoods in Riverine islands of Bangladesh (CHAR)*. Final Technical Report R8103: Annex B-i. Practical Action, UK.

21. Based on the evidence in the studies listed above, for each country detail how the poor have benefited from the application and/or adoption of the output(s) ***(max. 500 words):***

- *What positive impacts on livelihoods have been recorded and over what time period have these impacts been observed? These impacts should be recorded against the capital assets (human, social, natural, physical and, financial) of the livelihoods framework;*
- *For whom i.e. which type of person (gender, poverty group (see glossary for definitions) has there been a positive impact;*
- *Indicate the number of people who have realised a positive impact on their livelihood;*
- *Using whatever appropriate indicator was used detail what was the average percentage increase recorded*

A method to quantify changes in social capital attributable to PAPD (the Consensus Assessment Survey) revealed positive social observations in 70-80% of participants across the range of four key local stakeholders - landless men, landless women, large farmers and full-time fishers (ICLARM & CNRS, 2001). Significant positive change was detected in relation to community-validated indicators of consensus and social capital (e.g. “trust”, “empowerment”, “conflict management”, “cooperation” and “empathy”).

An attitudinal survey of PAPD gauged levels of community commitment to local plans, levels of awareness and prospects for horizontal spread to non-participating primary stakeholders (Lewins and Mallick, 2001). This provides an indication of future adherence to community plans intended to relieve poverty. PAPD was scored highly by all stakeholders (including non-participating neighbours) with reference to eight recognised indicators for “good” consensus building.

The CBFM and MACH projects have conducted household surveys over the last six years and have uncovered positive change in relation to capital assets. Women have managed to apply new skills to income generation and have been empowered by membership of community-based organisations and by access to micro-credit (most of the 40,000 target households under these projects participate in group savings schemes). Fish catch assessment has revealed that species diversity has increased and water quality improved in most of the project sites whilst physical capital has been boosted with about 100 new community-planned buildings.

In the charlands context, participatory monitoring and evaluation revealed positive change in relation to social capital and institutional linkage on the one hand, and more readily quantifiable change associated with physical,

natural, human and financial capital, on the other (Lewins *et al*, 2005). In the case of social capital, this included proxy indications of positive change such as independent community-led delegations to local and district government bodies and service providers and examples of autonomous conflict resolution. A survey of women provided positive feedback on PAPD-related activities and indicators of social capital ("mobility, linkage and voice") and human capital ("new knowledge, technical skills and improved health").

Rapid land use change was achieved during the confidence building process within PAPD and was intended to maintain natural capital (resilience and production) in flood prone areas. Simple cost-benefit analysis was conducted for each of the new crops cultivated in this period revealing that market price to cost ranged from about 2:1 to 6:1 for 4 alternative crops adopted by 241 farmers in one year (Islam *et al*, 2005). In excess of 750 households were represented via livelihoods planning and piloting at the two char villages within R8103.

Finally, the survey by Sultana (2004) revealed statistically significant benefits in PAPD versus non-PAPD sites within CBFM-2. Improved performance related to: the time taken to form community-based organisations (CBOs); representation of poor stakeholders such fishers and landless; social cohesion; environmental awareness/ responsibility; reduced conflict; linkage with government and; lower transaction costs (opportunity costs to the poor). Reduced transaction costs related to the legitimacy of PAPD-formed committees with wide representation versus non-PAPD CBO committees where decisions must be secured by poor stakeholders in isolation.

Environmental Impact

H. Environmental impact

24. What are the direct and indirect environmental benefits related to the output(s) and their outcome(s)? ***(max 300 words)***

This could include direct benefits from the application of the technology or policy action with local governments or multinational agencies to create environmentally sound policies or programmes. Any supporting and appropriate evidence can be provided in the form of an annex.

Environmental benefits can be derived directly through PAPD because the resulting local level plans are intended to reduce conflict and unsustainable practice across the range of primary stakeholders and producers. In the context of the South Asian floodplain, conflicting interests between the diverse stakeholders has reduced the capacity to manage common property resources (principally water) for the common good. Often these resource management conflicts are categorised by fisher (water for broodstock, fish migration etc.) versus farmer (water use for dry season irrigation and release during high flood) issues. PAPD helps identify mutually acceptable interventions that can rehabilitate degraded habitats and restore their viability and function for the range of users.

To date, most applications of PAPD have been within large projects with an emphasis on community participation for sustainable NRM. The facilitators of PAPD in the floodplain have been specialists in habitat restoration and have promoted the conservation of biodiversity by highlighting the economic and traditional role of underutilised species. In addition to sustainable agriculture and fisheries, additional environmental benefits include community-

designated areas as refugia for endangered bird and mammal species.

In the case of the Bangladesh charlands, PAPD has resulted in local flood management plans, intended to save lives, protect physical and natural assets like housing and livestock but also to protect farmland. Technical options jointly-developed via PAPD have included alternative cropping regimes and composting practices to reduce reliance on externally-sourced inputs and to improve nutrient-poor char soils. Improved links between primary stakeholders and technical service providers can increase awareness of the inappropriate use of chemical pesticide, growth hormone and other inputs with potential detrimental impacts on human health and the environment. PAPD in this context has uncovered community planning capacity and local demand for technical support for improved sanitation to control eutrophication and minimise risks to health.

25. Are there any adverse environmental impacts related to the output(s) and their outcome(s)? ***(max 100 words)***

Comprehensive evaluation of alternative plans using STEPS analysis (consideration of the preconditions and possible outcomes related to social, technical, economic, political and sustainability issues) make negative environmental impact unlikely.

26. Do the outputs increase the capacity of poor people to cope with the effects of climate change, reduce the risks of natural disasters and increase their resilience? ***(max 200 words)***

Previous flood control projects in South Asia have acknowledged that better understanding of the institutions that operate to manage floodplain resources and mobilise community participation in times of flood will increase the prospect of success in large-scale schemes. The process documentation methodology of R8195 reveals the key stakeholders that make legitimate and locally supported management decisions during the flood and institutional mapping like this can help craft sustainable decision-making platforms in future.

An important outcome of PAPD in the char context has been the development of village flood management plans and emergency committees. The Practical Action project “Disappearing Lands” is applying this cluster of outputs to target very vulnerable communities that settle eroding river banks in the charlands. The outputs are helping to develop disaster management strategies in conjunction with locally legitimate and existing informal institutions (in this case, Mosque committees). This planning increases awareness of risk management options and of modifying practice (e.g. seedling sanctuaries on higher ground, pre-flood and post-flood strategies to maintain animal health, arable production and hygiene during flood). PAPD can also increase awareness of community health issues such as arsenic-contaminated groundwater and could contribute to cyclone preparedness and recovery in coastal areas.