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**NRSP Production System**

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# **Scientific Annex A**

**Evaluating action planning for enhanced natural  
resources management in peri-urban Kolkata**

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*DFID Natural Resources Systems Programme*

## Glossary

### Acronyms and Bengali terms

ADB	Asian Development Bank
CEMPD	Centre for Environmental Management and Participatory Development
DFID	Department for International Development (UK Government)
DoF	Department of Fisheries, Aquaculture, Aquatic Resources and Fishing Harbours, GoWB
DoE	Department of Environment, GoWB
DoIW	Department of Irrigation and Waterways, GoWB
EKW	East Kolkata Wetlands
FAO	Food and Agriculture Organization (UN)
FPA	Fish Producers Association
GO	Government Organization
GoI	Government of India
GoWB	Government of West Bengal
IESWM	Institute of Environmental Studies and Wetland Management
IUCN	International Union for the Conservation of Nature
IWMED	Institute of Wetland Management and Ecological Design
KMC	Kolkata Metropolitan Corporation
MIC	Minister-in-Charge
NGO	Non-government Organisation
NRM	Natural Resources Management
NRSP	Natural Resources Systems Programme (DFID funded)
PAP	Participatory Action Planning (the action planning approach adopted in this project)
PAPD	Participatory Action Plan Development (a workshop-based method for planning and consensus building, developed and tested in Project R7562)
PS	Production System
PU	Peri-Urban
PUI	Peri-Urban Interface
STEPS	Social, Technical, Environmental, Physical & Sustainability (participatory planning tool to elicit constraints or precursors to action)
SWC	Save Wetlands Committee
WB	World Bank
WBSPCB	West Bengal State Pollution Control Board
WWF	World Wide Fund for nature

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## 1. Introduction

Horticulture, aquaculture and paddy farming practices exploiting wastewater and garbage resources in peri-urban Kolkata produce significant quantities of fresh market produce, provide direct and indirect employment for mainly poor people and managed wastewater reuse reduces health risks from unregulated discharges and protects downstream environments. These systems are threatened by growing pressure to use their lands for urban purposes at the same time that access to reliable wastewater flows and suitable solid wastes is declining. Building on knowledge generated by a previous DFID NRSP project entitled ‘Renewable natural resource-use in livelihoods at the Kolkata peri-urban interface’<sup>1</sup> this project ‘Evaluating action planning for enhanced natural resources management in peri-urban Kolkata’<sup>2</sup> was aimed at researching the conditions and methods for achieving successful participatory action planning that benefits poor people in the complex social and administrative context of the peri-urban interface. In particular, it has sought new knowledge about the difficulties of, and opportunities for, effective participation of those poor, whose natural resource based livelihoods are threatened by urbanisation, in developing responses to the threats of urban growth and insensitive waste management policies, in collaboration with both urban and rural government authorities.

Interactions during meetings and workshops were documented and other events recorded. Following a review and verification of production constraints identified in R7872, action planning was initiated to address problems of water management, which negatively affect poor people engaged in horticulture, paddy farming and fish culture in peri-urban Kolkata. Analysis of an ongoing planning activity involving local stakeholders highlighted key difference between the proposed action planning framework and a locally instigated and facilitated process. The action planning process developed during the project was tailored to suit the complex social, political and administrative context of peri-urban Kolkata and was designed to be responsive to the demands and expectations of stakeholders.

To avoid bias towards one or other area or farming activity the wetland was divided into 11 regions based on the prevailing physical, environmental and social setting. Meetings with community members in each region were undertaken to verify the problems they face concerning access to and management of the natural resources upon which they depend. Bilateral meetings and briefings were held in parallel with government departments, non-government organisations and key stakeholders in the wetlands (Fish Producers Association, Save Wetlands Committee, labour unions) to establish a dialogue, raise awareness and seek support for the proposed action planning process. As a result some stakeholder group representatives (FPA, SWC, labour unions) organised meetings among their members to discuss the proposal and seek widespread backing for continued interaction. Following this consolidation phase workshops were held in the 11 wetland regions to verify and prioritise the proposed strategies to address the major water management issues. A series of workshops bringing together government agencies (KMC, KMDA, KEIP, DoIW, DoE, North-24-Parganas, South-24-Parganas), NGOs and other key stakeholders in the wetlands (SWC, FPA, labour unions, Panchayats) was conducted to build consensus around the proposed plan of action and confirm support for the process and proposal to undertake preliminary development activities; dialogue with external agencies that might also support implementation is ongoing. The following sections

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<sup>1</sup> Previous project website: [www.dfid.stir.ac.uk/dfid/nrsp/kolkata.htm](http://www.dfid.stir.ac.uk/dfid/nrsp/kolkata.htm)

<sup>2</sup> Current project website: [www.dfid.stir.ac.uk/dfid/nrsp/actionplanning.htm](http://www.dfid.stir.ac.uk/dfid/nrsp/actionplanning.htm)

provide an overview of the action planning approach invoked to formulate a water management action plan for the East Kolkata Wetlands, including a comparison of the approach with participatory action plan development (PAPD) represented in Figure 1.1 and discussed in detail below. The role of process documentation and monitoring in directing and focusing the research assignment and analysing the action planning is outlined. Experiences concerning the preliminary implementation of selected elements of the action plan are then discussed. Finally the formulation, refinement and outcomes of internal and external communication plans for the project are described.

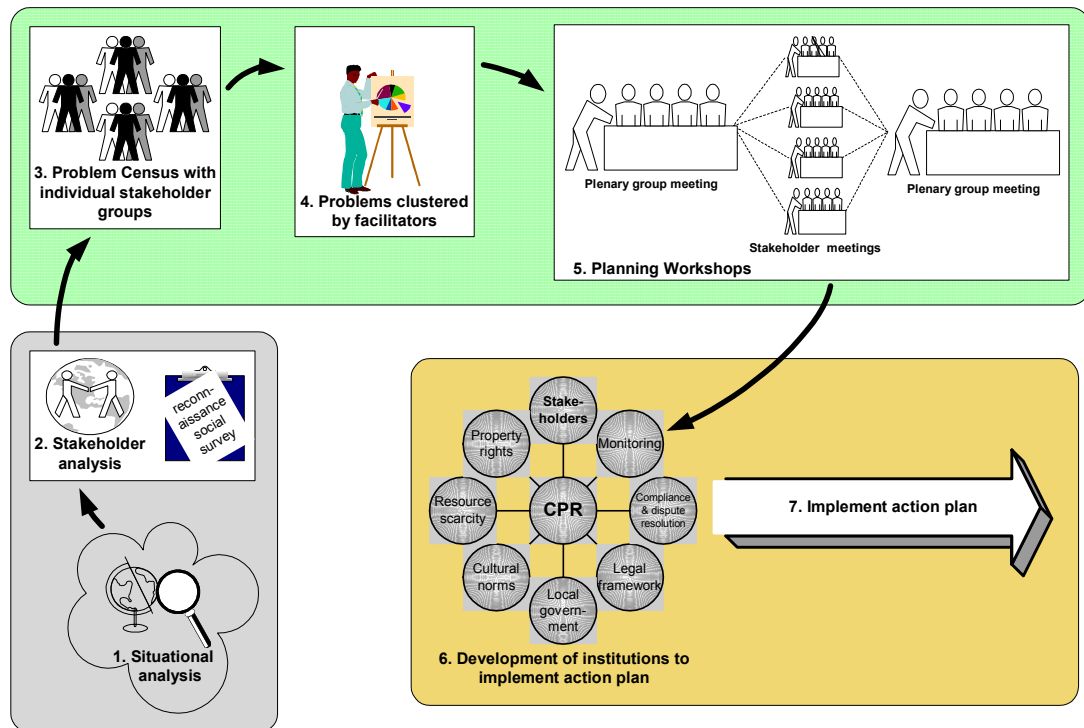


Figure 1.1. Seven stages of the PAPD process (source: Barr and Dixon, 2001).

## 2. Action planning

During preliminary meetings the project team reflected upon the likely demands of action planning involving diverse stakeholder groups including urban and rural authorities and poor people. Approaches to action planning that might be suited to work with PU communities and stakeholders were discussed and the key elements of an action plan reviewed. The potential role of process monitoring in evaluating action planning as an approach was also discussed. Initial meetings between the project team and key stakeholders and their representatives permitted awareness of the project and its objectives to be raised with likely participants in the action planning process. Discussions during initial project team meetings also ensured the project aimed to address a key issue identified by previous work (R7872) as constituting a significant constraint to sustaining poor livelihoods in PU Kolkata i.e. wastewater supply to peri-urban farming systems. Acknowledging the need to consider the varying demands of the main primary stakeholder groups in a holistic approach to planning, it was decided to develop action plans that would address the main concerns and expectations of those groups dependent on aquaculture,

horticulture and paddy farming. However, it was also acknowledged that there were differing problems, priorities and agendas between stakeholders in different geographical regions of the wetlands, therefore, the wetland was divided into 11 distinct regions based on physical, livelihoods, social and institutional attributes. This approach, developing action plans to address the different demands of primary stakeholder groups dependent mainly on aquaculture, horticulture and paddy farming across 11 regions was different to that proposed in the initial project proposal and the project logical framework was amended to reflect this change.

Analysis of a locally initiated planning activity in PU Kolkata by the project team helped contextualise the rather abstract reference to PAPD invoked in support of the project proposal (Bunting, Lewins, Pickstock and Kundu, 2004). This exercise enabled the project team to explore the process and timescale of a locally facilitated planning activity, knowledge of which was used to refine the proposed sequence of action planning in the current project. The sequence of meetings and key events surrounding the installation of pumps on the main drainage canal to transfer wastewater to secondary feeder canals supplying one area of PU fish farms was discussed. During this discussion a schematic diagram, in the same style as the PAPD framework was developed. Reviewing the resulting process diagram it was clear that the series of discussions and negotiations was much more complex than the proposed PAPD sequence of meetings and activities, and that bilateral meetings and briefings involving state level government agencies, national government representatives and key stakeholders played an important role. During the initial stages, meetings between the SWC, FPA and Department of Fisheries were sometimes held twice weekly to discuss and refine their plans. This is in contrast to the proposed PAPD approach where stakeholder groups were expected to work independently to discuss and refine their contribution to the action planning process, prior to discussing and negotiating their position at workshops attended by other stakeholders.

The need for stakeholder representatives to seek broad based support from their peers and people they represent, consolidate their position and refine proposals between workshops was part of the PAPD framework. However, based on the case-study examined by the project team it appeared necessary to facilitate smaller meetings of stakeholder groups with shared or even competing objectives to better enable negotiation and collective decision making. During discussion of the case-study doubt was also raised as to whether large workshops bringing together all stakeholder groups would be the best approach to developing action plans, or indeed whether it was a practical approach given the geographical distribution of stakeholders, their differing experiences of participation in such meetings, and the likelihood that it would be impossible to arrange a mutually acceptable time for all groups to meet together. Analysis of an ongoing planning initiative involving stakeholder groups in PU Kolkata that had been instigated and facilitated by local actors helped inform the current project. However, it was also noted that the initiative to install pumps on the main canal only addressed the issues of wastewater supply in one area of the PUI used for farming, and specifically for fish culture in large ponds. A conscious decision was made to ensure action plans formulated in the current project would help develop strategies to help benefit people in other areas of PU Kolkata that suffer due to irregular and unpredictable wastewater supplies, including those involved in horticulture, paddy farming and fish culture.



## 2.1. Participatory planning activities

For the purposes of this work the East Kolkata Wetlands were divided into 11 regions with distinct physical, environmental and social characteristics<sup>3</sup>. A problem census was conducted in each region to verify key constraints facing stakeholders living and working in the wetlands. Workshops were conducted in each region to prioritise constraints and potential solutions. Workshops with key stakeholders, non-government organisations and rural and urban government departments and agencies raised awareness of the issues, facilitated constructive dialogue and built consensus on water management issues and potential strategies to resolve the most pressing problems. Considering the range of potential water management improvements suggested 3 preliminary development activities were proposed for further investigation. The feasibility of each activity was assessed in a workshop organised by local stakeholders. Technical, financial, institutional, environmental and sustainability issues were discussed and conditions and agreements required for implementation identified. Focus groups were initiated with women and vulnerable groups who had not been able to participate fully in workshops and user group meetings to check on possible impacts. Preliminary development activities are ongoing but full implementation depends upon gaining support and approval from the EKW Management Committee. The timeline of action planning and implementation activities and stakeholders that have been involved at the various stages is presented in Figure 2.1.

## 2.2. Peri-urban participatory action plan development - analysis

The PAPD principles and tools were used as the basis for the training and planning approach adopted in the EKW<sup>4</sup>. PAPD is a workshop-based consensus building and planning tool that works by building mutual awareness of livelihoods strategies and concerns between different interest groups. The tool was developed and tested in Project R7562 by the Centre for Natural Resource Studies (CNRS) in Bangladesh and the Universities of Newcastle and Durham in the UK.

The PAPD process requires intensive facilitation over 7-10 days and applies a fixed sequence of problems census, problem-solving (in separate groups and plenary), feasibility analysis and finally commitment to act and develop an implementation committee. At key points, influential stakeholders such as local political leaders are invited to witness the discussions and to add gravitas to the planning process.

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<sup>3</sup> The 11 regions were delineated for practical purposes and have no legal or constitutional basis, a similar pragmatic approach is proposed for future planning activities as the wetlands environment is not homogenous and the demands and expectations of stakeholders throughout the wetlands are not always the same

<sup>4</sup> Other PU planning processes were reviewed but offered less specific guidance on mechanisms and activities

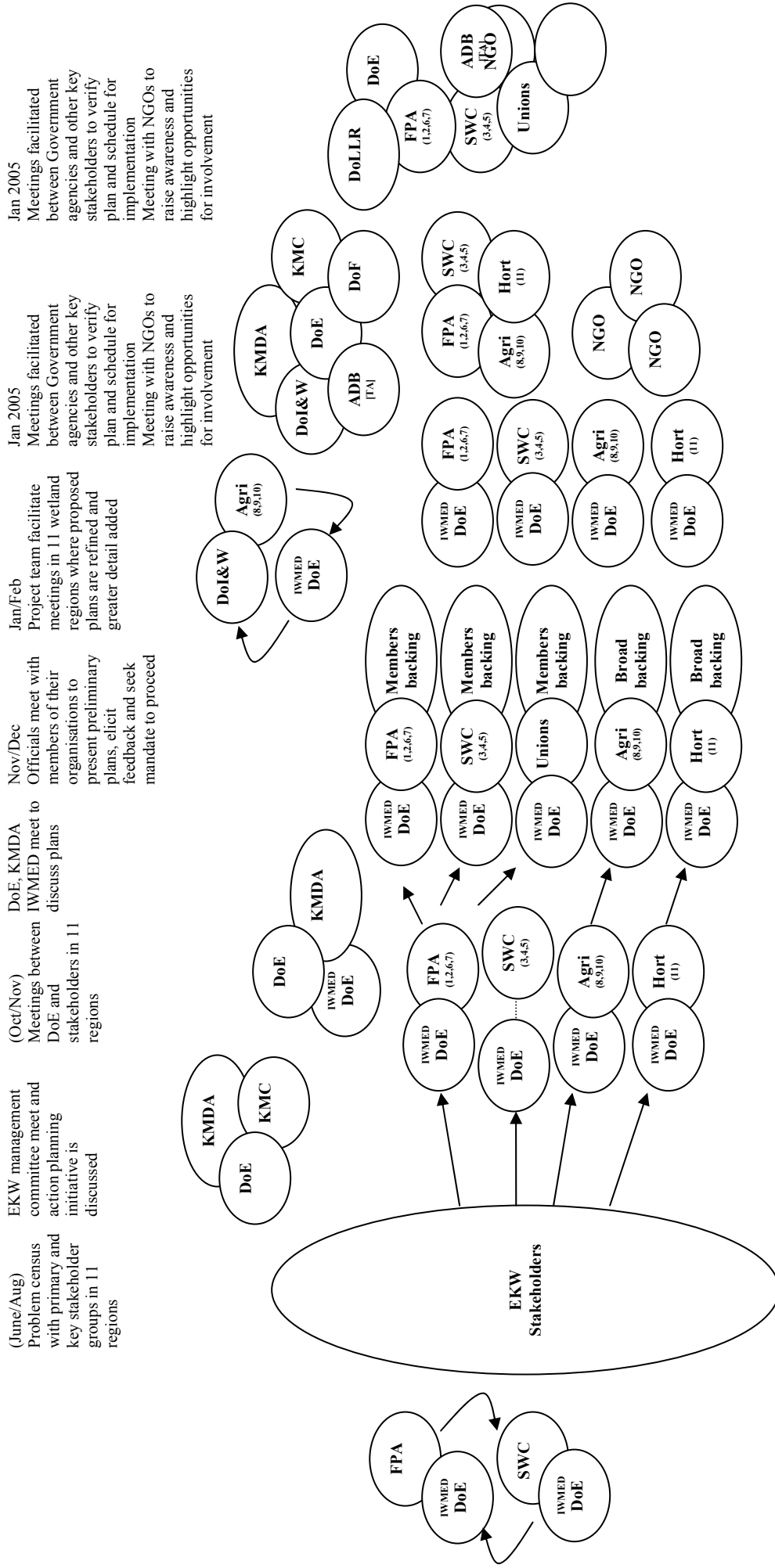


Figure 2.1. Action planning process for wastewater management in the East Kolkata Wetlands

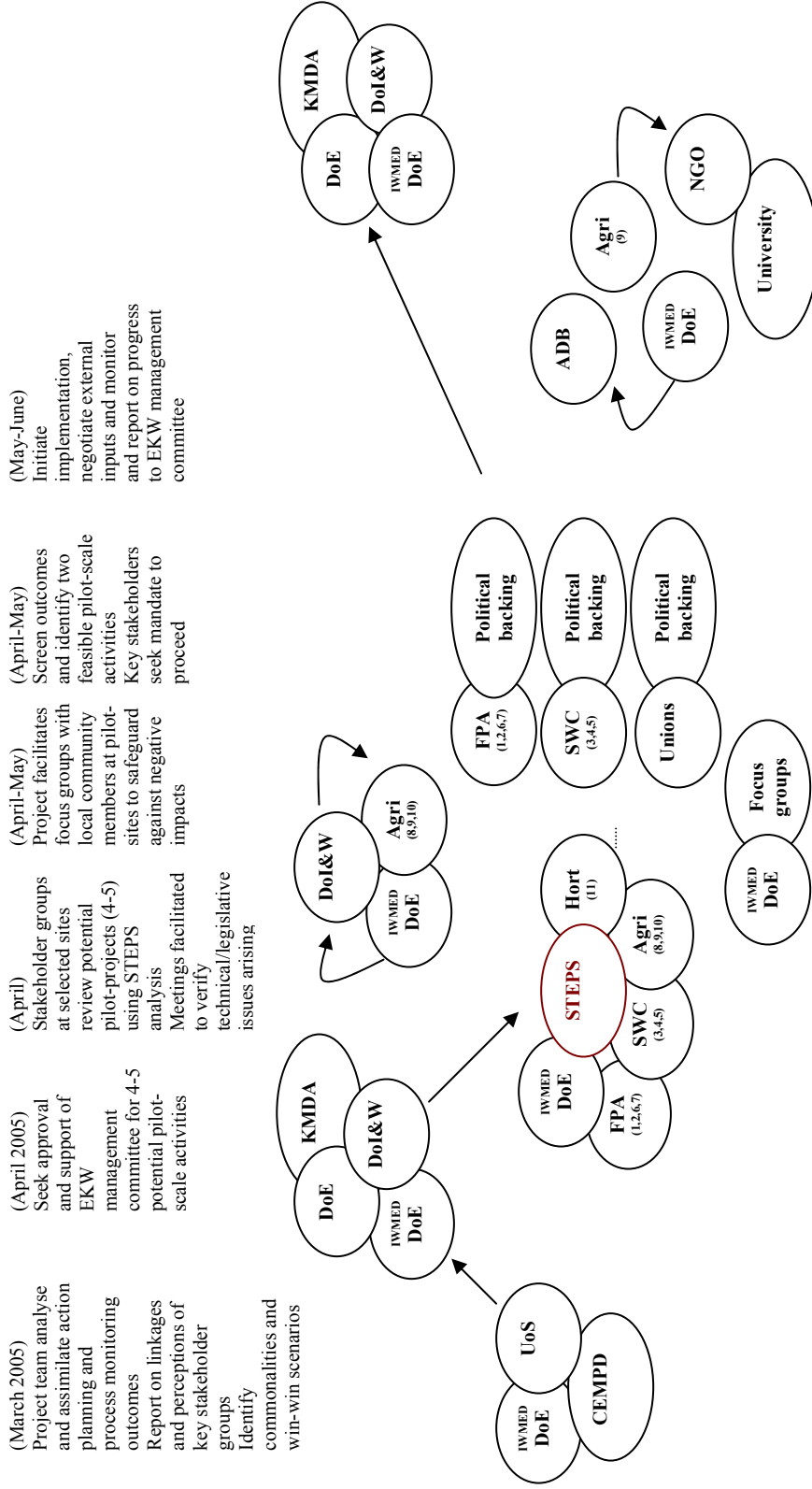


Figure 2.1.(cont'). Action planning process for wastewater management in the East Kolkata Wetlands

Briefly, in the context of floodplain Bangladesh, PAPD has appeared to:

- instil a sense of ownership of plans by involving the range of poor stakeholders directly;
- create links between the poor and facilitating or enabling institutions such as local government;
- create widely supported and detailed plans and to devise the structure of future implementing committees;
- build mutual awareness between competing interests (livelihoods) groups;
- build social capital or consensus, locally.

To date, PAPD in Bangladesh has been applied as a supportive activity within larger NRM projects with their own predefined sets of objectives and activities. In the case of the Community-Based Fisheries Management Project, for instance, PAPD is deployed to gain support and enthusiasm for sustainable and pro-poor management changes, local negotiation and the use of new management committees. Consensual planning is a means to highlight the inter-connectedness of floodplain stakeholders and the opportunity for simple interventions that cross-cut their needs and concerns. After the PAPD, the emphasis changes to exploring the potential of other IFM options (alternative dry season water use, effort control, fish sanctuaries etc.) with project facilitation.

In the case of this peri-urban planning for the EKW, both the context and objective were quite different. Rather than operating horizontally to develop understanding and agreement between local stakeholders, the intention here was to explore a planning process that can result in feasible pro-poor actions with government support and facilitation. This necessitated a mechanism to report back local level issues and suggestions to intermediaries such as farmer or fish pond-operator organisations and to government institutions. Contributions to planning by the poor, as primary stakeholders, were provided at distinct periods within the process but not continuously.

The planning process was not conducted specifically to build consensus but to develop feasible pro-poor plans with the required backing and to test the suitability of the pilot process to Kolkata and other PUI settings. The project team acknowledged that the production of new knowledge regarding PUI planning had greater priority than the successful implementation of a process or resultant actions. In this respect, monitoring took greater precedence than it would within established methodologies such as PAPD<sup>5</sup>.

The scale and complexity of the EKW production system provided special problems regarding proper representation and the identification of potential actions that can benefit the range of poor stakeholders simultaneously without significant negative impacts on other users or livelihood functions of the system. Key differences between the EKW PAP and PAPD are outlined below and summarised in Table 2.1.

#### *2.2.1. Scale and disaggregation of the system and primary stakeholders*

PAPD operates locally, bringing in individuals from representative households of several villages, each of which interact directly with a relatively distinct waterbody. The groups

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<sup>5</sup> PAPD was evaluated in this way during R7562 (FTR: Section 5). PAPD was monitored for change with respect to social capital, the level of understanding within the workshops and the spread of knowledge within local communities.

and households are identified as representative through a pre-workshop period of social reconnaissance with key local informants whereby major livelihoods interests are uncovered and discussed. The resulting stakeholder groups are livelihoods-based but wealth-ranking can delineate these groups further (large and small farmers, for instance). Gender aspects of NRM are also considered so that women normally comprise one of the groups. Ultimately a workshop of about five stakeholder groups, each represented by 15-20 individuals, is conducted over a period of approximately one week.

In this project, an early challenge for the research team was to deconstruct the EKW in order to provide a manageable but representative process. The scale and complexity of the EKW provided special problems as it would in most peri-urban contexts. The EKW extends over 12,500 hectares and supports the livelihoods of approximately 60,000 people. It was important that the number of participants was not too large as to make the process unworkable or unwieldy but that potential plans were significant and wide enough to benefit considerable numbers of people and so achieve serious consideration and support by government agencies.

The division into eleven regions was intended to reflect:

- broad similarities in livelihoods activities (and so NRM interests and concerns) *within* the regions,
- distinct hydrological, environmental and institutional differences *between* regions<sup>6</sup>.

The project did not intend to test an approach to build consensus or social capital via mutual learning between stakeholders. Acknowledging the hydrological and land-use characters of the various regions, however, helped the facilitator and participants consider externalities or downstream impacts from proposed actions (e.g. the impact of re-excavating fish-pond feeder canals on other regions dependent on irrigation for agriculture).

#### *The decision to demarcate the EKW by land use*

Consensual planning theory highlights the distinction between zero-sum games that represent compromise, and positive-sum games that benefit all stakeholders simultaneously (see Lewins et al., 2001). These latter win-win plans are more likely to be widely supported and reach the implementation phase. In the case of the LWI in Bangladesh, water management was found to be both the consistent underlying cause of livelihoods constraints and conflict and the most likely entry point for win-win interventions. PAPD in this context is normally applied to highlight the root cause of these problems and to introduce potential interventions to the range of stakeholders. In particular, desiltation and re-excavation of water channels can both increase water supply for the benefit of agricultural interests and increase fish recruitment and help fish production, for instance.

Before the 11 regions were identified, training on consensual planning introduced these concepts to the team. With existing knowledge of EKW, brainstorming the livelihoods constraints and NRM issues in its different regions suggested that the supply of water may be the unifying theme for fish producers, labourers as their employees and sharecroppers as

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<sup>6</sup> There was no consideration of administrative boundaries in this classification.

agriculture stakeholders. Declining water quality for fish production (declining sewage content) and reduced water supply to agricultural zones to the east and south seemed to relate to canal maintenance and sluice gate management and did not appear mutually exclusive.

The demarcation of the EKW by land use was an attempt to deconstruct the system into manageable and representative units. The objective here was to consult with and represent the objectives, concerns and suggestions of the entire range of stakeholders. Consensual planning requires a democratic process of representation but the scale of consultation had to be sensibly constrained in a process analogous to stratified sampling.

#### *Vertical linkages and the role of political brokers*

The political and institutional complexity of the PUI and EKW requires that potential planning processes balance or negotiate the interests and positions of multiple stakeholders at many levels. Management of the PUI is controlled by overlapping functions and responsibilities that may complement or counteract one another. Superimposed on this is the informal institutional environment that influences the way land use decisions are made within and outside government<sup>7</sup>.

The intensity and diversity of economic activity means that any proposed interventions will have knock-on impacts on other interests including departmental obligations or performance. Although the implementation of actions were not the project's priority the research team needed to test a planning approach that would ultimately lead to pro-poor action at the EKW and beyond. In this regard, it was crucial that this planning process engaged with both the representative organisations of primary stakeholders and with relevant government institutions, what the team termed secondary and tertiary stakeholders, respectively. Ultimately, it was these stakeholders that would support or hinder interventions and the planning process was intended to communicate the interests and needs of poor stakeholders to these groups.

The EKW's proximity to Kolkata increases the diversity of economic interests and increases differences in the capacity to exert economic and political influence. Although PAPD attempts to deconstruct the community and acknowledges differences in power, it is assumed that PAPD participants are similarly dependent on NRM improvements and are all vulnerable. The negotiation process in PAPD can be termed horizontal in that the stakeholder groups that participate are directly linked to a local and delimited resource and are peers.

Although the issue of institutionalisation of the PAPD process has recently been addressed in the context of Bangladesh charlands (see Coupe, 2005), integration with existing government structures and functions has not been attempted. PAPD has operated in project environments with pre-arranged *modus operandi* with key institutions such as local fisheries departments and their staff and most of these roles are related to project objective (establishment of sanctuaries, training etc.).

In the context of EKW, however, a vertical form of planning had to be tested. Actions with the potential to benefit meaningful numbers of poor will require permission and developing

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<sup>7</sup> For instance, there is little open acknowledgement that many landowners of the EKW are opposed to sustainable management of the wetland. This affects the behaviour of government institutions such as the KMDP.

a planning process with key government stakeholders is the most realistic way to increase coverage and attempt an ongoing process. The approach combined distinct, formal, interaction as one-off workshops and meetings with secondary and tertiary stakeholder with more ad hoc discussions (see below).

### *2.2.2. The role of the facilitator*

IWMED have close working relations with several of the secondary stakeholder groups. The intention was to utilise their existing linkages and leverage with government and their perceived legitimacy and support by their members. Ultimately, they were to function to sanction and negotiate implementation of plans on behalf of primary stakeholders.

During the project, IWMED has sought to meet the demands and objectives of donors such as ADB and DFID in addition to accommodating Ramsar, Federal and State requirements. In this respect, the facilitation by Nitai Kundu and IWMED apparently functioned to meet numerous objectives simultaneously. Three large workshops were intended to discuss and publicise the planning process and preliminary plans but additional stakeholders were invited and related issues discussed. This process helped meet the needs of IWMED but also functioned to increase publicity of the PAP process and created new options for financial or technical support in the future.

The facilitator in PAPD should primarily be concerned with increasing the level of understanding and empathy between livelihoods groups at the local level. Any implementation of plans is an additional achievement and might occur one year or more after PAPD. Facilitation in this context is about managing the various workshop sessions and guiding participants through a process of learning. The facilitator must ensure that the dynamics between participants remains productive but links between the facilitator and secondary stakeholders are not crucial to PAPD. PAPD requires good judgement by the facilitator during the early reconnaissance of the locality and the filtering of problems and clumping of solutions but the overall approach is well defined and structured enough to be simply replicated by others.

Testing a PAP methodology in the context of the EKW required a more flexible approach to facilitating dialogue (the ability to exploit new opportunities for discussions as they arise etc.) and with respect to what might constitute a positive development (Annex B-b2). As a pilot project, the facilitators were required to document progress and breakthroughs as had been the case for PAPD during Project R7562.

### *2.2.3. Timing*

PAPD comprises a prescribed sequence of participatory tools and activities along a relatively fixed timeline over one week. The sequence is carefully designed to accommodate all contributions of the participants but to contain the depth and scope of debate within NRM and to move planning towards feasible and acceptable actions. Key to this process are the plenary sessions which provide an end-point to the intra-group planning stages and the opportunity for mutual learning between groups.

The PAP approach piloted at the EKW deliberately adopted a similar sequence of activities and tools but modified the strategy to incorporate the constraints represented by scale and complexity in the PUI context and the different purpose. The key sequence included

equivalent reconnaissance, problem census, problem solving (including STEPS, see Annex B-b1 for a detailed description of this approach) and plenary phases but these activities proceeded over a period of approximately 18 months to incorporate the input of all project regions. In this last respect, problem census and STEPS would have to be repeated 11 times.

The PAP approach attempted to channel local level planning options vertically to the relevant enabling institutions. This required the problem census and STEPS first to identify potential interventions (taking about 6 months) and a parallel process of less directed dialogue with secondary and tertiary stakeholders. Three major workshops were held approximately half way through the process and functioned to publicise PAP objectives and discuss early options with representative stakeholders. These modifications reflect the purpose of PAP in EKW (to pilot a planning approach and gain new knowledge) as distinct from PAPD (to build local level consensus and agreement for future project activities). Accordingly the role and type of participation also differed (see below).

#### 2.2.4. *The role of participation*

The planning phase was punctuated by key activities and events intended to test the capacity to develop and promote plans on behalf of the poor. In this respect, participation performed two functions: enabling representative groups of poor to demonstrate local constraints and potential solutions to their livelihoods; increasing the level of support of enabling institutions such as producer's organisations and government agencies.

In the former case, and relative to PAPD, participation was relatively extractive because discussions focussed on the quick identification of problems framed by the research team, in this case NRM issues related to water management. The role of participation could be described as functional in that the scope of the contribution of participants was pre-determined by project facilitators and purpose (Pimbert and Pretty, 1994). In the PAPD context, although the scope of discussions and planning is carefully focussed on NRM and problems with potential solutions, the workshops include carefully facilitated exercises (such as resource use mapping and drawing of seasonal timelines) intended to include all those present.

The local level meetings for problem census and STEPS analysis were less structured in the EKW PAP. The research team convened open meetings with the various stakeholders represented on an *ad hoc* basis. The timing and location of the meetings was discussed with local representatives in advance and the quality of discussions and the broad composition of participants and contribution by women recorded (Annex B-b2). The principles of problem and solutions identification and STEPS analysis were applied but not in the strongly-guided, workshop environment of PAPD. Instead, the facilitators were briefed on the value of STEPS as a planning tool but, crucially, as a means to direct open discussion towards ideas for acceptable and feasible actions for and by local people. In this respect, STEPS provided a checklist to help guide and record the contributions of participants.



Table 2.1. PUI planning as applied in the EKW and modifications of the Participatory Action Plan Development approach (PAPD).

Modification and purpose	PAPD	PAP at EKW
<p><i>Scale &amp; reach</i></p> <p>EKW size requires process to extend beyond village workshop to engage government &amp; user groups &amp; 1<sup>o</sup> stakeholders from entire system. Political complexity of PUI requires vertical links &amp; formal, but more <i>ad hoc</i>, interaction.</p>	<p>Normally LWI sites comprising several villages – project delineated waterbody with agricultural land.</p> <p>Primarily local issues &amp; horizontal negotiation.</p> <p>Minimal role for Union level government representatives &amp; other local/regional service providers such as Local Government Engineering Department.</p>	<p>The mosaic of inter-connected land-use &amp; hydrological zones over 12,500 hectares &amp; providing livelihoods (directly &amp; indirectly) to 60,000 people.</p> <p>Local or regional* issues discussed but presented as symptomatic of system-wide issues where applicable.</p> <p>Major role for government institutions** &amp; resource user representative groups (fish producers’ organisation, agricultural cooperatives etc.) in negotiation &amp; prospective implementation.</p>
<p><i>Deconstructing the system</i></p> <p>Micro-issues as potential targets for planned actions should relate to livelihood concerns but were predicted to correspond to water use &amp; so be determined by hydrology &amp; existing economic activity.</p>	<p>NRM interests &amp; positions considered to relate to 5-6 broad livelihoods groups. The groups are identified with key informants &amp; may be re-defined by wealth ranking. A sub-set (approx 20 people) participate form each group.</p>	<p>EKW interests and positions in relation prospective interventions considered to relate to hydrology and economic activity – relating to three basic zones (fish production, agriculture production &amp; mixed). These zones sub-divided by facilitator (IWMED) to 11 regions based on existing knowledge &amp; transect study. Problem census &amp; STEPS conducted with open groups with range of stakeholders from each region (approx. 30 people). Key 2<sup>o</sup> and government stakeholders identified by facilitator.</p>
<p><i>Timing</i></p> <p>Institutional complexity, geographic scale and no. of stakeholders impact on logistics. Requires repeated engagement with each of 11 regions &amp; re-verification &amp; facilitation between 3 distinct levels of stakeholders.</p>	<p>Approx. 7 day process. Situation &amp; stakeholder analysis before week-long workshops of problem identification, filtering, cause &amp; effect analysis, STEPS and plenary. Finishes with commitment to develop implementing committee.</p>	<p>18 month process. Analysis of EKW stakeholders occurred prior to project over several years (material existed). Similar sequence of problem census, identifying potential solutions, STEPS and plenary. Problem census and STEPS repeated for 11 regions over extended period (approx. 6 months). 3 stakeholder workshops equivalent to PAPD 1<sup>st</sup> plenary – verification process with government and 1<sup>o</sup> stakeholders will work as 2<sup>nd</sup> PAPD plenary after project end.</p>

Table 2.1(cont'). PUI planning as applied in the EKW and modifications of the Participatory Action Plan Development approach (PAPD).

<p><i>The role of facilitator</i></p> <p>EKW facilitator required to interact with larger constituency of 1° stakeholders &amp; crucially political stakeholders as representatives (unions etc.) &amp; government stakeholders. EKW facilitator acts as intermediary between these 3 levels.</p> <p>The multiple interests of government/donors required facilitator to operate PAP events in parallel with other commitments (to ADB etc.).</p>	<p>Facilitating agency strongly influences identification of stakeholder groups, directs planning activities &amp; sorts/filters feedback in isolation. Facilitator required to achieve broad agreement on feasible intervention at plenary sessions. No negotiation between government stakeholders &amp; facilitator. Facilitator switches to other project related activities post-PAPD.</p>	<p>Facilitating agency identifies stakeholder groups/constituencies independently.</p> <p>Facilitator seeks support for planning process rather than implementation of actions.</p> <p>Facilitator interacts with primary stakeholders, their representative organisations and government stakeholders.</p> <p>Interaction occurs both at discrete events (planning workshops &amp; meetings) &amp; continuously and informally.</p> <p>Facilitator expected to extend the implement phase after project end.</p>
<p><i>The role of participation</i></p> <p>Commitment to planning required input of government and stakeholder representatives.</p> <p>Participation of 1° stakeholders was intended to prove local ability to plan carefully. Plans were extracted for promotion elsewhere by facilitator, <u>not</u> by 1° stakeholders themselves – local political reality required the facilitator to navigate the government and institutional landscape on behalf of the poor.</p>	<p>A sub-set of representative interest groups participate in planning.</p> <p>Participation in planning lasts 1 week, participation in implementation dependent on successful establishment of committee &amp; action.</p> <p>Participation is a means to extract options for interventions, engender ownership &amp; increase local legitimacy of plans.</p> <p>Participation of government stakeholders occurs at two plenary sessions to increase legitimacy &amp; commitment to act.</p>	<p>A sub-set of broadly representative stakeholders from each of 11 regions participates in problem/solution identification and one-off plenary as workshop.</p> <p>1° stakeholders are passive in workshops – representative groups and government agencies state their positions.***</p> <p>Participation is primarily a means to extract options for intervention types for promotion at government level.</p> <p>Participation of government stakeholders occurs at two workshop sessions and <i>ad hoc</i> meetings/discussions with facilitator. Government participation intended to gain support for planning process and intervention types.</p>

\* The 11 regions as defined by the research team and based on hydrological and land-use characteristics.

\*\* PAP's function will be dictated by role of DoE, DoI etc...

\*\*\* Workshops had potential to validate the contributions of primary stakeholders in planning but meeting format failed to do this (see Annex x).

The early and extractive stages of problems and solutions identification and STEPS was to provide material for discussion and support at other levels but poor stakeholders at local level were to be provided with feedback on the plans of all 11 regions and the status of government or intermediary support<sup>8</sup>. As a week-long workshop process, PAPD provides no structured mechanism for this verification and feedback regarding secondary stakeholder support. In this case an implementation committee might be expected to liaise with the relevant institutions and report back to the community without facilitation. In the case of participation by relevant institutions in the EKW PAP, the form of interaction was less prescriptive with organisations such as the SWC proactively seeking IW MED regarding proposed interventions<sup>9</sup> or government agencies discussing PAP issues in the context of general EKW meetings.

### 2.2.5 Significance of the modifications

While the guiding principles of PAPD proved useful to the project with respect to developing well-considered plans and subsequent political backing, the mechanism by which this is achieved required modification in the context of the PUI. The enormous range of interests and the differences in power (the ability to influence change or to block it) between all stakeholders, contrasts with the relatively contained LWI settings where PAPD has been applied. These characteristics are not unique to the EKW or West Bengal and it is likely that participatory planning processes require similar approaches elsewhere.

The key features of the modifications outlined in Table 2.1 related to representation and the sequence of the activities – starting with local planning and moving to higher-level verification and backing. It is acknowledged here that the demarcation of stakeholders and the land use areas functions to simplify the EKW and may overlook some local level issues and concerns. Similarly, working through influential stakeholders such as the bheri owner associations may result in some concerns of the poor becoming distorted or overlooked. However, the project team recognised the potential role these stakeholders can play in brokering change that will benefit the poor.

It should be noted here that the nature of discussions with these secondary stakeholders as enabling groups, differed from those had with primary stakeholders in the local STEPS planning activities. In the former case, the discussions related to preserving the interests of producers and ensuring political backing for renovation of the system and other technical support. In the case of the STEPS activities, the demands and plans were much more locale-specific and defined (e.g. the feasibility and impact of proposed technical interventions).

The facilitation and management of participatory planning in the PUI is complex in that it is necessary to keep the interest and support of players at multiple levels and to do this simultaneously. In this respect, the approach is not unique. For example, the DFID project *Joint Wetlands Livelihoods* (JWL) in Northern Nigeria is attempting to develop integrated water resources management by demonstrating examples of community planning and action to higher level political stakeholders. JWL maintains dialogue with government

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<sup>8</sup> This process will occur after project end and will centre around the discussion of the draft report.

<sup>9</sup> What Pimbert & Pretty (ibid) might term ‘interactive participation’ with the participants contributing to and shaping the process. However, the motive here was to check the progress of local-level action plans (not all associated with the project) rather than headway on representation in the planning process itself (Lewins, 2005a).

agencies as the community plans are developed and implemented. Again, the scale and complexity of the setting requires engagement at several levels.

The logistics of facilitating participatory planning processes in the PUI probably necessitates some simplification and compromise in design. It is not possible to engage all stakeholders in a constant process of discussion and planning and this would obviously not be in the interests of the participants, themselves. What was attempted in this approach was a combination of informal discussion with key stakeholders punctuated by distinct public workshops and planning sessions and strategic points across the EKW to maintain enthusiasm and understanding.

Finally, the approach that evolved during the project should be applicable in other countries and other settings. The task here was to accumulate new knowledge in the natural resource sector and the PUI but the strategy to delineate the interests groups, to organise intra-group and inter-group discussion and feasibility studies could be adopted for any task where participation of the poor is required. In particular, a PAP approach can help establish a pathway or mechanism to make public (to more powerful stakeholders and government) the concerns and suggested alternative of poor stakeholders.

### 2.2.6 Summary

The modifications of the PAPD process were intended to make a testable EKW PAP achievable in the context of the PUI. The key differences related to purpose (to test a planning process rather than to build social capital and reach local consensus) and to scale and political complexity (geographic scale and the number and range of stakeholders). The stages were less structured and were, in fact, adapted during the project but several PAPD principles were retained including the importance of public verification in plenary (in this case, Kolkata meetings), the need for good facilitation in interpreting and filtering potential solutions and the attempt to include relevant enabling stakeholders early on. Finally, the flexibility of the EKW PAP had consequences for process monitoring. As the planning strategy evolved, the means to record progress had to be adapted from more open-ended reporting to that focussing on key events such as the regional meetings or major workshops that punctuated the planning period.

## 3. Process monitoring

Process monitoring is merely a systematic approach to recording project developments and change. It can help describe the stages that led to successful outcomes (consensus, agreement, and enhanced management) and less successful outcomes (conflict, failure to reach agreement or to improve management, for instance). Process monitoring is normally a part of project design but it has recently received greater attention because it is recognised that relationships between researchers and the various stakeholders play an important role in achieving successful and lasting outcomes (Lewins, 2004).

In addition to describing events retrospectively as in final report writing, for instance, process monitoring can allow the research team to respond to unexpected changes and positive or negative developments. In projects where negotiation, discussion and agreements are the objective, process monitoring can allow project managers to assess new opportunities for agreement (new avenues to explore) and help form a systematic way for

field staff to communicate progress to the whole project team. In this way process monitoring allows the project team to review progress in real time and to change emphasis or direction to exploit new developments, for instance, a supportive and influential government stakeholder or a small, positive intervention that suits numerous stakeholders simultaneously.

The key theme and activity within this project is discussion or negotiation with a view to reaching agreement on the future management of the wetlands. Initial discussion within the project team led to the development of a draft calendar of research activities and commitments. Central to this was the way in which the various stakeholders were to be engaged prior to and after two large workshops. It was agreed that there were about seven or eight key stakeholder groups that must be engaged, consulted and involved in the discussion of future wetlands management. In turn, these stakeholders could be described as primary or secondary stakeholders (Brown, Tompkins and Adger, 2001). Primary stakeholders have high importance but may view themselves as having low influence; they may also have a direct stake and interest in the resource for their livelihoods (e.g. fish farm labourers). Secondary stakeholders may be important and influential and so be a key to success; they can have a very influential position in the process (e.g. government officials, powerful NGOs). The relevant stakeholder group for the wetlands included fish producers associations, labour unions and various government and NGO agencies with a role and stake in natural resources or water management. It was suggested that these groups should be engaged as soon as possible and the project purpose should be communicated to them in face-to-face discussions.

With respect to recording the process of discussion and negotiation two key aspects were identified:

- discussions held with the stakeholder group in isolation (for instance, the level of support and enthusiasm for planning expressed by the fish producers association to the project team),
- discussions and networking between the stakeholder groups themselves (the outcomes and discussion within multiple-stakeholder meetings and workshops).

Process monitoring within other DFID-funded NRM projects has been based on a combination of at least two reporting formats e.g. diaries and meeting reports. Structured diaries helped document processes *within* stakeholder groups and with the research team, meeting reports helped document processes *between* the stakeholder groups. It has been found useful for projects to record their interaction with stakeholder groups in a systematic and consistent way, partly because this helps to compare feedback from different members of the team. In addition, a structured approach also makes the interpretation and analysis of processes easier during report writing by allowing responses to be tallied or tracked over the span of the project. In the case of the project, relationship-building and decision-making are key because long-term partnerships and new ways to achieve improved management of the wetlands are important. To achieve mutual support for new management or technical activities it was considered important to engender an environment for negotiation and trust between the stakeholders. In addition, the project proposal highlighted the need to promote co-operation, understanding and collective decision-making.

Diary reporting formats incorporated spaces in which progress (or problems) in specific areas could be highlighted by the researcher. It was also considered particularly important to document change and for this reason, a special section was included to report unusual outcomes and events. Meeting reports in other projects have attempted to distil the essential dynamics and outcomes of important meetings. For this reason a large space may be provided for the researcher to enter his or her interpretation of the effect of the meeting and its significance to achieving successful project outcomes or for producing potential problems in this regard. Previously, it has been found convenient to report the discussion and decisions and to provide a detailed researcher's summary. Based on this assessment the provisional reporting format contained sections on: discussion quality, how open was the discussion, who was loudest or quietest and clarity of the agreements and plans; hopes, what good things came from the meeting and how these things will help; fears, drawing on knowledge of behind-the-scenes issues, what might obstruct progress and the wishes of the people; recommendations, what should be done to help and are there specific tasks for the project team or participants.

### 3.1. Process documentation

Process documentation within this and other NRSP projects (R8103, R8195 and R8306)<sup>10</sup> has performed a range of functions depending on project objective. In all cases, there was a need to track change attributable to the project. In particular, it was important to follow social and institutional developments often overlooked in conventional monitoring<sup>11</sup>. The various methodologies were loosely based on interesting approaches to project monitoring and evaluation which emphasise the process of the project and its interaction with participants rather than post-project impact in isolation. This change in focus allows the type of evaluation criteria to be flexible in relation to interesting or unexpected developments rather than to be pre-defined by set indicators. These new developments can then be tracked and their significance communicated with reference to narratives or stories. In his paper 'Improved representations of change processes: improved theories of change' Davies (2002) argues that the influence of projects and programmes is unlikely to be purely a linear one. Processes are more likely to operate within several overlapping spheres concurrently. In reality, projects tend not to adhere to classic hierarchical organogram-type structures but are better described as heterachies where people and institutions form their own networks within larger structures. In this respect it is difficult to pre-empt the components of projects and their interaction with local people and institutions that are likely to be significant and interesting, or which may constitute what Davies terms Most Significant Change (MSC). In this case, PAP was given a preliminary structure (a sequence, punctuated by distinct event types, guidance on facilitation etc.) but it was hoped process documentation might capture the significance of less formal dialogue and interaction around the project's margins (what additional stakeholders play a key role, can their influence be pro-poor and how might they be systematically accommodated in the future?). Dependent on the project aim, however, it is possible to start the documentation

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<sup>10</sup> R8103 - Consensus for a Holistic Approach to improve Rural-livelihoods in Riverine-islands of Bangladesh (CHAR), R8195 - Integrated floodplain management: institutional environments and participatory methods, R8306 - Better options for integrated floodplain management – uptake promotion.

<sup>11</sup> Project R8195 suggests that the relationship between project facilitators, themselves, and potential beneficiaries may evolve in quite unexpected ways and will influence the type of outcomes that outlive projects. These relationships are a sub-set of the informal institutional environment and relate to process. For instance, in Project R8103 the char-modified PAPD required an extended period of familiarisation and confidence building between the facilitator and the community before large, more entrenched, issues could be addressed. This feature was recorded in the project team's diaries which revealed increasing participation and confidence by local people over time (for instance, autonomous meetings or interaction with secondary stakeholders, community-modified activities etc.).

process off by directing the research team to potentially key areas of interaction or the *types* of change to be aware of.

Process documentation has been used to detect change in relation to project activities (promotion of integrated floodplain management methods or the appraisal of social and institutional impacts of other projects) and the suitability of planning approaches (PUI PAP and char-modified PAPD). The following sub-section provides a brief overview.

### 3.1.1. Documenting change attributable to project institutions (structures and processes)

Whilst recognising this complexity, the approach adopted for process documentation within Project R8195 targeted the local resource management institutions (RMIs) as the fulcrum between potential beneficiaries, non-targets and secondary stakeholders such as project personnel and local government institutions. There were several reasons for this. Firstly, considerable time, effort and faith has been invested in RMIs as community based organisations, resource management institutions, user groups etc. with the assumption that local participation in the choice of rules will increase compliance and longevity of new and pro-poor management. In R8195 it was important to understand the working of these units and why they tend to disintegrate or introduce conflicts and differential access to pre-existing or new resources. Secondly, the choice of the RMI as the first or central port of call allowed the research team to evaluate its role and status with respect to other stakeholders and sets of stakeholders or other players in the game. The RMI formed a basis of semi-structured interview or discussion, around which additional and related issues and narratives could also be aired. Thirdly, the organogram of almost all project structures assumes a clear and delineated formal and hierarchical structure. As long as the means of recording and eliciting feedback is not too structured, this step-wise visit to key players and groups is an effective means to uncover the *de facto* relationships and interests of numerous stakeholders. Discussion of the RMI helps anchor discussion, creating a basis for developing narratives around what Davies (2002) called ‘realms of change’ and local reality can be discussed by triangulating numerous perspectives of the same structure, the RMI acts as the interface between the project and the people<sup>12</sup>.

### 3.1.2. Documenting change attributable to the planning process

In R8103 the approach was slightly different. Because the greater purpose of the project was to investigate the impact of PAPD through consensus and local activities, rather than group or committee building, the meetings themselves were seen as key units within the process. The manner in which issues were negotiated, people were included or excluded in activities, were all relevant to commenting on the impact of PAPD and the project in the two villages. In addition, the team acknowledged that discussions continued locally between group meetings and that some issues were less likely to be aired willingly in public or to project staff. To capture this additional change, the monitoring system adopted a diary format for staff to outline off-stage and on-stage concerns or issues as they evolved over the course of the project. Both meeting and diary reporting were intended to work towards a narrative for key changes within each of the two villages. These were intended to take the form of detailed case studies of how problems or topics were identified and the process by which they were then negotiated, resolved or enacted. The process by which different interest groups were included and secondary stakeholders consulted within the

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<sup>12</sup> The approach was intended to be similarly anchored and directed in Project R8306 where project implementation groups formed the focus of the discussion and analysis.





The approaches adopted within the above projects attempted to resemble MSC in that they explicitly emphasised the importance of unusual outcomes to the reporting teams. In R8195 outcomes are discussed in relation to transparency, equity, pro-poor, etc... and in R8103 outcomes are framed in relation to decision-making, conflict or consensus and participation. In both cases, these indicators may be better described as ‘indicative domains of change’, however, because they are designed to elicit discussion by both local stakeholders and field staff themselves of unusual events and outcome relating to these types of change. Micro and macro-PAPD activities are not scored in relation to these indicative types but narratives are discussed in relation to these characters.

The rather more directed approach to uncovering change adopted in R8103 (through group-identified indicator types) was appropriate given the aims of the project, to uncover the potential of existing integrated floodplain knowledge. In other words, indicator types, and the stories they let us develop, need to be focussed on issues related to community negotiation (meetings, outcomes, conflicts, decisions, actions etc.).

In R8103, the early discussions with the field team put the emphasis on trying to uncover change attributable to the project and PAPD, whether this is deemed as positive or negative. In order to do this, the team jointly-identified themes that might be expected to change as a result of project activities. These were not so much set indicators, rather guidance and the intention here was to structure the field reporting formats to help staff realign their perception of the greater project purpose (social/community, political and institutional linkage and cooperation). Crucially, however, reporting staff were encouraged to develop and follow what they saw as key outcomes and changes and to describe how these stories evolved overtime. The domains of change were initially presented with potential examples but they were ultimately fuzzy in that reporting could use these examples to develop stories in any number of directions.

In summary, with respect to procedure and the way monitoring is implemented on the ground, process documentation in these projects has adopted several of the characteristics of the MSC approach. Change is not recorded with respect to the attainment or otherwise of pre-formed indicators. Rather, discussion surrounding the *indicative realms of change* is encouraged. As with MSC, great care was taken in phrasing the question. Diary and meeting report formats required project staff to think analytically about outcomes, first by describing what had or had not changed (the *descriptive* component of the story) and then attempting an explanation for this (the *explanatory* component of the story). In this regard, process documentation functions to develop the understanding of the research teams and to help them realign their understanding of what is significant within the parameters of project objective.

### 3.2. Development of the monitoring strategy

Process documentation was initially intended to: record any significant events, decisions, obstacles or breakthroughs that shape the outcome/relevance of the planning process; help guide the research team (especially the junior team) with respect to the type of issues that might be expected to influence the quality and outcome of planning (participation by the poor and women, political support, public awareness etc.); help the entire research team re-direct planning to additional key areas/stakeholders or to suggest revisions in plans and planning approach as the project progressed. In this respect, process documentation was to

provide support in facilitation as much as a tool to represent the planning process in retrospect.

The first project team meetings comprised discussion of some of the key NRM issues of the EKW and how they related to poverty and the objectives of Ramsar, DFID and the Government of India. This formed the basis to introduce some of the consensual planning principles and their application in other settings, in particular, PAPD experience in Bangladesh. A proposed planning strategy was drafted to elicit and manage the input from the range of stakeholders and to seek potential actions that benefit the widest range of poor stakeholders. The importance of looking beyond entrenched positions (in this case, fish production and sewage content versus agriculture interests and water supply) helped the team consider the importance of filtering and clumping issues and solutions i.e. the proactive role of the facilitator. In this respect, water management issues were seen as a unifying feature that affected all vulnerable stakeholders in the EKW system both in terms of quality and quantity of supply.

At this stage of the project, the approach was to be flexible, with IW MED as the facilitator with poor stakeholders and potential supporters of the process as and when required. The direction of the planning process, the type of issues discussed and the type of actions proposed was to be relatively open. Three distinct levels of EKW stakeholder were defined and diary and major meeting reports were drafted for weekly use and to document specific meetings, respectively.

The function of process documentation at this stage was to: record interaction with the various stakeholders, the outcomes of this interaction and its significance for the pilot planning; highlight the key role of the team themselves as facilitators and the need to react strategically to the outcomes of discussion and meetings. In this last regard, it was felt important the team were able to navigate the political landscape of EKW and were aware of potential problems before they occurred. The reporting formats were intended to prompt the team to consider opportunities and potential problems as the process evolved.

### 3.2.1. Modifying the strategy

The draft reporting formats were developed around several key areas of planning performance more commonly applied to the monitoring of consensus building (e.g. understanding, co-operation and decision-making). These criteria were intended to order the diary-type reporting and keep feedback consistent across the team.

However, as highlighted by the MTR, there are limitations of this approach in relation to the primary research objective, the generation of new knowledge useful to PAP in the PUI context. Process documentation within other NRSP projects (Table 3.1) had attempted to uncover informal institutional developments that relate to new relationships between the various stakeholders and with the facilitators, themselves, and the early approach here had focussed on the management of good planning, likely to result in achievable actions.

The key requirement was to maintain a method to re-cap what had occurred, what decisions had been made and what events or stakeholders appeared key in the planning process while keeping the strategy simple and framing the reporting criteria more tightly. The objective changed from one of strong facilitation to help ensure implementation of

actions, to the recording of key moments in the process and an attempt to explain their significance.

In parallel, the planning process itself was undergoing change. From a preliminary phase of open discussion to publicise Ramsar and the potential for planning, the project entered a phase of directed problem census and STEPS analysis. In an attempt to report back and verify the findings of these exercises, several large scale workshops were to be held with the entire range of stakeholders (equivalent to the PAPD plenary sessions). This more focussed phase of the planning was punctuated by discrete events and activities repeated in each of the 11 regions or in large workshops in the wetlands or the city.

The reporting formats were modified for the three basic levels of planning activity:

1. at the local level in discussions held directly with a mixture of stakeholders in each of the 11 regions,
2. in meetings where secondary stakeholders (taken here to mean representative bodies and committees for local stakeholders such as the Save the Wetlands Committee and the Labour Union) meet together or independently,
3. at a tertiary level where discussions between IW MED and other government agencies or donors take place.

A new approach to recording dialogue and decisions was piloted and used as the basis for documenting large meetings and workshops. The meeting reports were intended to record simple details of attendance/participation, agenda, commitments and decisions and researcher opinion (see Box 1 for *Events Report* example).

Box 1. Example of completed Events Report.

### **Events Report (discussions, meetings & workshops)**

**Date & location:** 3/11/04 Mr Ghosh's house

**Agenda & purpose:** Introduce planning concept / seek commitment from SWC

**Stakeholders present and attendance:** SWC & FFPA

**Key representatives:** Mr Ghosh (SWC & FFPA) & Dr Kundu

#### **Discussion**

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

The project was introduced in greater detail (the strategy & regions, planning).

Mr Ghosh (SWC & FPA) believes all problems ultimately relate to water management, particularly sewage supplies ("*increasing sewage would solve 50% of the people's problems*").

Mr Ghosh expressed interest and support for the project but stated that - "*lack of coordination among government agencies is a bottle-neck*"

Ghosh said there are 4 key stakeholders (Labour Union, SWC, FPA, the cooperatives)

A major problem has been sluice gate management and the distribution of sewage to downstream users (sluice gate committee failed under KMC). This problem has recently been debated by a cooperative in Region 2.

Other participants (EcoDev) expressed their own expertise, stating that evaluation and alternative management should be considered.

#### **Decisions**

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

Agreement was reached to organise 2 workshops on 22<sup>nd</sup> and 23<sup>rd</sup> November (Labour Union followed by, FPA)

Ghosh said that data on sewage would be available to the project and to IWMED.

#### **Breakthroughs or obstacles**

*e.g. what +ve or -ve developments have occurred today or since last time?*

The objectives of the project were well communicated and provisional support and enthusiasm was received (Ghosh suggested the meetings & will help organise).

Ghosh recognised solutions could benefit all stakeholders (agriculture & pisciculture).

Ghosh recognised the problem of government communication between departments and with local stakeholders, however.

#### **Additional notes**

*e.g. what needs to be done now to ensure success?*

The meeting did not represent a full range of SWC members as hoped but was useful in initiating major meetings with secondary stakeholders in November.

It also secured the support of a very influential individual (Ghosh).

The presence of EcoDev provided little, they are not a stakeholder, but did publicised the project a little further.

The need now is to plan for these November meetings/workshops and to ensure that stakeholders are well informed and in attendance on the day.

After these group meetings, the local-level planning discussions with primary stakeholders could be undertaken.

As the project entered a period of consultation with the poor at local level, a mechanism was required to help the team facilitate and order meetings and to document their contributions. It was crucial that key local livelihoods issues were recorded so that the concerns of the poor could be communicated to other levels and to enabling institutions. In this respect, the prioritisation by stakeholders of local problems and solutions proved particularly successful in presenting the issues and options for the 11 regions in a concise and systematic way for the EKWMC and others. The team devised a way to clump and filter this feedback by tallying the number of responses to each issue type and was then able to represent this diagrammatically (see Figure 3.1).

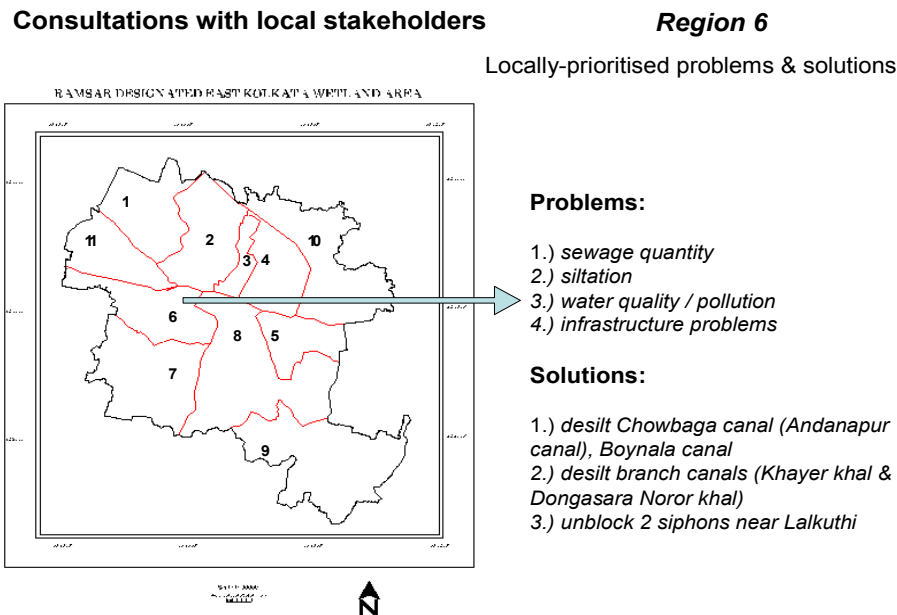


Figure 3.1. Summarised problem and solutions analysis for a government (EKWMC) audience. This format helped the facilitating team order the feedback of the poor and promote it vertically.

Finally, towards the end of the planning phase, post-problem census and STEPS but prior to publication of the PAP report, a semi-structured interview was conducted with a limited number of representative stakeholders to gauge their level of understanding and support of PAP. Two to three representatives of the three stakeholder groups (defined by the project as primary, secondary and tertiary) were interviewed with the intention to discuss PAP issues with both participants and potential participants. Feedback suggested that awareness of the planning activities was relatively good but that understanding of the purpose and mechanism of the piloted PAP was less developed (see Section 3.3).

### 3.3. Process quality

The process documentation strategy was well-applied by the team and several common features, constraints and opportunities were revealed by the reporting. The approach was largely intended to help keep planning on track and realign the PAP strategy as and when needed but some general observations on the quality of process are outlined below.

### 3.3.1. Regional planning workshops

The Regional planning workshops provided the opportunity to consolidate local awareness of the PAP process. Reporting feedback suggests that the local participants were well aware of the technical and physical constraints to their livelihoods and, crucially, the potential solutions to them. The research team had agreed to focus on the water issues (quality and volume) that would appear unifying and acceptable by the full range of EKW users. The Events Reports of these meetings suggest that little facilitation and guidance was needed in this regard. Although the team had some reservations regarding representation of all interests (see below), the discussions were generally very detailed and thoughtful. Virtually all discussion focussed on the management of waste water, with desalination the key proposed intervention. Detailed technical solutions were being suggested that incorporated the role of local and neighbouring stakeholders as well as the potential impact on other regions and the role of facilitating government institutions. These were later consolidated in more detail with STEPS workshops.

Political stakes were expected to provide a hurdle to inter-departmental collaboration and discussion at the tertiary level but Events Reports for each of the planning meetings at the 11 regions revealed that the issue of power differentials between participants and the range of political interests appeared as strong at local level.

These meetings were lightly facilitated in that the agenda and objective was pre-defined by IW MED (to check key constraints, prioritise them and identify preliminary responses with a representative range of primary stakeholders) but the identity and range of stakeholders present was not dictated by the team. Most of the Events Reports show that the meetings were attended by key representatives who tended to direct the planning discussions. Typically these individuals included Panchayat officials and *bheri* secretaries. Although these representatives may have been spokesmen for the poorest, the research team, themselves, questioned the transparency of their motives:

*In the workshop it has been noticed that all stakeholders who were present didn't participate in the discussion actively. Two voices were dominating - these are the president of krishak samiti and the local councillor. We tried to make the other people participate actively and asked individually to give their own views. As a result, they only expressed their support about whatever was discussing. Here, one thing should be noted that when our researchers interviewed the farmers in the field area they came up with their own views. At least they spoke something about their problems. But when we arranged the work shop in a local party office the scenario changed.*

(Source: IW MED project team; excerpt Workshop Report - Zone 11, Dhapa region).

The number of participants ranged from only 12 (Region 6, Chowbagha) to 44 (Region 8, Khayadaha). Most meetings were in the range of 20-25 participants with at least some women present. This size of group can make meaningful headway and can be considered broadly representative. In PAPD, the various planning stages comprise groups this size or slightly smaller and at this scale it is possible to avoid intimidation and encourage the less vocal. In addition, the appropriate scale depends on purpose and at this stage of PAP the purpose was to extract key livelihoods constraints and potential actions on behalf of poor stakeholders rather than disseminate the purpose of PAP, locally.

IWMED's fieldwork normally focuses on issues related to the *bheris* and their representative institutions but there was no indication from the Events Reports that attendance levels corresponded to land use or these existing linkages, for instance, Region 8 with the greatest attendance is, in fact, predominantly agricultural.

### 3.3.2. Multi-stakeholder planning workshops (NGO, GO and mixed)

The quality and coverage of PAP-related discussion appeared to be highest and most relevant within the first mixed stakeholder workshop which was the first of the large workshops. The discussion here reflected well the concerns of all stakeholders at all levels, especially, the concerns of poor, primary stakeholders. Unlike the second mixed workshop where the research team presented its strategy, the poor were able to raise local political issues. Of particular interest were the knock-on effects on labourer income from declining fish production and the issue of rights for the ethnic groups indigenous to the Banonghata Kormoshala region. These issues were raised by affected individuals, themselves.

The quality of discussion between government stakeholders was also higher here than it appeared at the GO workshop where government stakeholders had made rather general pronouncements in the presence of the ADB team regarding Ramsar and broad agreement with IWMED's draft conservation plan. At this first mixed workshop, though, government agencies openly acknowledged present weaknesses (e.g. the KMC and DoI agreed the underlying threats to the EKW related to good waste management and land policy on which they must collaborate) while other stakeholders were able to raise political issues openly (e.g. *bheri* managers raised the lack of linkages to government, especially to KMC).

The NGO and GO-specific workshops appeared to make less headway with respect to PAP. IWMED used these workshops to air their draft conservation plan and to discuss general EKW issues with the ADB team. These workshops probably served several functions in this respect, but they were not strongly directed to discuss the PAP piloting. This is acknowledged here as a weakness with the project's planning (see below).

The final mixed workshop presented an opportunity for the research team to clarify the PAP strategy, the purpose of the project and the local issues and management requirement identified by the poor of each Region. The audience and the speakers were comprised of predominantly secondary and tertiary level stakeholders, however.

In summary, the less formal mixed workshop incorporated the type of discussion across stakeholder groups that could raise mutual awareness and support for PAP. The other workshops were intended to serve several functions simultaneously but they did not specifically discuss the concept of PAP or outputs produced by the poor. In part, this was an issue of timing. Stakeholder consultation was progressing at the 11 regions and detailed STEPS plans had not yet been produced for public discussion. Nonetheless, PAP principles and the potential for such a strategy should have been discussed at these higher level workshops in greater detail. In retrospect, these meetings should have been more tightly framed in relation their project-specific objective and greater guidance developed with the facilitator well in advance of the meetings.

### 3.3.3. Awareness and understanding of the planning process and other methodologies

The project intended to make some headway on increasing the awareness of potential beneficiaries with respect to the prospect and function of participatory planning. All meetings facilitated by IW MED were intended to publicise the potential of the planning process, even if the process itself was evolving over time. It is likely that enthusiasm for potential actions would have exceeded interest in the planning process itself (as appeared to be the case with primary and secondary level stakeholders). However, a formal mechanism to help represent local needs to government would be welcomed by organisations such as the Save the Wetlands Committee that are currently attempting greater political influence and control over local management interventions<sup>13</sup>.

The PAP message was rather complicated by the breadth of IW MED's remit and its multiple management functions in the EKW. Nitai Kandu was operating with numerous stakeholders, each with their own objective and relationship to IW MED. As a result, it was sometimes preferable for the facilitator to combine several objectives simultaneously within one meeting or workshop. While this may have helped achieve reasonable participation and external support (as was the case with ADB, their participation in two of the major workshops and commitment to support local interventions in future) it made process documentation more complicated and it is likely it detracted from the PAP strategy by obscuring the objective of this project.

In relation to the small, post-planning awareness survey, there was some indication that government stakeholders operating above IW MED did not see themselves as relevant to the planning process as was hoped. Enthusiasm and understanding of the action plans, themselves, was relatively high within the operator or manager groups at intermediate levels while there appeared potential to better include Panchayat and women at village level. In summary, it appeared that the range of stakeholders were well aware of the planning events and that the meetings and workshops had achieved considerable coverage and publicity. However, of the small sample of stakeholders consulted, it was not clear that these meetings were seen as a co-ordinated and pro-poor planning approach but rather as one-off meetings.

This may be both a function of the relatively extractive PAP approach that was piloted – compiling details of local problems and potential solutions before facilitating the negotiation process on behalf of, but largely independent of, the poor. In addition, prior to the publication of the PAP report to the EKWMC, the discussion process seemed to focus more strongly at the intermediary level (with Save the Wetlands Committee and manager's groups) than it did within government. This may also reflect IW MED's normal domain of engagement which sees them interacting with these stakeholders on an almost daily basis or may relate to the way in which the project and IW MED are perceived by other government agencies.

It was also hoped that the project team would gain from the project experience and learn more about PAP and process documentation. The development of the reporting formats was intended to introduce new issues to the team (the need to understand and represent the significance of what is seen during planning meetings, for instance). Although the IW MED field team was relatively young and inexperienced in the use of participatory approaches

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<sup>13</sup> SWC are currently attempting to achieve NGO status in order to gain political leverage regarding new management interventions.



and in facilitating public events, the team members that stayed with the project did well to adopt the reporting formats and understand their purpose. Process documentation of participatory processes requires good judgement and a higher degree of initiative on the part of the researcher than the quantitative surveys that have tended to dominate natural resources research. The team became more sophisticated in their understanding of what was significant to the PAP process and, crucially, what factors might make the planning process more or less realistic or representative. Changes in personnel were disappointing but it was possible to build a good level of understanding. Feedback was provided to help guide and clarify the reporting process.

#### 3.3.4. The PAPD-modified PAP in retrospect

The performance of the piloted PAP and its various activities appeared to relate as much to management and facilitation of these stages as to their design or intended function. For instance, it was assumed that the large feedback workshops with NGO, GO and mixed stakeholders would provide a mechanism to clearly articulate PAP, the needs and demands of the poor and would increase a sense of responsibility and support from relevant institutions. While the quality of the regional planning workshops appeared to be relatively high and the outputs useable, the PAP message appeared less carefully articulated at higher levels. Process documentation revealed that the coverage and quality of some of these meetings was muddled by other management or political issues and other agenda (e.g. the objectives of other, partly relevant, donor activities such as the ADB biodiversity inventory). It appears important for the reporting agency (in this case, the facilitator) to separate PAP events and issues from other activities. This would highlight the significance and potential of PAP to all stakeholders, reduce their confusion and help focus planning on achievable, pro-poor action. The workshop that appeared to achieve real linkage and face-to-face dialogue across the stakeholders at different levels appeared to be the mixed stakeholder workshop of 28<sup>th</sup> January 2005.

Knowledge of inter-governmental processes was not well captured by the monitoring formats. It is likely that PAP facilitators will always be compromised by publicising and appraising the role of other GOs in planning but the number, purpose and outcome of meetings could have been better documented. In relation to PAP in other PUI contexts, this might indicate that the identity of the facilitator is key. The brief review of PAP awareness would indicate that IW MED was well placed to mobilise the participation of secondary stakeholders as bheri managers and labour unions but perhaps less able to explore the potential of new local and GO roles. Table 3.2 provides a timeline of key PAP events together with feedback on observation and issues derived through process documentation.

#### 3.4. Process documentation and maintaining momentum

The type of documentation adopted within this project has attempted to make the facilitator record the negotiation process in order to consider which events, issues and stakeholders appear key to maintaining momentum in planning. Because PAP within this project was flexible, it was important that the relevance and function of the meetings and events was gauged by the team.

Table 3.2. Timeline of PAP activities and summary of process documentation observations.

Timing	Activity	Process documentation observations
May 2004	DOE arrange meetings with SWC & FPA to discuss project	Process documentation piloting (indicators related to “good” consensus building applied)
June/Aug	Problem census with primary & key stakeholder groups in 11 regions	Water-related issues prioritised by primary stakeholders, themselves
	EKW management committee meet & action planning initiative is discussed	Little information derived from GO-IWMED meetings. Feedback required from senior PAP facilitators in future
Oct/Nov	DoE, KMDA IWMED meet to discuss plans	Process not well documented.
Nov/Dec	Officials meet with members of their organisations to present preliminary plans, elicit feedback & seek mandate to proceed	“Representatives” chair meetings & dictate discussion – structured facilitation required to ensure pro-poor voice.
Jan/Feb 2005	Project team facilitate meetings in 11 wetland regions where proposed plans are refined & greater detail added	Solutions (potential actions) of primary stakeholders reveal awareness of institutional & geographical linkages
Jan	Meetings facilitated between Government agencies & other key stakeholders to verify plan & schedule for implementation Meeting with NGOs to raise awareness & highlight opportunities for involvement	Mixed workshop appears most useful to PAP & openly discussed political constraints. NGO & GO workshops needed to better incorporate PAP principles & the identified concerns of the poor
March	Project team analyse & assimilate action planning & process monitoring outcomes Report on linkages & perceptions of key stakeholder groups Identify commonalities & win-win scenarios	STEPS reports comprise realistic & win-win interventions. Secondary level representatives appeared best informed, potential to better publicise PAP & widen process at local level (Panchayat & women, especially). Facilitator best placed to interact with secondary level stakeholders but may be limited with respect to upward influence.
April	Seek approval & support of EKW management committee for 4-5 potential pilot-scale activities	Provisional support agreed (verbal feedback – Nitai Kundu)
April	Stakeholder groups at selected sites review potential pilot-projects (4-5) using STEPS analysis Meetings facilitated to verify technical/legislative issues arising	STEPS reports reveals detailed planning, relevance of GOs & awareness of impacts on neighbouring regions
April-May	Project facilitates focus groups with local community members at pilot-sites to safeguard against negative impacts Screen outcomes & identify two feasible pilot-scale activities Key stakeholders seek mandate to proceed	Process not well documented.
May-June	Initiate implementation, negotiate external inputs & monitor & report on progress to EKW management committee	Documentation compiled & disseminated to EKWMC

In response to comments within the mid-term review, the use of indicative criteria for good consensual planning were dropped and replaced with an emphasis on the quality of planning. It is acknowledged that this reporting required interpreting in relation to the PAPD-modifications tested. For instance, process documentation such as this has provided an insight into representation of the poor during public workshops with mixed stakeholders and during local planning workshops with primary stakeholders. The piloted PAP attempted early inclusion of the poor but Events Reports suggested the convenors of some of these meetings dictated the direction of discussions and that the poor expressed alternative views off-stage. This may suggest a much stronger form of facilitation by IWMED which would by-pass more influential individuals and encourage greater input by the poor, including women.

### 3.4.1. Process documentation in future participatory action planning

Whatever the methodology of participatory action planning, it might be reasonably assumed that facilitators should be obliged to describe and defend the quality of their approach in terms of:

- representation and participation (a sufficient range of poor stakeholders are given opportunity to shape planning)
- the process adopted (what mechanisms for representation and communication of planning priorities were put in place and if / how these changed over time)
- outcomes (whether pro-poor action is achieved or headway has been made on representing the needs of the poor to supportive institutions).

In order to do this, some system of documentation is required that can note change in these features. Quantitative information may be recorded but the quality of process needs to be presented. For instance, any tailing-off of public participation in planning meetings can be presented numerically but qualified by its meaning with respect to pro-poor NRM. Does the decline in participation relate to a loss of interest on the part of wealthier landowners or managers rather than a lack of perceived legitimacy by the poor themselves, for instance?

With respect to interpretation, the reporting formats outlined above and drafted with the research team were intended to help formulate mini hypotheses and encourage thinking about the significance of public events and meetings. The relevance of this type of documentation will depend on the purpose and character of PAP, however. If the stages of PAP are predetermined and are intended to unfold in a prescribed sequence, documentation may focus on the successful completion of the stages as meetings, agreements and draft plans etc. The facilitator may not be required to re-think the significance of the approach but may be obliged to provide evidence that the process was properly adhered to. This is the case with local consensus building by PAPD within NRM projects. Project reports describe the stages and their outputs (lists of problems, solutions, proposed actions) rather than critically appraise their pro-poor or NRM significance, their potential or feasibility.

## 4. Water management action plan and preliminary implementation

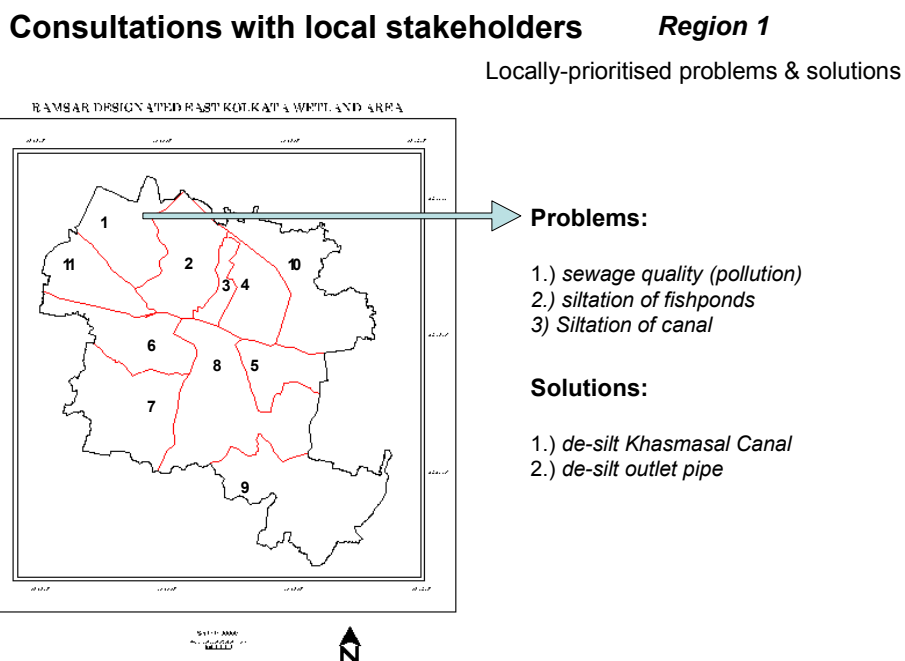
This section provides a summary of outcomes from a process of extended interaction with the principal stakeholders associated with water management in the East Kolkata Wetlands. The participatory approach adopted for this work ensured that rice, vegetable and fish farmers, together with other community members, were given the opportunity to identify the most pressing constraints concerning water management in the wetlands, propose appropriate solutions, develop and agree upon a plan of action and embark upon the process of implementing preliminary development activities that address some of the most pressing and widely held problems. The objectives of this work, approach adopted and resulting conclusions and recommendations received broad-based support from the principal stakeholders that participated in the process. The resulting report has been reviewed by some representatives of the principal stakeholder groups associated with water management in the East Kolkata Wetlands and they endorse the planning approach and findings presented. Groups and organisations that supported and endorse this work include

the Institute of Environmental Studies and Wetland Management, Department of Environment; West Bengal Pollution Control Board, Department of Environment; Principal Secretary's Office, Department of Environment. Other key stakeholder groups currently being consulted include the Save Wetlands Committee; Fish Producers Association; labour unions; Krishak Sabha and Panchayats in the EKW.

#### 4.1. Water management action plan

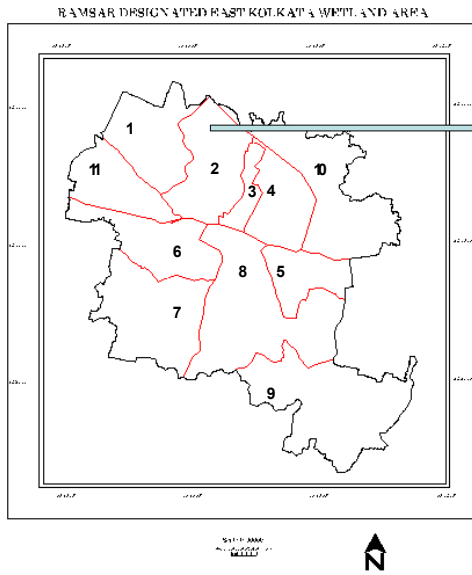
Following extended interaction amongst stakeholders an action plan for water management in the East Kolkata Wetlands was formulated. The plan addresses the major issues highlighted by stakeholders and the most promising solutions put forward by them. Based on these findings 3 preliminary development activities we proposed for implementation. An important output of this work is to demonstrate to government and other prospective supporters that the diverse stakeholder groups active in the East Kolkata Wetlands are committed to, and indeed active in working together to solve their problems.

The figures shown below summarise the regional priorities for water management identified by stakeholders participating in the project and solutions they proposed.



**Consultations with local stakeholders**      *Region 2*

Locally-prioritised problems & solutions



**Problems:**

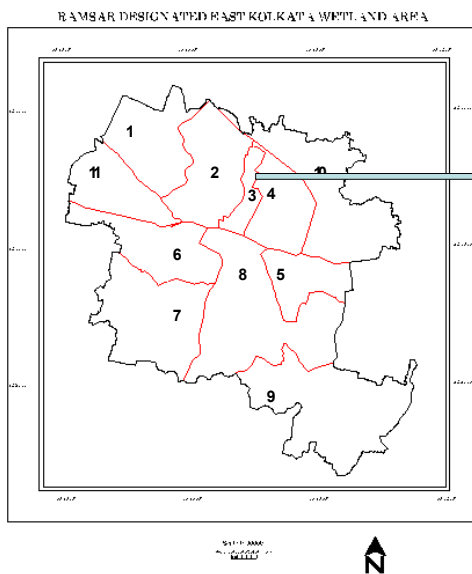
- 1.) lack of water
- 2.) siltation of ponds
- 3.) siltation of feeder canal
- 4.) sewage quality (pollution)

**Solutions:**

- 1) Desiltation of feeder canal, inlets, outlets and fishponds.
- 2) Improve water distribution.

**Consultations with local stakeholders**      *Regions 3 & 4*

Locally-prioritised problems & solutions



**Problems:**

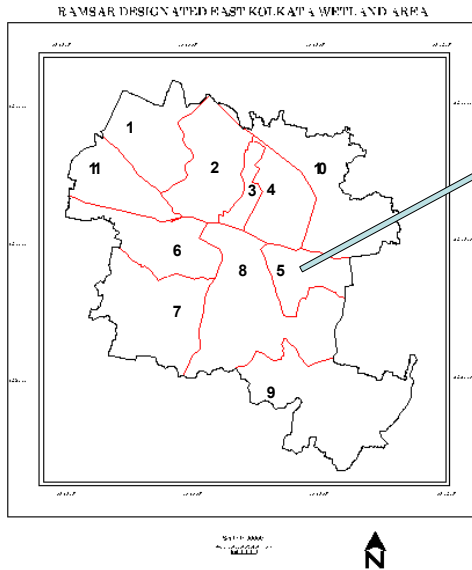
- 1.) adequate sewage
- 2.) pollution
- 3.) poor infrastructure
- 4.) lack of water in 7, 8 & 9

**Solutions:**

- 1.) Divert Chowbagha water station water South (via Chak-kolar Khal, Boynala khal, Kheyadaha 1&2 and Bidyadhari)
- 2) Desilt Bantala to Tarda, Paranchaprasa khal, Ghosher khal & feeder canal.
- 3)Bidyadhari must be desilted for 7, 8 & 9

**Consultations with local stakeholders**      **Region 5**

Locally-prioritised problems & solutions



**Problems:**

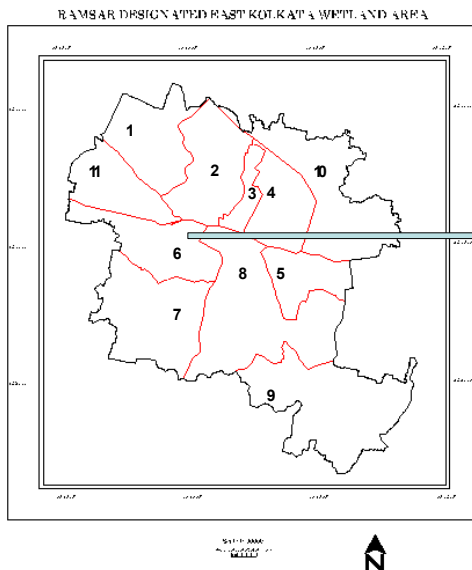
- 1.) sewage quality - pollution
- 2.) siltation ponds
- 3.) siltation feeder canal
- 4.) adequate sewage
- 5.) lack of infrastructure

**Solutions:**

- 1.) prevent tannery influx
- 2.) desilt ponds
- 3.) better sluice gate – gate management at Bantala

**Consultations with local stakeholders**      **Region 6**

Locally-prioritised problems & solutions



**Problems:**

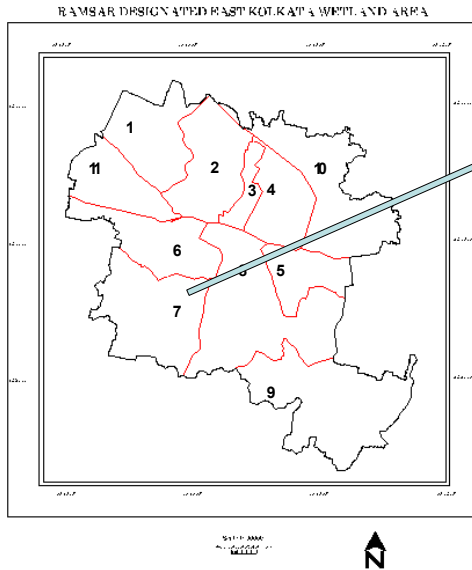
- 1.) sewage quantity
- 2.) siltation
- 3.) water quality / pollution
- 4.) infrastructure problems

**Solutions:**

- 1.) desilt Chowbaga canal (Andanapur canal), Boynala khal
- 2.) desilt branch canals (Khayer khal & Dongasara Noror khal)
- 3.) unblock 2 siphons near Lalkuthi

**Consultations with local stakeholders**      **Region 7**

Locally-prioritised problems & solutions



**Problems:**

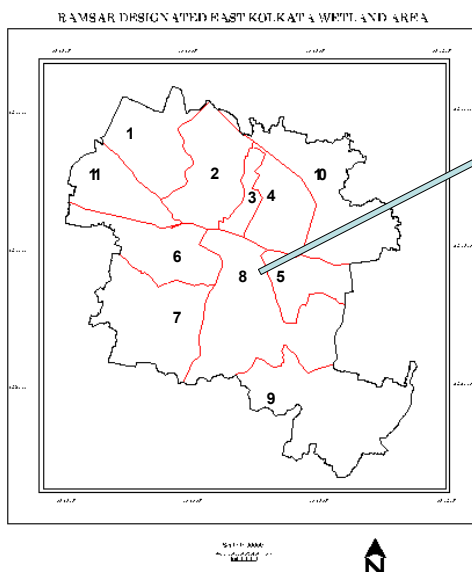
- 1.) lack of sewage
- 2.) lack of irrigable water (February-March)
- 3.) poor quality (cow sheds gone & pollutior.
- 4.) poor infrastructure

**Solutions:**

- 1.) desiltation
- 2.) better water flow / increased depth
- 3.) better water management with Bantala lock gate
- 4.) stop chemical discharge
- 5.) health centre

**Consultations with local stakeholders**      **Region 8**

Locally-prioritised problems & solutions



**Problems:**

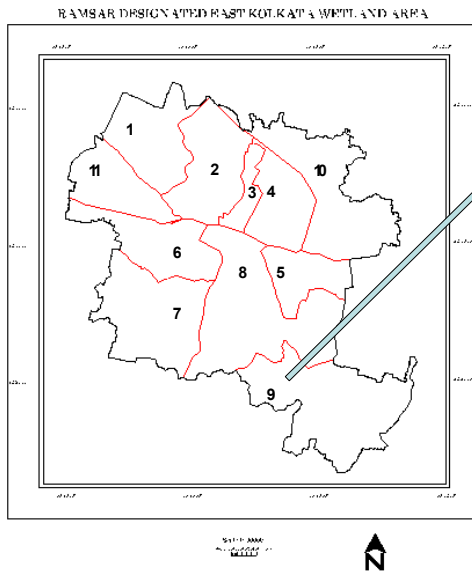
- 1.) sewage quantity
- 2.) siltation
- 3) Water quality
- 4.) infrastructure (roads) for desilting

**Solutions:**

- 1) Desilt canal.
- 2) Proper monitoring of sluice gate.
- 3) Pump sewage from main canal.
- 4) Environment dept. should act'
- 5) Excavate a new canal.

**Consultations with local stakeholders**      **Region 9**

Locally-prioritised problems & solutions



**Problems:**

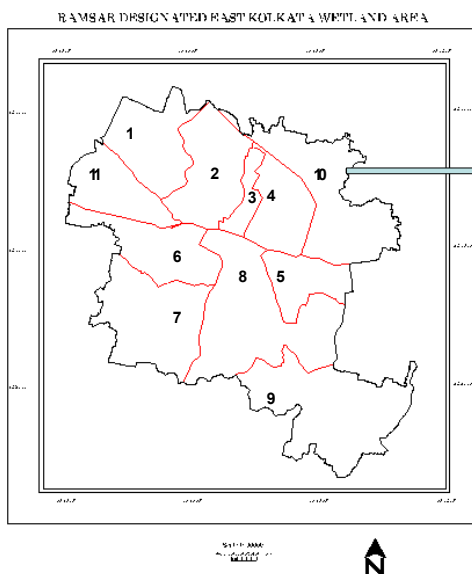
- 1.) lack of irrigable water
- 2) siltation. (*bidyadhari cana*)
- 3) infrastructure
- 4) Sewage quality.

**Solutions:**

- 1.) "Link to channel sewage from Chowbaga to south?"

**Consultations with local stakeholders**      **Region 10**

Locally-prioritised problems & solutions



**Problems:**

- 1.) lack of sewage
- 2.) siltation.
- 3) Sewage quality

**Solutions:**

- 1.) conduct survey of landowners & explore diversification
- 2.) develop cooperatives for new pisciculture



Following extended interaction amongst stakeholders an action plan for water management in the East Kolkata Wetlands was formulated. The plan addresses the major issues highlighted during our discussions and the most promising solutions put forward by stakeholders in the respective regions (the main issues and solutions are presented below). Based on the action plan it was proposed that 3 preliminary development activities should be selected and appropriate measures taken to facilitate implementation. It was anticipated that these preliminary activities would demonstrate that the various stakeholder groups in the EKW are committed to, and indeed active in working together to solve their problems.

#### 4.2. STEPS analysis of preliminary development activities

As has been shown in other settings it is important to ensure that outcomes of an action planning process are adopted and implemented so that trust is built between the participants and key stakeholders and to ensure that future planning and development activities are more likely to find widespread support. Several indicators can be identified to monitor and evaluate adoption and implementation: action by participants to address the development activities identified would indicate a commitment of resources and degree of trust in the process; institutional and organisational change to permit the implementation of development activities would demonstrate a commitment on behalf of the relevant bodies to adopting the findings and facilitating implementation; institutionalisation of the process would show the findings and plans are valued and approach deemed suitable for other settings; successful outcomes and application of the process by participants to other issues would provide clear evidence of development impact and uptake. However, based on findings from other action planning initiatives and considering the nature of the action plan developed here and the complex physical, social and institutional setting of peri-urban Kolkata it was anticipated that implementation and adoption would only proceed if the proposed preliminary development activities showed promise.

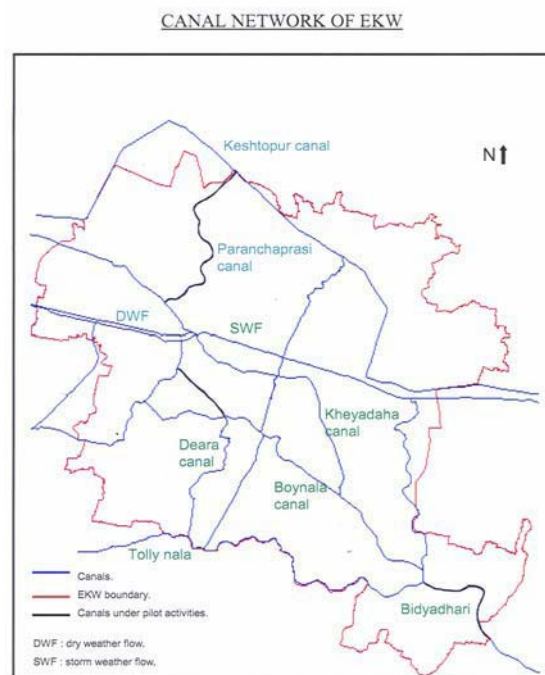


Figure 4.1. Canal network in the East Kolkata wetlands showing secondary canals assessed as preliminary development activities.

The initial selection of potential preliminary development activities was guided by some well defined criteria and it was proposed that the activity should: benefit several stakeholders, preferably from different user groups, simultaneously; be politically feasible, requiring permission from limited agencies; be technically and financially feasible; not impact negatively on others. A problem common to most stakeholders in several of the regions was the need to coordinate and carry out the desiltation of the feeder canal supplying their farms. Consequently, preliminary canal desiltation activities were identified in 3 different regions; Paranchaprasai khal supplying fish farms in the northern half of the wetlands; Boynala connecting canals supplying fish farms in the south; Bidyadhari canal which once served rice and fish farms in the south-east (Figure 4.1). In each case a workshop was arranged with stakeholders in the region and discussions guided by the STEPS methodology undertaken to explore the technical, financial, institutional, environmental and sustainability issues and conditions and agreements required for implementation. The following sections outline the methodology employed and key findings from this process and subsequent analysis.

#### 4.2.1. STEPS methodology

Meetings were arranged at a convenient and neutral place for all those with a stake in the proposed activity. The objectives of the meeting were explained, notably, that the outcomes of the activity would be used to demonstrate to Government agencies and potential sponsors that EKW stakeholder groups are committed to, and active in working together to solve the problems they face. Furthermore, that by starting with feasible activities there is more chance of demonstrating quick and beneficial progress. At the start of the meeting the objectives were described in more detail: to test the feasibility of proposed pilot activities (using STEPS); develop a better knowledge and data base to assist implementation; reach agreement on what happens next (when, how, why, who is responsible) and how to monitor progress and revise the plan as required; explain the role of the research team (facilitation and documenting).

During the group discussion the research team aimed to get information on: past planning initiatives on this topic (especially failures and conflicts); existing plans or ongoing work regarding this topic; associated data that could be used to support implementation. In this discussion it was important to remember to maintain a focus on the pilot activity and related matters. Participants were then encouraged to draw an outline map of the project area showing: where the planned work was to be carried out, and provide notes to annotate (including physical change required and technical or financial inputs needed). The map was also used to facilitate the identification of institutions and social groups that need to be involved or consulted or will be positively or negatively impacted, and explore why and where to locate them. The location of biodiversity rich areas that should be considered or monitored during implementation was identified and other potential positive and negative environmental impacts as a direct or indirect result of implementation highlighted. The extent of threats to continued usefulness and how to overcome these was also discussed.

Efforts were made to ensure that all stakeholders groups present at the meeting had the chance to comment at each stage of the discussion, the research team made notes on the quality of the discussion and tried to resolve differences. Areas of agreement and breakthroughs were highlighted and new issues arising that should be added to the STEPS analysis were noted. The primary aim of the meeting was to ensure that participants agreed what needed to be done urgently, what was needed in the short-term, or required long-term

(reasoning was noted and potential bottlenecks highlighted). It was also necessary to decide how to do these things, giving a broad perspective and agree about who would take responsibility for each task, when these things should be completed and how to monitor progress and revise the plan.

#### 4.2.2. Paranchaprasī khal desiltation

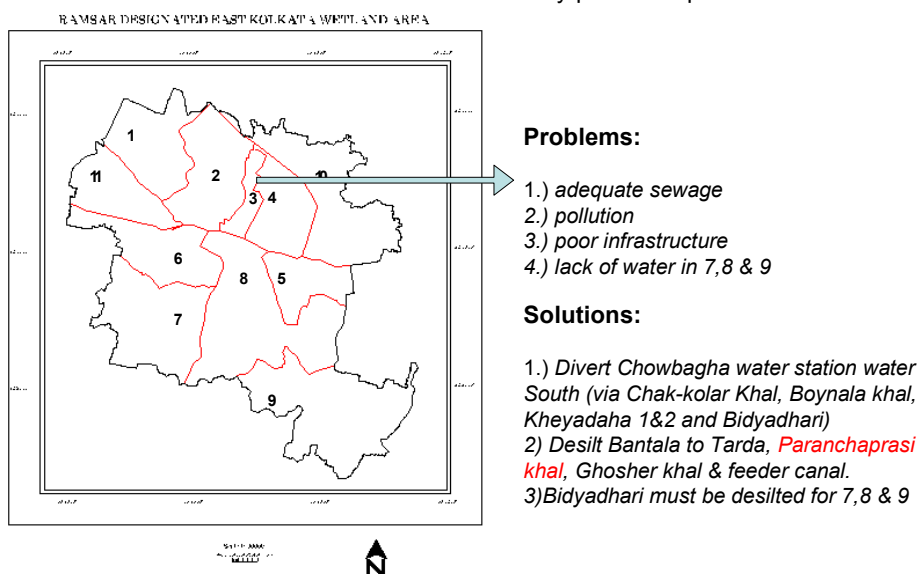
The workshop to discuss the initial stages of desilting the Paranchaprasī khal was conducted at the Khashmahal sporting club and was attended by 30-40 stakeholders; a more detailed report on the meeting is provided by Bunting, Kundu, Saha, Lewins and Pal (2005).

##### *Technical and financial considerations*

Estimates by the participants indicated that 10 fisheries covering an area of 1,000 acres, and the families that depend on them, would benefit from this work. Prior to starting work it was deemed necessary to conduct a hydrological survey (possibly with support of DGPS from IESWM) to ensure the canal configuration proposed and agreed during the STEPS workshop is a viable proposition. A need was also identified to verify that the design proposal to operate the canal to promote sedimentation prior to entering the fishponds is compatible with anticipated flow rates, and subsequently to estimate the time before re-excavation is required (this would help guide the level of funds collected from the fisheries). It would also be necessary to verify that drainage arrangements serving the fisheries are sufficient to cope with additional water. Participants also noted that desiltation should be prior to the monsoon and that potential sponsors of this activity would need to be approached to meet the full or partial costs of the work, on this point IESWM agreed to approach EKW Committee.

### Consultations with local stakeholders *Regions 3 & 4*

Locally-prioritised problems & solutions



*Institutional considerations*

Participants identified a need to get agreement from DoIW to retain or reduce the amount of money paid for irrigation system maintenance and to use these funds locally to improve and maintain the irrigation infrastructure; during the meeting IESWM undertook to facilitate this process. Consultation with all fisheries affected by the proposal was required to verify their agreement and agreement amongst the farmers on how to set up a joint fund to use for future canal maintenance was also needed. Participants also undertook to seek the agreement of the Panchayat and work with the project team to prepare and submit a report on the proposed activity to the EKW Committee. It was also noted that prior to commencing work it would be necessary to make arrangements with wage labourers to desilt the canal and reach an agreement with potential silt buyers.

*Social considerations*

Having identified that some people reside on or near to the canal embankments it was considered important to seek their agreement regarding the proposed work and possibly make arrangements for their relocation. A need was also identified to assess the likely impact of the work on poorer consumers, women, day labourers, people downstream and residents in Kolkata, including an assessment of possible changes in public health risks. Additional considerations were the need to make provisions for more employment and assess the impact on social capital of group formation.

*Environmental considerations*

The primary consideration identified during group discussions was to assess the possible localised environmental impacts of desiltation. Additional considerations included the need to assess the requirements for disposing of silt potentially contaminated with metal with WBPCB; assess likely improvement in the environment downstream; assess possible changes to environmental and animal health risks.

*Sustainability considerations*

The organisation and remit of four users groups with one representative from each fishery to coordinate management and maintenance of the respective canals requires further negotiation. Agreement is needed on the composition and remit of a higher level committee taking representatives from all fisheries supplied by the four canals to oversee all activities. Furthermore, agreement is required from EKW Management Committee on a mechanism to achieve formal links between this higher level fisheries committee and the proposed EKW Management Board.

*Feasibility assessment*

The feasibility of desilting the canal was dependent on achieving agreement concerning specific aspects from several agencies including the Panchayat, DoIW, farmers not represented at the meeting, and significantly people living on or near the canal embankment. The intention of the fish producers to retain the payment they are supposed to make to the DoIW for the wastewater they receive to pay for the future maintenance of

the canal appears to be a possible area of conflict<sup>14</sup>. The possible need to relocate or resettle people living on or near the embankment also constitutes a potentially controversial issue<sup>15</sup>. Although not raised in the meeting, during subsequent discussions it was questioned whether special arrangements would be required to dispose of the silt from the canal if it were contaminated with heavy metals or chemicals; IESWM undertook to investigate what legislation is in place and what implications this may have. Several practical issues also presented themselves during the meeting, a proposal was put forward to engineer the canal in such a way as to promote the settlement of silt here, before it entered the fishponds, it was acknowledged that the canal would require more frequent desiltation but this was considered preferable to permitting silt to enter the ponds. Although the proposal received widespread support the feasibility and recurring cost associated with such an approach should be assessed in more detail.

With an expected increase in the flow of wastewater down the canal following desiltation this also raises a question as to whether there is sufficient capacity downstream to drain away this excess water; altering the hydrology of this area, even restoring flow rates to what they were may have an impact on communities and user groups downstream and this should be assessed prior to implementation<sup>16</sup>. Another practical consideration is the need to conduct the desilting work prior to the monsoon; due to the timing of the STEPS activity no physical works will be possible until early next year, but this does provide an opportunity to ensure that all the issues raised are fully considered and addressed beforehand. Funding to implement the desiltation work is also required, as it would take the farmers several years to build up the necessary reserves<sup>17</sup>. Despite the attendance of three women at the STEPS workshop they were generally unwilling to discuss issues of importance to them in front of the male participants, some of whom were their employers. To ensure their voices were heard it was decided to conduct a separate workshop with women to discuss issues specific to the proposed desiltation work<sup>18</sup>.

#### 4.2.3. Boynala connecting canals desiltation

The workshop to discuss the initial stages of desilting the Boynala connecting canals was conducted in Bajbarontala and was attended by 15 stakeholders. Originally the workshop was intended to focus on desilting the Boynala khal, but following an early project meeting work had already been initiated by the local stakeholders to desilt this canal. A more detailed report on the meeting is provided by Bunting et al. (2005).

<sup>14</sup> A subsequent meeting arranged between the IESWM and DoIW clarified that the withholding of payment by the fish farmers for the sewage they receive (fixed at Rs 500 per acre for 6 months) has been ongoing for almost twenty years; a nominal amount of around Rs 5000 is collected annually. The DoIW indicated that there is little they can do in practice to persuade the farmers to pay.

<sup>15</sup> Discussion with a Panchayat member in region 4 suggested that the Panchayat could assist in relocating people from the canal embankment; resettlement of people from the larger canal embankments within the EKW under a ADB funded initiative has proved controversial and difficult, especially as ADB guidelines advocate resettlement within close proximity, but this is practically impossible in the EKW where development of new settlements is prohibited

<sup>16</sup> IESWM are currently conducting a hydrological survey of the entire EKW and the results from the work will be crucial in assessing the feasibility of the planned desiltation project and the likely impacts on downstream communities, users and environments

<sup>17</sup> During the government stakeholders workshop the Principal Secretary, DoE and leader ADB TA both mentioned that if suitable plan were forthcoming it may be possible to allocate some funds to support the desiltation of canals in the EKW. IESWM made an undertaking to investigate further these and other potential funding sources on behalf of the participants at the workshop.

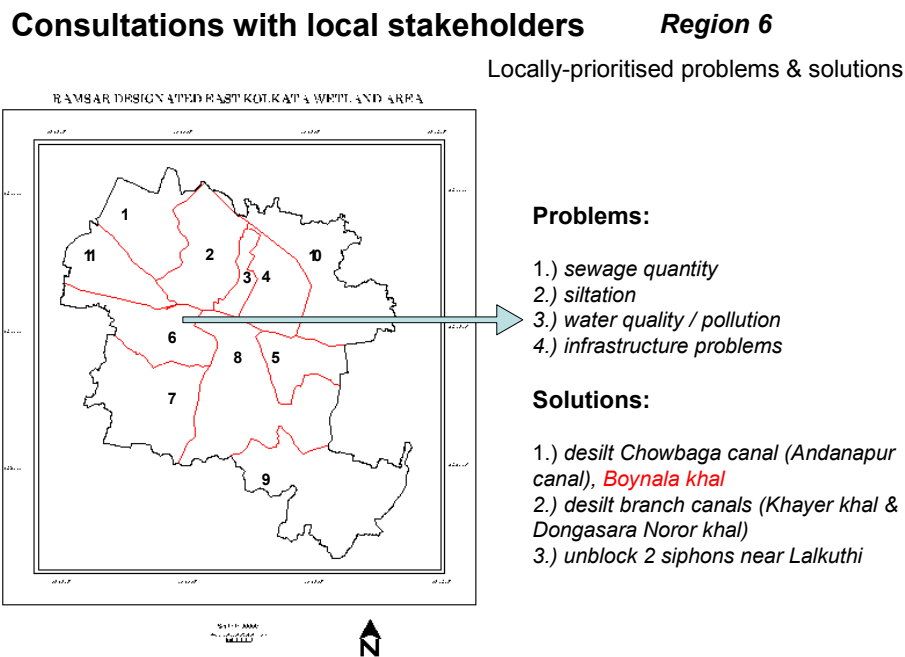
<sup>18</sup> A focus group with women was undertaken in region 4 to discuss the proposed desiltation

### *Technical and financial considerations*

Participants noted that desiltation will benefit areas of agricultural land and numerous fisheries. A hydrological survey is required to establish the extent of the work required<sup>19</sup>; the hydrological survey should cover the downstream system to ensure the drainage infrastructure is adequate. During the discussion it was suggested that two branch canals should be desilted in conjunction with the proposed work. The source of funds to conduct this work was not identified but desiltation should be undertaken prior to the monsoon.

### *Institutional considerations*

Consent is required from the Panchayat concerning the proposed desiltation work. Consent is also required from cooperatives and others who manage other fishponds in the area. Confirmation is needed from DoIW that they are agreeable to proposal<sup>20</sup>. Prior to starting work it will be necessary to ensure arrangements are made with wage labourers from outside EKW to do the desiltation work. Agreement is also required on how to dispose of silt outside the EKW.



### *Social considerations*

The impact on local communities will be significant, higher rates of fish production will help safeguard employment in the EKW. Possible impacts on women, vulnerable groups and communities downstream should be given consideration. Health risks to workers, and

<sup>19</sup> The coverage of the hydrological survey being conducted by IESWM will be modified to ensure it provides the information required prior to desilting; if feasible the canal design, that accommodates silt deposition, proposed by participants in the Paranchaprasai canal workshop may also be relevant

<sup>20</sup> Following discussion with the DoIW it appears consent from the DoIW is not necessary; written confirmation regarding the responsibilities of DoIW for canals in the EKW has been requested by IESWM on behalf of the participants and other stakeholders

possibly consumers, may change when more wastewater is used, measures should be taken to monitor this and act accordingly.

#### *Environmental considerations*

Localised environmental impacts of desiltation will be minimised through removing the silt from the EKW. Checks are needed to ensure that the contractor is responsible for making the appropriate arrangements for transporting and disposing of potentially contaminated silt with WBPCB.

#### *Sustainability considerations*

Agreement needs to be reached concerning the composition and function of a committee that was proposed to oversee the operation and maintenance of the canal. Broad consensus that canal desiltation and maintenance should be paid for in proportion to the area served was reached, but a formal agreement should be made; it was envisaged that desiltation would be required again in 5 to 7 years.

#### *Feasibility assessment*

Agreement was still required from other farm managers and cooperative leaders that were not represented at the meeting; consent for the proposed works from the Panchayat was also required. Both agreements should be possible at the local level without external facilitation. Written clarification has been sought by IESWM regarding the jurisdiction of the DoIW and whether their consent is required (Bunting et al., 2005). Formal agreement among all users is required regarding the collection of payments for the work. Information from the hydrological survey being conducted by IESWM should be useful in assessing the likely impact of the proposed desiltation work on communities and the environment downstream. Although not raised as an issue in the meeting, an assessment of settlements on or near the embankments could be undertaken in conjunction with the planned hydrological survey. A focus group with women would also be required prior to commencing work to verify that any potential negative impacts are fully assessed and appropriate action taken.

#### 4.2.4. Desiltation of the southern Bidyadhari and associated branch canals

The workshop to discuss the initial stages of desilting the southern Bidyadhari and associated canals was conducted at Pratapnagar; a more detailed report on the meeting is provided by Bunting et al. (2005).

#### *Technical and financial considerations*

Estimates by the participants suggested that farms covering over 1,000 acres and supporting several thousand livelihoods would benefit from this work. A hydrological survey is required to establish the extent of the work required<sup>21</sup>. During the discussion it was suggested that two branch canals and associated culverts should be renovated in conjunction with the proposed work. The hydrological survey should cover the

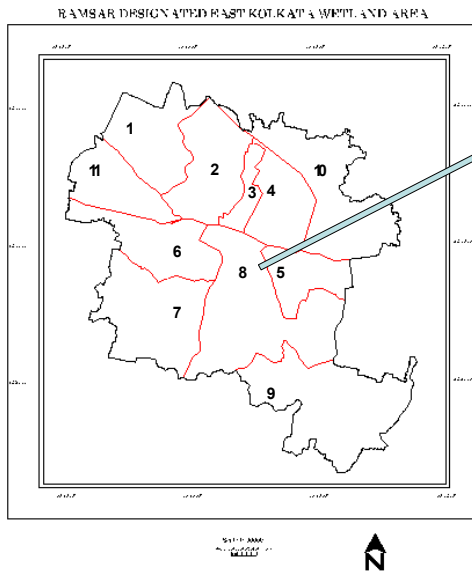
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<sup>21</sup> The coverage of the hydrological survey being conducted by IESWM will be modified to ensure it provides the information required prior to desilting; if feasible the canal design, that accommodates silt deposition, proposed by participants in the Paranchaprasa canal workshop may also be relevant

downstream system to ensure the drainage infrastructure is adequate. Soil excavated from the canal will be sold to the new town developers or used to consolidate low-lying land nearby. The source of funds to conduct this work was not identified.

**Consultations with local stakeholders**      **Region 8**

Locally-prioritised problems & solutions



**Problems:**

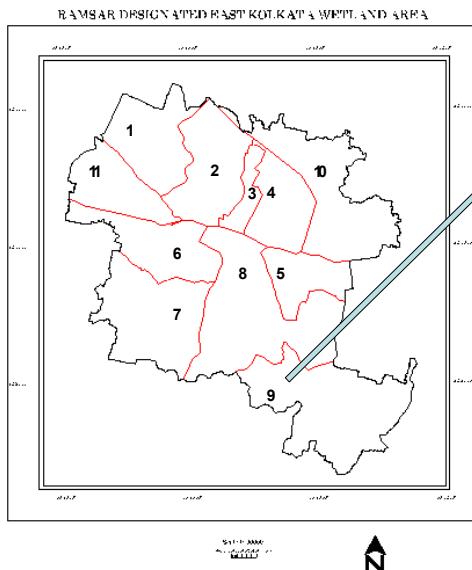
- 1.) sewage quantity
- 2.) siltation
- 3) Water quality
- 4.) infrastructure (roads) for desilting

**Solutions:**

- 1). *Desilt canal.*
- 2). Proper monitoring of sluice gate.
- 3). Pump sewage from main canal.
- 4.) Environment dept. should act'
- 5). Excavate a new canal.

**Consultations with local stakeholders**      **Region 9**

Locally-prioritised problems & solutions



**Problems:**

- 1.) lack of irrigable water
- 2) siltation. (bidyadhari canal)
- 3) infrastructure
- 4) Sewage quality.

**Solutions:**

- 1.)

*Institutional considerations*

Consent and assistance is required from the Panchayat and other farmers not represented at the meeting. Confirmation is required from DoIW that they are agreeable to the proposal<sup>22</sup>.

<sup>22</sup> Following discussion with the DoIW it appears consent from the DoIW is not necessary; written confirmation regarding the responsibilities of DoIW for canals in the EKW has been requested by IESWM on behalf of the participants and other stakeholders



*Social considerations*

Participants noted that the impact on local communities will be significant, higher rice and fish production will help enhance livelihoods in the southern EKW. However, possible impacts on women, vulnerable groups and communities downstream should be assessed. Health risks to workers, and possibly consumers, may change when more wastewater is used, measures should be taken to monitor this and act accordingly.

*Environmental considerations*

Localised environmental impacts of desiltation will be minimised through removing the silt from the EKW; where local disposal is required it should be ensured that no waterbodies are affected. Check that the contractor is responsible for making the appropriate arrangements for transporting and disposing of potentially contaminated silt with WBPCB.

*Sustainability considerations*

Agreement needs to be reached concerning the composition and function of a committee that was proposed to oversee the operation and maintenance of the canal. It was envisaged that desiltation would be required again in roughly 10 years and a mechanism is required to ensure that the users have access to sufficient financial reserves to ensure operation and maintenance in the future. The need for greater awareness in the local community concerning the importance of maintaining the canal infrastructure to safeguard the wetlands was highlighted; IESWM undertook to arrange for local signboards to be erected to raise awareness<sup>23</sup>.

*Feasibility assessment*

Consent is required from the local ruling party, Panchayat and other local stakeholders; these agreements will require a degree of negotiation but should be possible with limited external facilitation. As with the Paranchaprasa khal and Boynala connecting canal, written clarification has been sought by IESWM regarding the jurisdiction of the DoIW and whether their consent is required (Bunting et al., 2005). Agreement will also be required among all users regarding the formation of a users committee and basis and collection of payments for the work and future operation and maintenance. Information from the hydrological survey being conducted by IESWM should be useful in assessing the likely impact of the proposed desiltation work on communities and the environment downstream. Although not raised as an issue in the meeting, an assessment of settlements on or near the embankments should be undertaken in conjunction with the planned hydrological survey. Focus groups with women and vulnerable groups should also be undertaken prior to commencing work to verify that any potential negative impacts are fully assessed and appropriate action taken.

## 4.3. Conclusions

The first stage in implementing the water management action plan was to convene meetings of stakeholders, user group representatives and community members from 3

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<sup>23</sup> In total 7 signboards will be erected throughout the EKW to raise awareness in the local communities as well as informing those from outside the wetlands of their importance and status, in particular land developers and speculators

regions to discuss proposed preliminary development activities. The meeting was used to verify the feasibility of undertaking the activity as a pilot project; social, technical, financial, environmental, institutional and sustainability issues were considered. The feasibility study reported here was conceived to identify potential preliminary development activities that could be implemented within the lifetime of the current DFID project. By selecting 'feasible' activities there is more chance of demonstrating quick and beneficial progress that should encourage participants to address more complex issues.

The meeting helped facilitate the structured analysis of the conditions required for implementation and possible problems and bottlenecks. For each pilot activity several agreements and consents were deemed necessary. Practical issues such as the need for a feasibility study on the proposed design for Paranchaprasikhal and a hydrological survey (with reconnaissance to confirm the extent and location of settlements on or near embankments) were identified. Further assessment regarding possible negative impacts on women and vulnerable groups is required in all cases. During the STEPS workshop it was not always possible to reach agreement on the exact sequence of follow up activities and further work is underway to clarify this; a strategy is also being developed to monitor progress and ensure implementation is adapted and revised as required. Follow up meetings with stakeholders to discuss issues arising from the 3 STEPS workshop are ongoing. Dialogue with principal stakeholder groups that participated in the workshops is also continuing and progress with addressing the issues raised in the meeting is being monitored. Considering the need for further agreements and consents before desiltation can commence, uncertainty regarding several technical issues and funding sources, and the need for further consultation with vulnerable groups, especially women, none of the proposed preliminary activities are considered feasible within the current project. In all cases the local agreements required should be pursued, and where necessary appropriate problem solving and conflict resolution strategies, potentially involving external mediation or facilitation, should be invoked. Clarification has been sought regarding the consents that might be required from DoIW and WBPCB. Further work is needed to identify vulnerable groups (notably women and people living on or near embankments), to consult with them, and to identify acceptable resettlement strategies or steps to mitigate negative impacts.

The report compiled by Bunting et al. (2005) outlines the participatory planning process and demonstrates that such a process can highlight areas of concern, for example, the need to assess the likely impact on vulnerable groups, and the need for local level agreement between stakeholders (all user groups, Panchayat members, community-based organisations, political parties); elements that are frequently overlooked in technocratic and comprehensive planning approaches. Outcomes of this participatory planning activity have been communicated to potential sponsors of current and future activities (see Section 5), giving them access to a valuable knowledge-base to support implementation of the proposed pilot activities, and evidence that stakeholders in the wetlands are working together constructively to solve problems to encourage future investment for development. The report prepared by Bunting et al. (2005) also constitutes an important output as it will be submitted to the EKW Management Committee so they may draw on the findings presented to target resources at addressing the most pressing issues related to water management in the EKW. It is anticipated that the EKM will value this work, and advocate and adopt a similar process of participatory action planning in addressing future development activities in support of enhanced livelihoods for people living and working in the wetlands.

## 5. Communication strategy and outcomes

An external communication plan was developed for the project taking account of the project purpose, communication stakeholder needs, appropriate media and pathways, main messages to convey and cost implications of different strategies. The internal communication plan for the project was based on the exchange of information originating from process monitoring activities, facilitated through regular email contact, and project team meetings convened to monitor progress and coordinate activities. This strategy is discussed in more detail below and the resulting outcomes and impact described.

### 5.1. Preliminary communication plan

An initial communication plan for the project was formulated by the project team and was described by Pickstock (2004). In formulating this plan it was noted that the wastewater-based aquaculture and horticulture systems of the wetlands provide many benefits to Kolkata, including production of fish, vegetables and rice, employment to several thousand people, and health and environmental benefits. Although this long-established system provides many benefits, and yet functions at little or no cost, its continued viability is currently threatened by lack of investment in infrastructure (replacement pumps, canal desilting) and the legislation necessary to provide security of land tenure to farmers. A communication campaign was seen as crucial to inform the general public, including policy makers, of the significance of the wetlands, their benefits, and the urgent need for funding and legislation to ensure their continued efficient functioning. It was also considered important that communication outreach be developed to the farmers and traders. To optimise communication, it was seen as essential that very careful consideration should be given by the project team and researchers to the messages to be conveyed to the different target groups at local, national and international levels. That the messages must be simple, clear and free of non-essential detail that may confuse target groups; they should provide only information that the target audience or readership needs to know.

During discussions it was noted that the selection of communication channels, including media, would depend on their availability to the different target groups, and the preferences of the target groups. Also that some communication channels would be more costly than others and that the funds available for implementing the communication strategy would require that the project team prioritises the messages to be conveyed to the different groups to be targeted, and the communication channels to be utilised to obtain optimum impact with limited funds. It was noted that costs can be minimised by careful planning of a coordinated communication campaign, which allows for the messages designed for communication channels to be used as broadly as appropriate, thus avoiding the need and expense of re-inventing the wheel for different parts of the campaign.

While all the researchers and members of the project team agreed in broad terms about the communication needs of the project and the target groups, there were differences of opinion in the messages to be conveyed, the prioritisation of target groups and the action to be taken. There was also a recurring tendency to draw in detail, which individuals felt were important but which were not directly relevant to the messages required for target groups. For instance, there was a wish to include detailed statistics and dates, which only diluted or confused messages; and the mention that this is now a Ramsar Convention site was brought in, though Ramsar is not the main reason why the wetlands need protection. It was suggested that a logical framework approach would help everyone to contribute to,

question and agree each stage of communication strategy development, providing a visual matrix to cross-check for omissions, repetitions and to determine a logical flow of communication requirements and actions (see Table 5.1 and 5.2).

#### *Selection, composition and prioritisation of target groups*

Initially, three target groups were identified (local, national and international) but on discussion it was agreed that two of these groups required dividing further. The local group initially covered those stakeholders directly and indirectly involved with the wastewater fish and vegetable production (farmers and trade-related people), and the general public of Kolkata including the policymakers of Kolkata and West Bengal. Since these two groups have different interests and communication with them demands different messages, the group was divided into local stakeholder (within the wetlands) and local stakeholder (outside the wetlands). These two groups were considered to be the highest priority for action in the communication strategy. The international group was also seen to comprise two interests, a regional group in south and south-east Asia, interested to learn from and possibly apply some of the lessons from the wetlands, and a truly international group of donors, consultants and NGOs which could potentially provide funds and influence policymakers in GoI and GoWB. These two groups were subsequently identified as regional and international, respectively. The national group was considered the next highest priority after the two local stakeholder groups and the international group was a lower priority. The lowest priority was the regional group, since they could offer no potential financial contribution, influence or leverage to benefit the situation in the wetlands.

#### *Selection of media and language to address each group*

Initially, the local stakeholders within EK system were considered best approached through radio and street theatre, since they cannot afford TV and are largely illiterate. However, this was revised when it was decided that access to TV and video is possible through group watching (informally at *chai* house or formally in organised groups), and that print could be used through the medium of simple booklets designed for use in schools. It was agreed that Bengali was the obvious language for all channels directed to this group. The preferred media for the local stakeholders outside the wetlands were TV and press, with radio being used to reinforce messages. Depending on circumstances prevailing and the media used, the languages used would be Bengali, and to some extent Hindi and English. Preferred media for the national group were TV and press, with radio being used to reinforce the messages, the languages used would be Hindi and English, depending on the TV channel and newspaper carrying the message. After some discussion it was decided that the international group would be served most effectively through the internet (e.g. Urban Agriculture, New Agriculturist and project website), and articles in technical publications such as *Appropriate Technology* and *Waterlines*, English would be the most appropriate language. Media suggested for the regional group were TV and articles in the regional press where English would be the appropriate language. Comparative costs for media and different formats were discussed and an indication of the relative costs given (Table 5.2).

Table 5.1: Draft communication plan, identifying broad groups of communication stakeholders, appropriate media to reach them and main messages to convey

Group	Composition	Why targeted	Priority & Start date	Media	Lang- uage	Main messages
Local stakeholders (within EK system)	Fish, vegetable & rice farmers. Employees & traders.	Make aware of Action Planning Process and any new practices.	1= Mid-July	Radio TV Street Theatre Print	Bengali	1. Awareness benefits of working together with other groups & consequences of not working together. 2. How to go about bringing groups together harmoniously and productively. 3. Details and benefits of action plan developed by project
Local stakeholders (outside EK system)	Kolkata residents, including GoWB policymakers.	Make aware of importance of EK sewage-based system & apply pressure on local politicians.	1= Mid-July	TV Press Radio	Bengali Hindi English	1. Explain self interest to Kolkata residents: what happens to their waste & benefits of current system 2. Consequences of system breaking down and what is likely to lead to systems breakdown 3. What needs to be done to keep the system functioning?
National	General public in India, including Gov of India Policy makers.	Make aware of EK system & its significance nationally, apply pressure on Gov India politicians..	2 1 Oct 04	TV Press Radio	Hindi English	1. Point out even though other Indians don't live in Kolkata, Kolkata's approach to waste may also be of interest to them. 2. Kolkata system is old and in danger of breaking down: consequences to all of India if EK system breaks down 3. What is needed is political action from national and state level policymakers for legislation and funding for E Kolkata.
Regional	S & SE Asia Policymakers, Professionals & NGOs	To share lessons learned for replication elsewhere.	4 2005	TV Dev't & tech press. Internet	English	
Internat'l	Donors Consultants Int'l organizations- IUCN/WWF/FAO.	Create awareness To stimulate them to put pressure on policymakers & provide funds	3 1 Oct 04	.Internet. Dev't & Technical Press.	English	1. Unique resource recovery system in Kolkata wetlands. 2. Why and how system is replicable elsewhere. 3. Need for international organizations and donors to pressure GoI and GoWB policymakers to fund and legislate to ensure sustained functioning of EK wetlands under Ramsar.

Table 5.2. Draft communication plan outlining appropriate media channels and formats, comparative cost and priority for actions to be taken

Group	Composition	Media channels & formats to be used for each target group.	Comparative Cost	Action to be taken & names of media contacts
Local stakeholders (within EK system)	Fish, vegetable & rice farmers.	Print: Press conference (incl GoWB) for Press coverage. Booklet on EK System for EK schools.	*	1. Identify radio & TV broadcasters and meet them and brief them and give fact sheet
	Employees, traders	Opinion Poll on EK System + press coverage Street drama: for E Kolkata rural stakeholders. Poster drama: for E Kolkata rural stakeholders. Procession & Festivals: activities for EK stakeholders. TV: Documentary Serial	** * * * ***** ***** **	2. Identify street theatre troupe, meet them, brief them and give fact sheet 3. Confirm their interest and assure them assistance
Local stakeholders (outside EK system)	Residents of Kolkata, including GoWB policymakers.	Interactive current affairs progs Current Affairs news report of topical events. Radio: Ask local celebrity to record 'sound-bite' message that reinforces message in TV & print Print: Press conference (with GoWB) for Press coverage Opinion Poll on EK System + press coverage TV: Documentary Serial	** * * ***** ***** **	1. Identify appropriate press, TV, radio broadcasters, meet & brief them, give fact sheet 2. Confirm their interest and assure them assistance 3. Decide who & how many stakeholders to invite to meetings
		Interactive current affairs progs Current Affairs news report of topical events. Radio: Ask local celebrity to record 'sound-bite' message that reinforces message in TV & print Quiz programme in schools.	** **	4. Hold meetings & record stakeholder reactions
Regional	S & SE Asia Policymakers & professionals, NGOs	Print: Press release and / or articles with pics for International development and technical press Internet: Articles for New Agriculturist online Develop project website	* * **	
	Donors Consultants Int'l organizations (IUCN/WWF/FAO)	Print: Press release and / or articles with pics for International development and technical press Internet: Articles for New Agriculturist online Develop project website	* * **	1. Target specialist print and internet titles / sites (e.g. <i>New Agriculturist</i> , <i>ITDG Appropriate Technology / Waterlines</i> ) with good info / stories for them to use.

## 5.2. Revised communication strategy

Following a review by the NRSP programme managers, building on the initial communication plan (Pickstock, 2004) and following the guidelines provided by NRSP (2003) a revised communication plan was formulated. This was based on the aims of the communication plan in relation to the project purpose; range and composition of communication stakeholders; current knowledge, attitudes and practices of these stakeholders; what research products and other issues the project team needed to communicate about; what media and pathways were most likely to prove effective. This process was designed to enhance the likelihood that the project would have a significant impact on its diverse range of communication stakeholders.

### 5.2.1. Aims of the communication plan in relation to the project purpose

Short and long term aims for the project communication plan in relation to the project purpose ‘Generate new knowledge of action planning to implement natural resources management strategies for the PUI of Kolkata, that benefit the poor, formulated through extended interaction with principal stakeholders’ are summarised in Table 5.3. Existing knowledge and past experiences that were accounted for in the current project are outlined in Table 5.4.

Table 5.3. Short and long term communication aims for the project

Short term
- Ensure project team communicate and share information effectively
- Raise awareness among primary and key stakeholders of project and generate broad based support
- Encourage primary and key stakeholders to participate effectively in the action planning process and pilot-scale interventions
Long term
- Raise awareness of lessons learned regarding the process of action planning and pilot-scale interventions with poor communities, urban and rural government agencies and other stakeholder in peri-urban areas
- Provide stakeholders in India and globally with the knowledge required to adapt and implement a participatory action planning approach in other PUI or wetland contexts

Table 5.4. Communication and previous projects

Project	Link to R8365 CP
AFGRP PD ‘Constraints and opportunities to wastewater aquaculture’	Dialogue with many stakeholders surrounding important issues of NR management in PU Kolkata was established during this activity.
R7872 ‘Renewable natural resource-use in poor livelihoods at the Kolkata PUI’	Communication stakeholders were identified and appropriate communication pathways and materials for NGOs, government agencies, fish farmers and the scientific community identified (Bunting et al., 2001).
R8195	Adapts methods for process monitoring of institutional relationships and linkages - internal communication tools to record and interpret positive and negative change
R7562	Builds on PAPD methodology used principally at horizontal, local level with rural primary stakeholders. Consensus building principles used in context of developing action plan in PU setting (a complex physical, social and institutional environment)

Responsibility for the implementation of the communication plan was shared among the project team members (Table 5.5), however, responsibility for specific tasks such as the development of an appropriate mechanism for internal communication was allotted to individuals with the appropriate expertise. Implementation of the communication plan and its component parts outlined in Table 5.5 was monitored and evaluated throughout the project.

Table 5.5. Responsibility for communication plan implementation within the project team

What needs to be done	Who by	When
Identify research outputs	Research team	RD1 onwards
Develop appropriate tools for internal project communication	Process monitoring expert	Inception phase
Identify communication stakeholders and appropriate media	Communication expert	Inception phase
Meet or develop media with local stakeholders	Research team	Start extension phase
Meet or develop materials for national, regional and international stakeholders	Research team	As research and communication outputs arise
Monitor and review progress and impact of communication plan	Research team	As new knowledge of value to stakeholders is generated Throughout project

Following on from the initial communication plan it was felt necessary to disaggregate the communication stakeholders further and to elucidate why they were considered important to the project. The communication stakeholders were further disaggregated according to the short and long term aims of the communication plan (see Table 5.6 and Table 5.7, respectively). Actions to ensure communication materials contained relevant information, were in a language that could be easily understood and were accessible to those with whom the project team wished to communicate during and after the project were identified by the project team. The first step was to verify with communication stakeholders their demands for information; it was recommended that draft materials and concepts should be pre-tested with sample of communication stakeholders and that where possible support should be given to community members developing their own communication outputs.



Table 5.6. Communication stakeholders and why they are important for the short term aims of the project

Communication aims related to stakeholders	Communication stakeholders	Why important to project
Short term aims	Agricultural workers	Depend on paddy farming in the wetlands
	Horticultural workers	Depend on vegetable production in the wetlands
	Fish farm labourers	Depend on fish production in the wetlands
	Fish farm managers	Depend on fish production and have a role to play in managing water in the wetlands area
	Save Wetlands Committee	Members are primary stakeholders; organisation with broad support in wetlands area
	Fish Producers Association	Represents farmers who manage a significant area of water bodies in the wetlands
	CITU	Members are primary stakeholders; influential body in wetlands area
	Agricultural Development Officers	Responsible for supporting development in agricultural areas
	Kolkata Metropolitan Development Authority	Responsible for operation and maintenance of drainage infrastructure in KMC area
	Department of Irrigation and Waterways	Responsible for primary drainage system passing through wetlands and associated sluice gates
	Department of Environment	Responsible for the formulation of the wetlands management plan
	West Bengal Pollution Control Board	Responsible for monitoring pollution and the quality of water discharged from Kolkata
	Department of Fisheries	Provide guidance to cooperative fisheries, manage some fisheries in the wetlands and provide advice on technical aspects of fish production
	Kolkata Municipal Corporation	Powerful urban authority with administrative responsibility in part of the wetlands, and significant land ownership
South and North-24-District Authorities	Powerful rural authority with administrative responsibility in part of the wetlands,	
Salt Lake Authority	Powerful urban authority with administrative responsibility in part of the wetlands	
Asian Development Bank and DFID-India	Involved in ongoing infrastructure development projects focused on wastewater treatment that may impact on wetlands	

Table 5.7. Communication stakeholders and why they are important for the long term aims of the project

Communication aims related to stakeholders	Communication stakeholders	Why important to project
Long term aims	*groups mentioned above	Process could be employed in future negotiations
	Peri-urban communities around Kolkata (not involved in R8365)	Process could be adopted in addressing other issues e.g. service provision, infrastructure development, livelihoods diversification
	PU & wetland communities in West Bengal, India and globally	Process could be used by communities for action planning to enhance poor livelihoods in other PU situations
Stakeholders in India and globally that could benefit from new knowledge on PU action planning		Knowledge of process could be used to implement participatory action planning in other PU settings and to raise awareness

The research products and other issues that the project team needed to communicate about with the communication stakeholders are summarised in Table 5.8.

Table 5.8. Linking research products to stakeholders for whom they are relevant.

Communication stakeholders	Research products			
	Review on PU process monitoring	Draft Water Management Action Plan for 11 regions	Report on action plan development & preliminary implementation	New knowledge on PU PAP in West Bengal and India
Agricultural, fish farm, horticultural workers		X	X	
Save Wetlands Committee		X	X	X
Fish Producers Association		X	X	X
CITU		X	X	X
Agricultural Development Officers		X	X	X
Kolkata Metropolitan Development Authority		X	X	X
Department of Irrigation and Waterways		X	X	X
Department of Environment West Bengal Pollution Control Board	X	X	X	X
Department of Fisheries	X	X	X	X
Kolkata Municipal Corporation		X	X	X
North & South-24-District Authority & Salt Lake Authority		X	X	X
Asian Development Bank & DFID-India	X	X	X	X
Peri-urban communities around Kolkata (not involved in R8365)		X		X
Peri-urban and wetland communities in India and globally		X		X
Stakeholders in India and globally that could benefit from new knowledge on action planning	X	X		X

The knowledge, attitudes and practices (KAP) of communication stakeholders in relation to the products to be promoted at the MTR stage of the project is presented in Table 5.9.

Table 5.9. Current knowledge, attitudes and practices (KAP) of the communication stakeholders

Communication Stakeholder	Knowledge of participatory action plan development	*Attitude toward PAP	Practice of participatory action plan development
Agricultural workers	Awareness among some farmers involved in PAP activities	+++	Some farmers involved, but small proportion of total
Horticultural workers	Awareness among some labour union members	+++	Some union members participating in process
Fish farm labourers	Awareness among some labour union members (~40%)	+++	Some union members participating in process
Fish farm managers	Awareness among some FPA members	+++	Farm workers participating in project, but not used previously
Save Wetlands Committee	Aware of ongoing PAP process	++++	Participating in current project but not used previously
Fish Producers Association	Aware of ongoing PAP process	++++	Participating in current project but not used previously
CITU	Aware of ongoing PAP process	++++	Participating in current project but not used previously
KMDA	Aware of ongoing PAP process	++	Action planning used in CEMSAP project (degree of participation unclear)
DoIW	Aware of ongoing PAP process	++	Participant in selected PAP activities
DoE	Aware of ongoing PAP process and worked on PD112	++++	Facilitating and participating in ongoing PAP process
WBPCB	Aware of ongoing action planning process	++	Participant in selected PAP activities
DoF	Aware of ongoing process and consulted in PD112	++	Participation limited
KMC	Aware of ongoing action planning process	++	Participation limited
N & S-24-District & Salt Lake Authority	-	++	Participation limited
Asian Development Bank [TA]	Aware of PAP approach being developed	+++	Participating in project activities and demand expressed for further information / cooperation
DFID-India	Aware of ongoing PAP through meeting, project reports and ongoing dialogue	++	Demand expressed for further information / cooperation
USAID	Aware of ongoing process	+	
PUI / wetland communities and NGOs in WB (not in R8365)	Good awareness among NGOs that have attended project workshops	++	Participation limited
PUI and wetland communities in India and globally	Very limited (a few communities participating in other projects aware of PAP)	+	
Stakeholders in India and globally that could benefit from new knowledge on PU PAP	Very limited		

\*Attitudes: + aware, ++ supportive, +++ positive and active in process, ++++ very positive

Building on the preliminary plan (Section 5.1) media and channels regarded as appropriate to reach the various communication stakeholders in relation to the research products (i.e. what is accessible to them, what are their preferences, what can be sustained after the project is over) are presented in Table 5.10.

Table 5.10. Media and channels regarded as appropriate for the communication stakeholders

Group	Composition	Media channels & formats appropriate for each group
Primary stakeholders	Fish, vegetable & rice farmers. Employees and traders. Community members	Field visits / farm walks Project meetings Presentations and representation at social / political gatherings Participatory research activities (e.g. mapping, focus groups) Project workshops Print: Press conference for media coverage. Bengali booklet on EK System for EK schools. Opinion Poll on EK System + press coverage Bengali street drama (for East Kolkata communities) Poster drama (for East Kolkata communities) Procession & Festivals: activities for EK stakeholders. TV: Documentary or Serial Interactive current affairs programmes Current Affairs news report of topical events. Radio: Ask local celebrity to record 'sound-bite' message that reinforces message in TV & print Quiz programme in schools.
Key stakeholders	GoWB agencies Kolkata, Salt Lake S/N-24-Parganas authorities Stakeholder representatives NGOs DFID-India	Project meetings Telephone calls Project workshops Representation and discussion at apex meetings Press conference for media coverage Print: Project reports Draft and final action plans Presentations Internet: project website, including project reports and updates with project activities
Regional	S & SE Asian policymakers, professionals, intergovernmental orgs & NGOs	Print: Press release and / or articles for international development and technical press Project reports Internet: Project website Articles for online magazines (e.g. Urban Agriculture) Contributions to email conferences Presentations at conferences in region
Internat'nal	Donors (ADB, USAID, WB) & consultants International organizations (IUCN, Ramsar, WWF, FAO, UN)	Print: Press release and / or articles for international development and technical press Project reports Internet: Project website Articles for online magazines (e.g. Urban Agriculture) Contributions to email conferences Presentations at international conferences

Following the detailed review of possible communication activities and materials and pathways appropriate for communication stakeholders it was necessary to consider which of these activities it would be possible to undertake within the project budget (Table 5.11).

Table 5.11. Comparative costs of media channels and formats and coverage by the project budget

Group	Composition	Media channels & formats to be used for each target group.	Comparative Cost	Comments in relation to project budget
Local stakeholders (within EK system)	Fish, vegetable & rice farmers. Employees and traders. Community members	Meetings	**	6 working group meetings in budget
		Print: Press conference for media coverage	*	Cost not included
		Bengali booklet on EK System for EK schools	**	Bengali leaflet included in costs
		Opinion Poll on EK System + press coverage	*	Cost not included
		Bengali street drama (for East Kolkata communities)	*	Cost not included
		Poster drama (for East Kolkata communities)	?	Cost not included
		Procession & Festivals: activities for EK stakeholders	*	Cost not included
		TV: Documentary or Serial	*****	Cost not included
		Interactive current affairs programmes	**	Cost not included
		Current Affairs news report of topical events.	*	Cost not included
Local stakeholders (outside EK system)	GoWB agencies Kolkata, Salt Lake S/N-24-Parganas authorities Stakeholder representatives NGOs DFID-India S & SE Asian policymakers, professionals, intergovernmental orgs & NGOs Donors (ADB, WB) & consultants International organizations	Radio: Ask local celebrity to record 'sound-bite' message that reinforces message in TV & print	**	Cost of radio broadcast included in budget
		Quiz programme in schools	*	Cost not included
		Meetings	**	6 working group meetings in budget
		Telephone calls	*	Cost included in overhead
		Workshops	*****	Cost of workshops not included
		Press conference for media coverage	*****	Two communication workshops in budget
		Print: Project reports	**	Cost included in budget
		Draft and final action plans	*	Cost included in budget
		Internet: project website, including project reports and updates with project activities	**	Cost to March 2005 included in budget
		Print: Articles for international development and technical press	**	Cost not included
Regional	S & SE Asian policymakers, professionals, intergovernmental orgs & NGOs Donors (ADB, WB) & consultants International organizations	Internet: Project website	**	Cost to March 2005 included in budget
		Articles for online magazines (e.g. Urban Agriculture)	*	Cost not included
		Contributions to email conferences	*	Cost not included
		Presentations at conferences in region	***	Cost not included
		Print: Articles for international development and technical press	**	Cost not included
		Internet: Project website	**	Cost to March 2005 included in budget
		Articles for online magazines (e.g. Urban Agriculture)	*	Cost not included
		Contributions to email conferences	*	Cost not included
		Presentations at international conferences	*****	Cost not included

### 5.3. Communication outputs and impact

#### 5.3.1. Internal communication

The internal project communication strategy depended largely on the effective documentation and exchange of information from field workers and local partners regarding their interaction with various stakeholder groups to the rest of the project team. Pro-formas developed for this purpose ensured that this element of communication was well structured, consistent and undertaken in a timely fashion. Other key elements of the internal communication strategy included: email and phone calls; process monitoring outputs; meeting and workshop reports; project management coordination meetings and visits. Internal reports e.g. Pickstock (2004), Lewins (2004), Quarterly reports, Milestones and spending forecasts, Annual reports, pre-MTR and pre-FTR reports and the PCSS and FTR report were used to facilitate internal communication regarding progress and findings between the project team and NRSP programme managers.

#### 5.3.2. External communication

Key elements of the external communication strategy included: identification of short and long term communication aims; identifying communication stakeholders; assessment of existing knowledge, attitudes and practices; assessing communication objectives; identifying appropriate media and pathways; assigning responsibility for activities (see Section 5.2).

##### *Local communication*

Participation of stakeholders at all stages of the research process was a central tenet of the local communication strategy aimed at raising awareness; facilitating stakeholder involvement in planning; promoting mutual understanding and benefits of working together. Target institutions were primary and key stakeholders in PU Kolkata, District and State level government agencies, NGOs and Development agencies. Activities included informal meetings and problem census; 11 regional workshops; attendance at meetings organised by key stakeholder representatives; 3 workshops for Government agencies, key stakeholders and NGOs; a general stakeholder workshop; bilateral meetings with State level agencies; 3 STEPS workshops and subsequent follow-up; focus group discussions. In addition a series of three project briefings, providing updates on action planning activities and the selection and implementation of pilot-scale development activities in the East Kolkata Wetlands was produced, these bulletins were given to participants and were made available on the website.

##### *Regional and international communication*

Project technical reports (Bunting et al., 2004; Bunting et al., 2005; Lewins, 2005a and 2005b) were produced to help raise awareness of the process and findings and contribute towards the institutionalisation of participatory action planning; target institutions included state and national level government agencies, policy-makers and planners, researchers and development practitioners in West Bengal, India and globally. A paper by Kundu, Pal, Chaudhuri and Bunting (2004) entitled 'Evaluating participatory action plan development in formulating sustainable management strategies for peri-urban areas, with emphasis on the East Kolkata wetlands' was presented at the 7<sup>th</sup> Asian Fisheries Forum and resulted in very positive feedback, including an invitation to 4-5 project team members to participate in a regional workshop in Dhaka, Bangladesh during November 2005. This workshop is being

organised by ITDG and DFID AFGRP which will focus on peri-urban aquatic food production and its role in sustaining and safeguarding poor livelihoods. An invited presentation entitled 'East Kolkata Wetland - an experience for preparation of conservation plan' was delivered by Dr Kundu at the Asian Wetland Symposium 2005 which focused on 'Innovative Approaches to Sustainable Livelihood' (Kundu, Bunting, Pal, Saha and Halder, 2005). Dr Kundu also made a trip to the UK where he was able to meet and talk with other researchers based at Stirling working on aquatic peri-urban production systems, visit the WWT reserve at Welney and talk to senior WWT staff at Slimbridge to discuss the management and development of the trust and its reserves.

The project website has attracted around 350 hits per week, and resulted in a number of enquires from India and elsewhere, including an invitation by IWIM-India to publish an article on the project in a forthcoming edition of the journal Urban Agriculture focused on urban aquaculture. Subsequently, drawing on preliminary findings from the experience of participatory action planning in a peri-urban setting a paper entitled 'Planning for aquatic production in East Kolkata Wetlands' was published in Urban Agriculture (Kundu, Halder, Pal, Saha and Bunting, 2005). Another paper aimed at engineering, sanitation and water resources management professional entitled 'Wastewater aquaculture and livelihoods in peri-urban Kolkata' was published in Waterlines (Bunting, 2004a). A third paper entitled 'Household livelihoods in peri-urban Kolkata: constraints, opportunities and coping strategies' (Punch and Bunting, forthcoming) has been submitted to the journal Aquatic Resources, Culture and Development for review. During the course of the project a paper building on outputs from R7872 entitled 'Wastewater aquaculture: perpetuating vulnerability or opportunity to enhance poor livelihoods?' was also published in the journal Aquatic Resources, Culture and Development (Bunting, 2004b). Recent research findings from work supported by NRSP in Kolkata also contributed to a datasheet on peri-urban issues for the forthcoming CAB International Aquaculture Compendium.

The project website continues to attract a good deal of attention and on the basis of visiting the website a journalist working for Ecotippings contacted the coordinator and arrangements were made for her to visit the project team and wetlands, findings from the visit will be used in a forthcoming book. RTI International also visited the website and as a consequence requested selected team members to join a consortium preparing a bid for a forthcoming USAID project, part of which will focus on the East Kolkata Wetlands.

### 5.3.3. Communication outcomes

Coverage of the teams work in an article written by Tony Juniper, Executive Director, Friends of the Earth, in The Guardian (2004) newspaper was welcomed, and demonstrated that outputs from the teams work in Kolkata are reaching key stakeholders outside West Bengal and India. Quoting from the article, Juniper notes:

'Sustaining this unique system should be a priority for policy makers, and researchers, including a group from the University of Stirling, are embarked on that process. If the lives of the people and the economy of this place can be better understood, then perhaps their welfare can be improved, alongside moves toward long-term sustainable management.'

In West Bengal, submission of a Constitutional Writ Jurisdiction to the High Court at Calcutta by the Department of Environment, Government of West Bengal that cites the example of the

11 regional workshops and subsequent meetings with stakeholders, NGOs and various Government Departments facilitated by the project and draws on findings from the current project in an attempt to better conserve, manage and develop the East Kolkata Wetlands demonstrates that the project is valued at the State level and contributing to the enhanced management of natural resources upon which poor people depend. The Writ also highlights the need for a Board or Authority to oversee the management of the area and that representatives from local NGOs and user groups should be included. Communication of project outputs, notably the report on the STEPS workshops facilitated by the project to the EKW Management Committee is expected to ensure that future development initiatives in the wetlands are focused on some of the key priorities for poorer stakeholder groups and that participatory planning approaches are adopted in the future.

Dialogue and meetings between project team members and Mr Das the West Bengal state representative for DFID-India provided opportunities to introduce the project, describe planned activities and outline anticipated outcomes. Mr Das agreed to participate in project activities and where possible provide assistance in promoting project outcomes with appropriate development agencies. Mr Das also agreed to explore the possibility of accessing support from DFID-India for the implementation of plans for action originating from the project.

Several meetings were held with ADB [TA-3423-IND] team members working on a wetland inventory for West Bengal, one element of which related to a conservation plan for the EKW. ADB team members participated in two of the major workshops and showed a commitment to the participatory action planning. Dialogue established with the team also provided an opportunity to influence future activities relating to the management of the East Kolkata wetlands and wastewater originating from Kolkata so that poor peoples livelihoods are safeguarded and enhanced. Support has been provided by the project team to DoE and ADB in integrating project findings, the planning approach and pilots into the EKW management plan being prepared as part of ADB [TA-3423-IND].

The value the Department of Environment, Government of West Bengal associates with outcomes of the current project was also highlighted recently in a Statement Of Work developed by USAID in consultation with the West Bengal State government which stated that future work in the wetlands should utilise the results of the current project. Furthermore the IESWM, WBPCB and DoE Principal Secretary's Office have endorsed and support the use of participatory action planning in the future (Bunting et al., 2005).



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