Government of the People's Republic of Bangladesh
Ministry of Irrigation, Water Development and Flood Control
Bangladesh Water Development Board
Flood Plan Coordination Organization

COMPARTMENTALIZATION PILOT PROJECT

GUIDELINES ON PEOPLE'S PARTICIPATION IN PLANNING & DESIGN PHASE

May 1994

GD 02

Euroconsult/Lahmeyer International/Bangladesh Engineering & Technological Services/House of Consultants

under assignment to

DIRECTORAAT GENERAAL INTERNATIONALE SAMENWERKING
Government of the Netherlands

and

KREDITANSTALT FÜR WIEDERAUFBAU
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OF
COMPARTMENTALIZATION

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APPENDICES

ABBREVIATIONS

BRDB	-	Bangladesh Rural Development Board
BWDB	-	Bangladesh Water Development Board
CPP	-	Compartmentalization Pilot Project
CWMC	-	Compartmentalization Water Management Committee
DAE	-	Department of Agricultural Extension
DOF	-	Department of Fisheries
DPHE	-	Department of Public Health Engineering
EMG	-	Earth Maintenance Group
FFYP	-	Fourth Five Year Plan
GO	-	Government Organizations
GOB	-	Government of Bangladesh
HYV	-	High Yielding Varieties
LCS	-	Landless Contracting Societies
LGED	-	Local Government Engineering Department
(M)BSS	-	(Mohilla) Bittahin Samabaya Samiti (female assetless coop. society)
NAS	-	Needs Assessment Survey
NGO	-	Non-Government Organization
RRA	-	Rapid Rural Appraisal
(SC)WMC	-	(Sub-Compartment) Water Management Committee
SRP	-	Systems Rehabilitation Project
ToR	-	Terms of Reference
WUG	-	Water Users Group
XEN	-	Executive Engineer
FAP	-	Flood Action Plan
O&M	-	Operation & Maintenance
FPCO	-	Flood Plan Coordination Organization
FCD/I	-	Flood Control Drainage/Irrigation
Ha	-	Hectare
DW	-	Deep Water
T.Aman	-	Transplanted Aman
WAPDA	-	Water And Power Development Authority
BRE	-	Brahmaputra Right Embankment
STW	-	Shallow Tube Well
FP	-	Family Planning
NA	-	Not Applicable
TCCA	-	Thana Central Cooperative Association

1 INTRODUCTION

1.1 Background to compartmentalization

One of the cornerstones of the Flood Action Plan is the plan to divide the protected floodplain into a series of adjoining compartments. A compartment is defined as follows:

> *"A compartment is an area in which effective water management, particularly through semi-controlled flooding and controlled drainage, is made possible through structural and institutional arrangements. Compartmentalization is linked to area development with sound water management as the main agent. A compartment will be sub-divided into sub-compartments and operational water management units."*
> [TANGAIL INTERIM REPORT, p 24.]

According to the FAP 20 Terms of Reference the overall objective of compartmentalization is:

> *"... to provide, through water management, a more secure environment for intensive agriculture, fisheries and integrated rural/urban development, and thereby improve the economic security and quality of life of the floodplain population."* [ToR, p. 3]

The compartment development is now being carried out in Tangail and Sirajganj CPP areas. The operation of compartment and testing of compartmentalization will subsequently be done. The testing includes a combination of structural and non-structural interventions. The structural elements enable water management while the non-structural elements are to ensure the use of the structural elements in such a way that maximum social benefit can be derived.

1.2 Purpose, scope and status of these guidelines

To achieve sustainable development through water management the FAP ToR puts much emphasis on people's participation and its institutionalization:

> *"The compartment is basically a management unit in which the involvement of beneficiaries is considered essential for its success". [ToR,p.3].*

"The non-structural output which constitute the basic objectives of the Pilot Project will cover the following:

.....

2. Social Aspects

Policies and Guidelines of involving the scheme beneficiaries an disadvantaged groups in the planning and implementation of physical works and their management

...

4. Institutional Arrangements

Policies and Guidelines for strengthening existing institution and/or establishing new ones for the management of compartments or sub-compartmental development with the emphasis on local government and beneficiary participation ... [ToR,p.6,7]

Accordingly one of the main outputs of field testing compartmentalization in the Tangail and Sirajganj projects is to prepare guidelines on different aspects of compartmentalization. These guidelines are to be made available to other FAP components (for implementation).

FAP 20 has recently completed the major part of the planning and initial design phase in both project areas. Though this only covers part of the project cycle (see section 2.2), a major part of people's participation planned during the project cycle is concentrated in this phase. It is therefore felt appropriate to draw together the acquired experience and make it available in this paper.

The purpose of this paper is to share with all concerned the experience to date, and provide opportunity for feed back. On the basis of such feed back and un-folding of people's participation in the remaining phases of the project, following guidelines will be developed and adjusted in due course.

The ToR puts much emphasis on people's participation and its institutionalization in all phases of the project. This includes planning and design, implementation and operation and maintenance. Ultimately FAP 20 will produce guidelines on all these phases. For the time being, the scope of the paper is therefore developed for the planning and design of the project.

1.3 Organization of the Guidelines

In Chapter 2 an overview is given of people's participation in the different phases of the project, as originally planned. This is followed by a description of what actually happened to date in Tangail and in Sirajganj CPP areas. The section is concluded by a summary of the lessons learned and recommendations. In Chapter 3 the methodology of the needs assessment is explained. The conclusions drawn from the process are then summarized.

Chapter 4 deals with the consultation process as originally planned and as executed. The experience gained from this phase is then drawn together at the end of the chapter. Finally in Chapter 5 a look-back at the process to date is presented and some conclusions are drawn as to project management related issues. Appendices are added on specific subjects.

2 OVERVIEW OF PEOPLE'S PARTICIPATION IN THE PROJECT CYCLE

2.1 What is meant by "People's Participation"?

Nowadays it is hard to find anyone in the field of development who does not adhere to the need for more "people's participation" in the field of development. Government officials, desk officers from donor agencies, engineers, bureaucrats, ministers (see Third FAP conference held in May 1993), elected representatives, consultants, they all agree; people's participation is a must!

Agree, that is, on those two words; "people's participation". But when it comes to implementation, it is obvious that there are widely diverging views on what those words really mean.

To some "people's participation" means empowerment. One of the basic assumptions is that most people are poor and they lack the power to influence the direction and speed of their own development. Therefore people must get together and decide for themselves what kind of change they want. Traditionally the authority to decide on what should be done lies (partially or fully) with people outside the affected communities, ie with government staff, development planners, donors and their representatives. From this point of view people's participation involves a reshuffling of the decision making process between the authorities who now control development and those who are meant to benefit from such change.

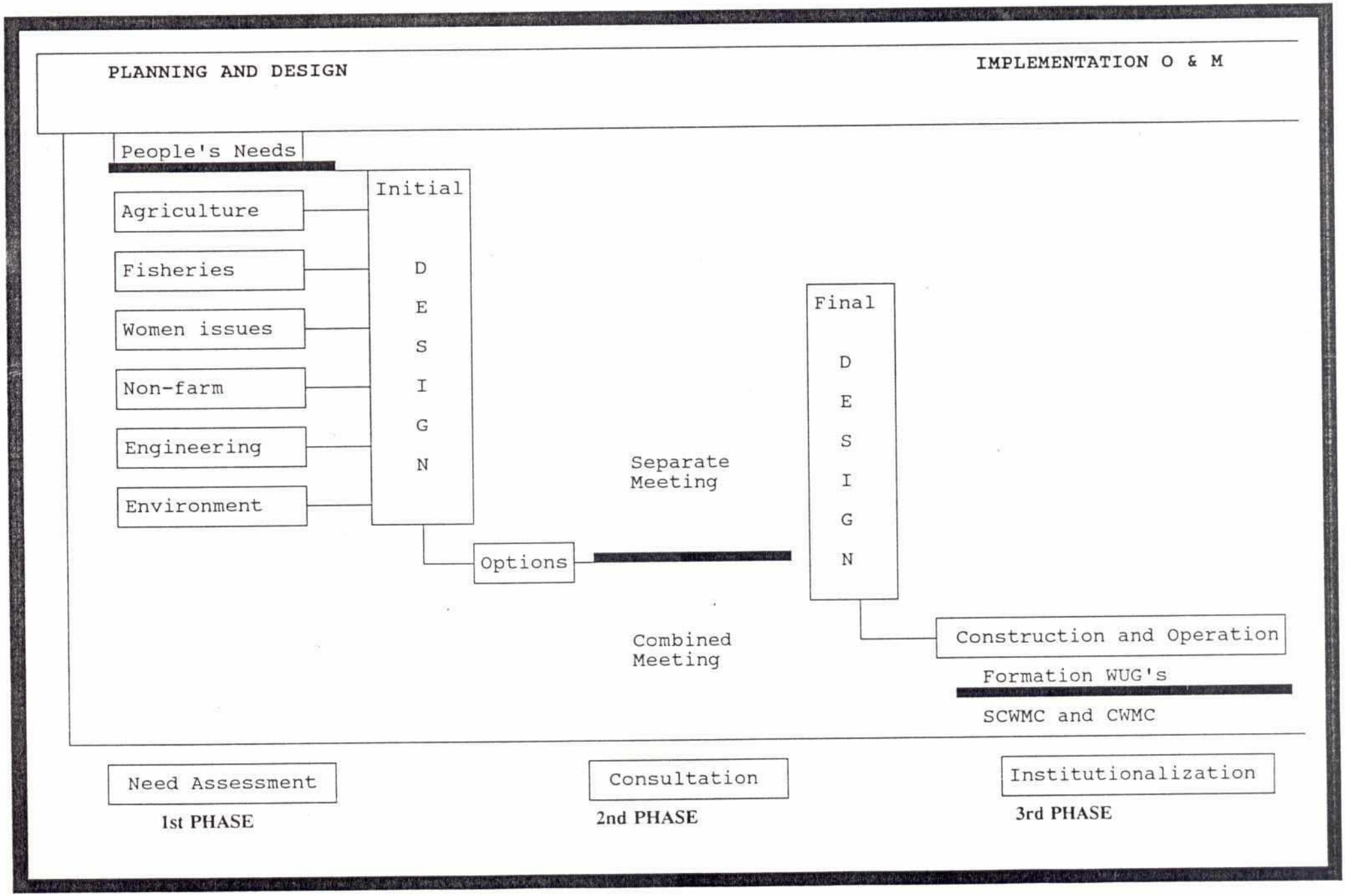
Many others have a rather different view. In their view specialists and elected representatives are equipped and entitled to draw up and decide on the development of a country. They believe that in the past the intended beneficiaries were not involved enough in development, and for that reason many projects did not yield the expected benefits. It is also applicable for many WDB projects. Some top officials of WDB mentioned at different times in different meetings/seminars that one of the major reasons of the failure of their several projects is due to lack of proper people's participation in those projects. It is also evident from the recent FAP evaluation that to ensure sustainable flood control, drainage, water development planning and management, involvement of local people is a must. Therefore, the Flood Plan Coordination Organization (FPCO) in their "Guidelines on People's Participation" strongly recommended for people's participation in all phases of a project cycle in order to maintain the derived benefits (development) of the projects sustainable. Now "people's participation" is added to water sector projects, with the intention that the people get involved in implementation, form committees to operate the structures, and pay for O&M.

It will be clear that the above mentioned views are diametrically opposed. When it comes to implementing people's participation in the field, it makes "a world of difference" which of the two (or intermediate) views one holds.

Compartmentalization is expected to allow for controlled flooding and controlled drainage of protected areas in Bangladesh. Although CPP intends to test the viability of the concept in the field, these guidelines are written on the assumption that the compartmentalization concept is viable and will be extended throughout the floodplain.

For the purpose of this paper "people's participation" is defined as "involving people in all phases of compartmentalization, with the aim that they will operate and maintain these compartments, so as to ensure sustainable development."

Figure : PEOPLE'S PARTICIPATION IN COMPARTMENTALIZATION PROJECT LIFE CYCLE



2.2 People's participation as planned in different phases of compartmentalization

For an overview of how people's participation relates to the project life cycle, please see the flow chart on page 10.

Planning and design

Planning and design is defined as that phase of the project in which the details are worked out as to how to implement the set goals and objectives.

Evaluations of existing FCD/I projects suggest that those projects which were built on the needs of the local population, have a higher chance of success (FAP 12) than those who do not adhere to this principle. Therefore, to enhance the chances of success and sustainability of compartmentalization, it was decided (by FAP 20) to start people's participation by involving people in defining their water related needs, i.e. discussing the welfare of better use of water and collecting proposal for developing the concept of compartmentalization in their area.

To identify people's needs and opinions a need assessment survey was carried out. This survey aimed at identifying the ideas of different interest groups about the present situation, the existing problems and their thoughts about potential solutions (The different interest groups as defined in the project are presented in appendix 1). To get an unbiased view of the real life situation, it was considered necessary to focus on water management issues including the aspects which are directly and indirectly related to water resources.

The output from the needs assessment was used by the planning team to draw up a number of alternative options for developing the water management system of the compartment. Those options included input from the different sector specialists. This was an attempt at cross-fertilization between local and specialized knowledge.
All possible water management systems were presented to those concerned for feedback during the consultation process. The opinions of the local people and their representatives were accorded much weight in the process of deciding which system to recommend for implementation.

The output from the consultation process was fed back again into design and planning. Technical interventions would then be adjusted and fine-tuned on the basis of these meetings (if and when necessary).

Implementation

Implementation is defined as the actual building of structures, (re-)excavation of channels, etc. In case of compartmentalization, implementation involves people in two ways; through land acquisition and through labour input.

Problems with land acquisition are minimized by getting the support from as many people as possible. In that way individual land owners may be convinced that their land is acquired for the benefit of many, and this is expected to prevent major problems arising during this process.

Landless may not benefit very much from compartmentalization. Therefore, special provisions have been made to involve organised groups of landless in implementation, mainly by awarding earth moving work on embankments and in re-excavation work, to Landless Contracting Societies (The procedure to work with LCS is explained in the FORMATION and METHODOLOGIES for LANDLESS CONTRACTING SOCIETIES in CPP, GD 01, December 1993).

Institutionalization

In CPP the need for institutionalization has been described as follows:

Water management is the controlled quantitative and qualitative usage of water including early, late and deep flooding, rainfall and ground water in agriculture, fisheries, transport, sanitation and for domestic and industrial purposes.

Water management is ideally a continuous process in which the people concerned participate in a decisive way. It starts with identification of the existing water related problems and possibilities, followed by planning, design, construction, operation and maintenance.

It is therefore necessary to institutionalize people's participation in water management. This will be done in a three-Tier system of Water Users Groups (WUG), Sub-Compartmental Water Management Committee (SWMC) and the Compartment Water Management Committee (CWMC). (The initial strategy is explained in STRATEGY for the ORGANISATION of WATER USERS GROUPS, CPP working paper 93/03, June 93)

Operation

Operation is defined as those activities that make use of the compartment's structures to control the in- and out-flow of water to the optimum benefit of the people concerned.

The involvement of all people concerned in operation is deemed crucial to the success and sustainability of compartmentalization. It is at this stage that people's participation is to be institutionalized.(The initial participation of the people is also described in the working paper mentioned above)

Involving the people in the operation of water management structures is expected to solve many of the local and regional conflicts that have hampered FCD/I projects in the past. To help solve the regional conflicts people from inside and outside the project area will be involved in these committees (further details of the proposals are presented in SIRAJGANJ CPP INTERIM REPORT, ANNEX 7).

Maintenance

Maintenance is here defined as all activities and procedures necessary to keep all the structures and related infrastructure for compartmentalization in good working order.

Sustainability requires maintenance. In the past, maintenance was assumed to be the responsibility of the implementing agency, i.e. in the case of FCD/I projects the BWDB. This practice is now considered too costly and ineffective. The beneficiaries are now given the chance to operate compartments to their advantage, and they are likely to reap considerable benefits. They are therefore expected to have a direct interest in maintaining the infrastructure provided, and will be encouraged to take over the responsibility from the implementing agency for proper maintenance. (Experience from SRP will be considered to develop the strategy in CPP)

2.3 People's participation in planning and design

CPP as a pilot project intends to test the concept of compartmentalization. Therefore certain interventions were deemed a prerequisite.

In the case of Tangail, to test the concept, it was considered necessary that the main channels flowing into the compartment had to be either closed or be made controllable by building a sluice gate at the entrance. Resectionning of the flood protection embankment at the periphery of the compartment as well as the need to build regulators in a number of the channels flowing in the compartment were considered essential. This pre-condition for compartmentalization meant that all the possible options identified originally could not be further retained during the process of consultation. Therefore, considering the physical objective, the presentation of the project had to be done carefully keeping in mind the pre-condition made for testing of the concept.

As far as the internal water management was concerned the original range of options was maintained. They were presented and people's advise was sought on the desirability of the various options and about details such as location of structures, additional interventions deemed necessary by the people in the area to achieve specific local goals (water retention, fish migration etc.)

2.4 Lessons learned and recommendations

The following lessons were learned from applying the above mentioned principles of people's participation in Tangail and Sirajganj;

Concept of people's participation

- The nature of, and scope for people's participation depends mainly on whether or not the people can influence the basic planning and design.

- That involving people in all phases of project cycle is a must.

- That the flexibility of time is a crucial factor for ensuring people's participation.

Recommendations

- The nature and level of people's participation in FAP projects should be clearly defined and be reflected in the ToR of FAP projects.

- Planning team composition should reflect the emphasis placed on people's participation.

- Planning schedules should reflect the additional time needed to implement people's participation. The time required is further explained in chapter 3.

- That the institutionalization process is to go simultaneously with the consultation process.

3 METHODOLOGY OF THE NEEDS ASSESSMENT

3.1 Objectives of the needs assessment

The objectives of the needs assessment are, for each sub-compartment;

1 To get a broad, inter-disciplinary, descriptive overview of the existing situation.

2 To identify the existing water management related situation, particularly the various ways in which water resources are used and the problems caused by flooding and/or drainage congestion.

3 To find out people's opinion on the potential solutions, structural and non-structural, to overcome the constraints identified.

3.2 Key elements of the needs assessment

Characteristics

The needs assessment is characterized by two main elements. First of all, it seeks the opinion of the local people. Secondly it is focused on water management, in the broadest sense of the word.

The stress on getting the perception of the people who live in the area is based on the assumption is that outside expert may have in-depth knowledge of a particular subject, but often lack the kind of specific knowledge related to locating specific details that the people of the area do have. The needs assessment acknowledges the importance of such local knowledge and is designed to bring such knowledge into the planning process.

Evaluation of previous FCD/I projects, as well as different FAP studies, have indicated the need to look beyond the monsoon at integrated water management. This includes qualitative and quantitative use of water, including early, late and deep flooding, rainfall, and ground water for agriculture, fisheries, transport, sanitation and domestic as well as industrial purposes. The needs assessment applies the findings of those studies by focusing on water, in the broadest sense of the word.

Principles

The first principle is that representativeness and accuracy is achieved via triangulation and iteration. Triangulation is systematically combining research methods, team composition and varying sites/respondents to get a complete picture of the subject of enquiry. Iteration

is accomplished by semi-structured interviewing which helps maintain flexibility in questioning and hypothesis building.

The second principle is that the work is done by an inter-disciplinary team. This has many obvious advantages over a mono-disciplinary team. The needs assessment seeks to stimulate sharing of information and insights between the various disciplines. This is particularly relevant where unexpected, and therefore questionable, information becomes available. An inter-disciplinary team might help direct further data gathering, verification and if necessary in-depth research.

Finally, the third principle is flexibility. Depending on the information collected, questions or their sequence can easily be changed and new questions added.

Required characteristics of individual team members

Conducting a needs assessment survey requires the right skill of professional expertise. The following characteristics are considered essential;

- willing to listen and learn,
- committed to people,
- cooperative attitude,
- professionally skilled and
- healthy and hard working
- believe in people's participation

Need Assessment surveys conducted by CPP in Tangail and Sirajganj suggest that neither very experienced nor fresh graduates are suitable as team members of a Need Assessment survey team. The former usually have much experience but only in top down approval while the latter lacks field and practical experience and a mature outlook to cope with the survey techniques.

Though exceptions can always be found, it is our experience that in general professionals with approximately 10 years experience are most likely to be suitable as qualified needs assessment team members.

Team composition and responsibilities

The ToR (of FAP 20) mentions the following about the main objective of the baseline survey:

> *"Provide and verify data on hydrological, engineering, agricultural, socio-economic and environmental aspects. Prior to, during and on completion of the project [ToR, page 9]. As a part of the baseline survey the Need Assessment survey provided much wider scope in collecting and verifying data the 'ToR' mentioned for. And thus to*

gather data on different aspects the needs assessment survey team were composed of professionals from different disciplines. They are: an Engineer (Civil), an Agronomist, a Fisheries Biologist, a male and a female Sociologist.

Controlled flooding and controlled drainage are the core of the compartmentalization concept, therefore the needs assessment team included a Civil Engineer for conducting the hydrological part of the needs assessment survey.

Within the rural area the farm households are distinct from the non-farm households. The former are likely to obtain most of the long-term and direct benefits from compartmentalization. The non-farm households are likely to only receive temporary and secondary benefits. Therefore both groups are treated as distinct populations, with their own domain. An Agronomist on the team interviewed farmers while the male Sociologist related to the landless, artisans, other day labourers etc.

Fishermen communities, as well as subsistence fishermen may be negatively affected by water management that is mainly based on agriculture. Therefore the Fisheries specialist on the team collected information on this topic.

Water, in all its aspects, is important to women. They bear most of the responsibility for raising children and keeping all household members healthy and going. Furthermore, women are most vulnerable during floods. Therefore the needs assessment team included a female Sociologist who interviewed women of all categories to find out their views on water and its management (for details see the attached checklists in Appendix 4).

The need to sustain the environment is now widely recognized. All team members gave particular attention to this in relation to their own field of specialization. An environmentalist later compiled a summary table based on the findings of the other specialists.

Training

The needs assessment team has been given a two day training course before starting the survey. To focus the information gathering during the survey, participants spent time clarifying their understanding of objectives of the FAP as a whole, and of FAP 20 in particular. Different project documents, recent maps of the project area with relevant and important information were used in the training session and a pre-testing was also done before the actual survey starts. Each specialist had to prepare a checklist on their subjects of engineering during the training to be used in the survey (Appendix 4).

The training emphasized on the concept and application of RRA methodology. Among others the importance of people's participation as envisaged in FAP 20 was covered in the training session. An important aspect of the training was that the team members were asked to maintain low-profile during their field visits for the survey and to listen and learn from the local people instead of pressing one's own insights and views on local people.

Practical matters

The survey team made use of the detailed knowledge gathered about the locality as collected during the land-use survey, to decide on where to start and which villages to cover. The land-use survey data allowed selection of those villages that were representative for each sub-compartment.

The survey schedule, on average, took two days field work per sub-compartment. These vary in size from 600 - 1500 ha, with a population of 5.000 - 15.000 people (except Tangail and Sirajganj towns with over 100,000 people). Report writing was done immediately after the fieldwork and during half-day sessions immediately following completion of the field work.

Interviewing different interest groups

The core of the needs assessment survey was performing group interviews of randomly selected individuals from the same interest group.(The different interest groups agreed upon in the project are explained in Appendix 1). Such groups were useful to get information on a variety of subjects, get an idea of the consensus about the information and the range of opinions. Group interviews were particularly useful to avoid the interviewer having to "question" information supplied as group members often argued amongst themselves.

Care was taken to interview people from different classes/occupations, even within the same interest group (marginal and large farmers etc.). Interviews include some, but few, key respondents. They were mainly approached to find out general information about the locality and long-term trends.

Whenever interviews of a group of people indicated that a sensitive area is touched upon (such as why a *khal* was closed by someone without the consent of others), then individuals were interviewed after the group interview.

In all interviews care was taken that the people of that particular interest group can voice their own opinion. When local elite or students would "volunteer" to speak for others, such interpreters were tactfully requested to allow everyone to speak for him/herself. If this had no result then the interview was cut short.

Interviews were normally held in locations where people felt at home. Interviews started with an introduction in which the interviewer would mention his/her name and that he/she had come from the BWDB. The BWDB was about to start a programme in the area and that the BWDB wanted to know the opinion of people from all walks of life about the existing water related situation, the main problems and potential solutions. The interviewer asked the respondents whether they could spare the time. Normally the interviewer used *"apni"*, not *"tumi"*, asked permission to write responses down and thanked the respondents at the end.

Much stress was laid on the principle that **no "leading" questions** should be asked. Only probing questions (who, what, where, when, why and how?) were allowed. There were two main reasons for this. The first is that leading questions distort the interview. The second reason is that in the Bengali culture, villagers would see the interviewers ("educated officials from the city") as (much) higher in status than themselves. In response, they would give the kind of answers that they think would please the interviewer. By not asking leading questions, such a biased response was (partly) prevented.

Interviewing local elected representatives

Once the needs assessment survey was completed in the sub-compartments, local elected representatives, i.e. Union Parishad members, were interviewed. Basically the same approach was followed, using non-leading questions. Interviews were however not held on a sub-compartmental basis but were organized per Union.

Team interaction

Team interaction was stimulated to cross check data and to achieve inter-disciplinary cross fertilization. To facilitate this, the team members spent much time together. An effort was made to ensure that staff would remain with the team through-out the period of the needs assessment survey.

Report writing

Ultimately the success of the needs assessment depends on the completion of a meaningful report, ie a source of comprehensive and reliable information allowing better design, planning and decision making.

As regards the reporting system (followed in Sirajganj) the team used to sit in a meeting (after each field visit) where each specialist reports back on his/her findings (for a sample see Appendix 2) after which a short but comprehensive report is drafted (for a sample see Appendix 3). This format proved to be more suitable (than that used in Tangail) because it allowed easy access to the key findings.

3.3 Checklists used

The checklist used concentrated on qualitative data rather than quantitative data and to focus more directly on the water related situation.

It should be pointed out that the stress on asking non-leading questions in the needs assessment conflicts to some extent with the use of checklists. The lists were therefore used only to probe further once a general topic (drought, sedimentation, capture fisheries etc.) had been mentioned by those interviewed.

3.4 Lessons learned and recommendations

After having conducted the needs assessment survey in Tangail and in Sirajganj, the following lessons have been learned and recommendations are formulated.

Lessons learned and recommendations

1 The needs assessment is very useful to get the view of different interest groups about the existing water management situation, its problems and the solutions as they perceive them.

2 The needs assessment is also useful because it introduces the professionals from the various disciplines to the knowledge of the people about the local conditions and to aspects involved in other disciplines.

* **A needs assessment survey should be part of all FAP projects.**

3 The needs assessment survey in Sirajganj CPP took 2 months, i.e. half of the time taken in Tangail CPP. The main reason is that Sirajganj is hydrologically more homogeneous, resulting in fewer sub-compartments and therefore fewer field visits.

4 The time schedule was even tighter than in Tangail CPP (2 days field work, and only half a day report writing, so two cycles per week). The results of this tight schedule were that not all topics raised in the interviews could be covered in-depth, discussion among the different disciplines were limited and follow-up had to be postponed till after the completion of the Interim Report. One cycle per week combined with other activities would improve the quality of the work considerably.

* **One week should be allowed for conducting a needs assessment of a sub-region, with initially two days of fieldwork, followed by report writing and follow-up visits.**

5 The reporting format used for Sirajganj, summary tables and short sections with details, has resulted in a much more concise final report than in the case of the Tangail survey (only 20% of the volume of the Tangail report). The summary in table form has made the information readily accessible, but at the cost of details. Given the purpose of the needs assessment, i.e. feeding local opinion into design and planning, the Sirajganj format is considered more suitable than the Tangail format.

* **Reports should be in such format that the key elements can easily be found, i.e. in many cases the reporting should be in tabular form.**

6 As the methodology differs considerably from the traditional approach, it is considered necessary to have a team of people who are well trained, who have experience in the methodology and are in a position to conduct an un-biased survey. This requires a commitment at project and higher level to this approach.

* **It may be worth training a limited number of special teams to conduct needs assessments in FAP projects. If that can not be done, then special training should be given to the regular team members of the FAP projects.**

7 Women show a broad as well as a detailed, female-specific understanding of water and its control. Assessing their view is therefore considered worthwhile.

* **Inclusion of a female sociologist in the team is therefore essential**

8 Conducting a needs assessment is a new approach for many sector specialists and engineers. Therefore it is important to ensure that the findings emerged from the survey are indeed considered while producing the plans.

* **Project management is to see that the findings of the needs assessment are indeed taken seriously in drawing up options for interventions.**

9 To ensure that the opinion of the local people is considered, it is worthwhile designing at least one, but preferably more options for development that are maximum built on the needs as expressed by the different interest groups in the area.

* **Options should include at least one, but preferably more options for development, built only on the needs as expressed by the local people (within the scope of the project objective).**

10 Following the needs assessment survey it was revealed that the survey could have been used as a media for disseminating information to the people about the project which ultimately would foster people's participation in the project.

* Dissemination of information to the people within the project area through leaflets containing information about the project objective, project boundary etc. is a must.

  Development plans, implementation procedures project life etc. should be considered for a coverage about what is actually going to happen in the area, so that from the very beginning interest can grow among the people about the project and hence their (expected) involvement at different phases of project cycle.

4 PEOPLE'S PARTICIPATION THROUGH CONSULTATION MEETINGS

4.1 Overview and methodology of consultation process

Aims of the consultation process

As proposed in the Inception Report (Tangail) the CPP team has taken many detailed and localized suggestions from the Needs Assessment, and has combined these into an overall and coherent development option. This is also proposed to take the option(s) to all concerned and a consultation process will precede detailed and final planning of the structural measures. This involves meetings per sub-compartment with different interest groups, i.e. farmers, fishermen, landless, women and the urban population. This is the second stage of people's participation while the first one is needs assessment.

As part of the process of people's participation the ultimate aim of the consultation process is to enhance the sustainability of the compartment.

More specifically the consultation process' aims are:

1 To share with all concerned information on the technical interventions, including:
   - the needs as identified by the different specialists and the interventions based on their observations,
   - flood protection works at the periphery of the compartment (embankments, structures),
   - proposed additional internal water management works,
   - positive and negative impacts of all interventions, including proposed mitigation measures;
2 To share with all concerned information on the possible institutional interventions; including local water management bodies, local resource mobilization, local setting for O&M;
3 To get feedback on additional and/or alternative interventions;
4 To stimulate the involvement of all affected and concerned in the compartmentalization process.

Assumptions underlying the consultation process

The operationalization of the consultation process is based on the assumption that the sustainability of compartmentalization requires:

- that the benefits of flood protection and monsoon regulation as a result of compartmentalization are carefully explained to the people affected (positively or negatively),

- the different interest groups (farmers, fishermen, landless, women, urban dwellers etc.) be allowed to express their opinions without interference from other interest groups,
- all elected representatives of the area (Union, Thana, Parliament) are to be consulted and their support solicited, and
- relevant GOB, NGO and other officials (including specialists) are to be consulted.

Involvement of elected representatives

The consultation with elected representatives is crucial to the institutionalization of people's participation. Such consultation is expected to enhance, in the long run, the sustainability of development in general and compartmentalization in particular.

Involvement of interest groups

It is considered necessary to not only consult elected representatives but also the different interest groups directly through homogeneous group meetings. The aim of this stage in the process of people's participation is to give all concerned (different interest groups) a chance to voice their opinion as to the desirability of the option(s) and proposed different interventions (of CPP).

Moreover, the consultation process is part of the training and motivation process leading to water management bodies that would include representatives from the all interest groups, including the minorities.

Practicalities

Meetings of the different interest groups should be organized in close cooperation with relevant GOB departments (BRDB, DAE, LGED, DOF etc.) and NGOs. These are requested to invite their group members to attend the relevant consultation meetings. Meetings should be held on a sub-compartmental basis and, depending on the size of the sub-compartment, at 1-3 places. A meeting with each interest group covering 3/4 villages (a cluster) would be ideal to hold. And a maximum of 100 participants per meeting would be a desirable size to manage.

Meetings should be facilitated by one or more project sociologists. Other members of the Team (including at least an engineer and a sector specialist) should explain the possible interventions and be available to answer questions. Detailed minutes of the meetings should be maintained, and if necessary the discussions should be tape-recorded.

Meetings with elected representatives should be held at Union level. These meetings should preferably be held in the office of the elected representative concerned. Meetings with GOB, NGO and other officials should preferably be held in their respective offices.

4.2 First phase separate interest group meetings

Before the consultation process starts, the team is to prepare a matrix showing all the planned interventions and their likely positive and possible negative consequences (for an example see Appendix 6).

The aim of this first phase meeting is to get feedback from the different interest groups about the proposed interventions, and to identify potential areas of conflict between the different interest groups and also whether any alternation/change is required to the plan.

In this first phase of the consultation process, meetings be held of the separate interest groups. The meeting starts with an introduction from a sociologist about the aim and the procedure of the consultation process as a whole and of the meeting in particular. Then an engineer briefly explains the compartmentalization concept, the project's aim and objectives and the overall proposed interventions. Then the engineer explains the planned interventions in detail, with particular reference to the locality concerned. Much attention is given to the expected positive and potential negative impacts relevant to the interest group concerned.

A specialist related to the concerned interest group (agronomist, female sociologist, male sociologist, fisheries expert) then facilitates the question and answer process that will follow these introductions. The consultation meeting facilitator is to keep track of what is said.

At the end of each meeting the interest group is asked to select two representatives who will join those from other interest groups meetings in the second phase joint meetings. Minutes are written in the prescribed form (Appendix 5) by the relevant specialist, based on the records of what was said and use of tape recorder is helping to recall the salient interventions during the discussion.

Once all first phase meetings in a sub-compartment are finished, the project planning team goes through the reports to see if the planned interventions can be adjusted in the light of the comments received.

4.3 Second phase combined meetings

When all first phase meetings in a sub-compartment are finished and (if necessary) the planned interventions have been adjusted, then the representatives of the different interest groups should meet on a sub-compartmental basis. The persons (participants of these meetings) should be asked to attend the next meeting along with the views of their group about the interventions presented in the 1st phase meetings.

The aim of these combined meetings is to confront each of the interest groups with the opinion of the others and to see if alternative interventions would minimize the areas of potential conflict.

The sociologist conducting the meeting should take particular care that all representatives are able to express their opinion. Again detailed records should be kept about the discussion.

The minutes of this meeting usually go to the project planning team to see whether the comments made and compromises reached, can be worked out in further adjustment of the planned interventions.

4.4 Third phase separate interest group meetings (if needed)

Usually the interest group representatives are not able to settle all conflicts at the above mentioned joint meeting. Also plans may be adjusted in the light of that meeting. Therefore a second round of meetings with the different interest groups separately may need to be planned.

The aim of this meeting is to get feedback from the interest groups about the adjusted plans.

All the guidelines mentioned above apply, including sending the minutes of the meeting to the engineering section to decide whether or not the proposed changes can be made.

4.5 Final phase combined meetings with elected representatives

When, following the above mentioned meetings, the engineering section has finalized its draft plans, then a final meeting of the interest group representatives together with the local elected representatives be held.

The purpose of this meeting is to settle any outstanding issues among the different interest groups, and, if possible, to come to a commonly accepted plan which has the backing of the local elected representatives.

If necessary, the engineering section can make further changes in the light of the discussions/decisions of this meeting.

After those adjustments the plan will be finalized. Any future requests for additional interventions or changes will only be accommodated if they give much benefit and have no negative impacts (cf. an additional culvert).

4.6 Lessons learned and recommendations

Lessons learned from the CPP consultation meetings;

1. The experience both in Tangail and Sirajganj shows that for a proper design and planning, using the information of NAS the time allotted to the CPP team was found insufficient.

* **Additional (sufficient) time for design and planning is required.**

2. As one single option cannot satisfy or be acceptable to all the interest groups, preparing a few options looking at the interest of different interest groups would be meaningful and expected.

* **Additional efforts on the part of the planning team to investigate alternatives and suggestions is required.**

3. Besides the planning team support service of some junior as well as some senior staffs was deemed necessary for follow-up/investigate (regular) of certain issues (case) studies, surveys (both engineering and social) as experienced by FAP 20.

* **Provision to be kept for additional manpower as and when required.**

4. A pilot project, like CPP, where a concept is to be tested should not be time-bound in regard to follow a strict schedule for implementation.

* **Flexibility on the side of the donors and GOB as to planning and implementation schedule is required.**

5. Planning and design by an inter-disciplinary team as practised in the CPP has been proved fruitful.

* **Extra effort on the part of the project management to ensure that the planning and design is done in an inter-disciplinary way.**

5 GENERAL OBSERVATIONS AND CONCLUSION

General observations

These guidelines are based on people's participation in the Compartmentalization Pilot Project (FAP 20). The fact that this is **a pilot project** has had implications for people's participation (see above). It is quite likely that in future compartmentalization projects there will be fewer restrictions on the process than in this project. If this is the case, these guidelines would have to be adjusted accordingly.

To enhance sustainability of the project one should aim at the kind of people's participation that really involves the people living inside and near the area, and their needs, from the very beginning, i.e. at the time of defining goals and objectives. Doing this actually means quite fundamental changes in the approach to planning and design.

If the GOB intends to give serious attention to people's participation in development projects, then the requirements as mentioned in section 4.6 would have to be accepted. As this will require additional manpower, time and money, the donors too would have to approve this approach at top level.

Furthermore, planning teams would have to be guided and directed by people committed to, and trained in this approach. Training in this respect should be given to key people as soon as possible so that they are available for such projects in days to come. Once teams have been formed, the team members should be trained in the approach to be followed.

Conclusion

People's participation is necessary if one aims at sustainable development. Because it involves a major change compared with present practice, it will require both top level policy support as well as adjustments to the planning process, team composition, team management, budgets and time schedules.

Socio-economic situation in Tangail and interest groups — APPENDIX 1

FAP 20 has identified 4 different interest groups in the rural area; farmers, fishermen, landless, women. As per household survey carried out in 1992, their situation is as follows:

Farmers (Farming Household)

Farm households (here defined as those households that operated 0.5 decimals or more) make up slightly less than 30% of rural households and 36% of the rural population. Of all farm households 4.5% are pure share-croppers, 23.5% are marginal farmers, 51.5% are small farmers, 15.2% medium farmers and 5.3% large farmers. Pure share-croppers own 0.6% of cultivated land, marginal farmers 12.0%, small farmers 40.8%, medium farmers 25.6% and large farm households 21.0%.

Medium and small farm households, which make up 66.7% of the farm households, and who operate about 70% of the lands are likely to benefit from compartmentalization to the extent that they have access to the necessary credit. If institutional credit were available in time and at the going rate then these categories of farm households would benefit from compartmentalization. To the extent that they have to rely on informal credit at high rates of interest, part of the benefits will be diverted to the money lenders. By improving overall productivity households that do have access to institutional credit might be able to delay the process of marginalization for the time being.

Marginal farmers and pure share-croppers are the least likely to benefit from compartmentalization. They normally have least access to the credit that is necessary to make use of the potential improved production made possible through compartmentalization. Furthermore the existing tenure arrangement divert up to half of the additional benefit to the landowner. Given the prevailing patron-client relationships it is quite likely that marginal and small farmers will be unable to stay in business. The likely increase in the value of land will be an additional factor in pushing them into the ranks of the landless.

Landless (Non-Farming Household)

Landless households will benefit from flood protection of their homesteads and whatever cultivated land they still own in case of gated structures.

Landless might benefit indirectly through additional employment in the agricultural sector. Given the high percentage of non-farm households (over 70%) and the small percentage of medium and large farm households it is unlikely that sufficient employment opportunities will be generated outside those households to increase the labour opportunities for landless.

To the extent that landless are involved in either navigation (not too much) or subsistence fisheries (very much) they are likely to be affected negatively (see below). The improvement of the road system through compartmentalization is likely to mitigate this negative impact to a limited extent.

Fishermen

There are about 325 professional fishermen households who live in the Tangail CPP area. According to the Household survey about three-quarters of their yearly catch comes from within the project area. With compartmentalization this volume is likely to be reduced by 13-21% resulting in a reduction of income of about 20%.

There are about 930 part time or occasional fishermen families in the Tangail CPP area. As they only catch within the project area their total catch is likely to go down by 13-21%. In monetary terms this is about 20% of their income from fisheries.

According to national statistics about 65% of rural households are involved in subsistence fishery. In Tangail CPP this would represent more than 17.000 families, many at the lower end of the social strata. The reduction of 13-21% of catch to them is almost certainly a similar loss of protein intake for which there is no easy replacement. An increase in animal protein through poultry raising might to some extent mitigate this negative impact of compartmentalization.

Women

Women are likely to benefit from additional flood protection as they and their children are most vulnerable during floods.

The change in cropping pattern away from sugarcane and DW Aman to HYV T. Aman and from jute to HYV Aus is likely to further aggravate the existing shortage of cooking fuel. The increase in rice production will raise the demand for female post-harvesting labour. This demand is likely to be met mainly from within the farm households as most of them are marginal/small, having excess labour.

The further reduction in livestock due to the reduction of fodder and grazing area will reduce the amount of manure available for drying and use as cooking fuel. All of these trends together will increase the burden of women who will have to spend more time and effort collecting fuel.

Sample interest group form; **APPEND 2**

FARMING; SUB-COMPARTMENT NO-1

SIRAJGANJ

1 VILLAGE WISE SUMMARY OF VIEWS EXPRESSED PER INTEREST GROUP, OF WATER RELATED PROBLEMS, SOLUTIONS AND CONFLICTS

	Chormara	*Ghati Shubgacha*	*Gazaria*	*Bahuka*
Situation	• devastating floods since 1984 (except 1992)	• devastating floods since 1984 (except 1992)	• devastating floods since 1984 (except 1992)	• devastating floods since 1984 (except 1992)
Problems	• water congestion • 1st and 2nd kharif crop damage • high mortality rate of livestock and poultry • high input prices • disrupted road communication	• water congestion • 1st and 2nd kharif crop damage • high mortality rate of livestock and poultry • high input prices • disrupted road communication	• water congestion • 1st and 2nd kharif crop damage • high mortality rate of livestock and poultry • high input prices • disrupted road communication	• water congestion sands deposit (30% area) • high mortality rate of livestoc and poultry • high input prices • disrupted road communication
Solutions	• groyne • stable BRE with flushing sluice • one culvert on WAPDA road • medicare facilities for livestock and poultry • low input price	• groyne • stable BRE with flushing sluice • one culvert on the *Banglabazar-Bairkhola* road • medicare facilities for livestock and poultry • low input price	• groyne • stable BRE with flushing sluice • one culvert on the *Banglabazar-Bairkhola* road • medicare facilities for livestock and poultry	• groyne • stable BRE with flushing sluic (one bridge on *Veouamara-Bahu* road) • one culvert on the *Banglabaza Bairkhola* road • medicare facilities for livestoc and poultry
Conflicts	• none	• none	• none	• none

2 DETAILS

All the villages surveyed suffered from devastating floods since 1984 (except in 1992). Flood in *Bahu* was minor in 1985. Without minor flooding (*Bahuka*) plantation of Aman is not possible in 50% area of the rest 50% Aman area is subject to moderately high flooding. However, in general 50% to 100% o 1st and 2nd kharif crops are damaged by flood water congestion ranging from 2-4 months (June - Sept.). Sand deposition in 30% area of *Bahuka* does not permit paddy plantation. Farmers consider T. Aman as a chance crop. Mustard, pulses become less profitable compensatory crops which the farmers can hardl grow as it would result in late plantation of HYV-Boro. HYV-Boro is the only crop on which the far survive. The *Jamuna* bank erosion has become the only and major problem in the area.

The farmers expressed their bitterest experience and resentment to our visits since the survey team belonged to WAPDA. With utter despair they observed that WAPDA people could not do any good t them. The reason was that in the name of flood control the WAPDA people in collaboration with lan acquisition personnel allure the poor illiterate farmers to dispose of their valuable land to pocket som cash money for construction of a so called embankment made of sands without compaction. The embankment they make does not last long, it fails in the face of the *Jamuna's* high river stage vis-a-v high pressure of water. When the so called embankment fails, the impact of river water becomes so h that with much velocity and speed it carries and spreads big quantity of embankment soil to a vast tra of

highly fertile cultivated areas, turning these into land unsuitable for crop production. 'It fertilizes the pockets of the few haves at the cost of many have nots', the farmers observed. Therefore, it does mo harm than good. In consideration of the severe bank erosion the farmers suggested an immediate construction of a groyne which the see as the only solution to save them from devastating floods. The affirmed that even a strong BRE is useless without a groyne. However, they felt the necessity of a sta BRE with sluices to get water for crops and fisheries.

Though all the villages suffer from water congestion, the excavation of local *khals* and rivers has bee ruled out by the farmers, because they are using the river and *khal* beds for seed beds for raising seedlings necessary to meet the requirements of the local and surrounding areas. Further they suggest that if excavated, the beds will be silted up next year due to flood water carrying huge quantity of sa and silts.

Chormara farmers suggested one culvert in front of the village on WAPDA road (east-west). *Ghati Shubgacha* farmers said that some 200 bighas of cultivated area faces water congestion for shortage o a culvert on the road from *Banglabazar* to *Baikhola*. *Bahuka* farmers strongly demanded one bridge (at *Itali*) on *Veouamara - Bahuka* road without which communication is disrupted for long six months. *Bahuka* farmers strongly suggested for controlled flooding for plantation of Aman.

There are no water users groups in the area. Water from STW is rented out against 25% of the harve HYV-Boro crop. Fertilizer rates as high as 40% above the Government rate has posed a major constr on HYV-Boro cultivation. The farmers are reported to dispose of their valuables, cattle heads in orde to meet the fertilizers requirement for HYV-Boro crop, the only crop on which they survive. Except in *Bahuka*, no other villages reported the use of power tiller. Draft animals are the only source of land preparation. Livestock population has declined because of high mortality rate, shortage of cash, lack of fodder during flood seasons, increased cash demand for purchase of fertilizers, lack of medicare facil and high price of cattle heads. The credit situation is cumbersome - without bribe institutional credit cannot be procured, the farmers resented.
Poultry shows an increasing trend because of women's participation. But high mortality rate due to la of vaccinations becomes a major problem in poultry.

Sample of needs assessment sub-compartmental reporting form (Revised); **APPEND 3**

SIRAJGANJ CPP

Sub-compartment 1

SUMMARY OF VIEWS EXPRESSED PER INTEREST GROUP, OF WATER RELATED PROBLEMS, SOLUTIONS AND CONFLICTS
(As presented in Table-A)

Table-A:

	WOMEN	FISHERMEN	NON-FARMERS	FARMERS
SITUATION	• any moment river erosion could happen	• capture fisheries declines to non-existence when there is no flood • culture fisheries absent except at *Gazaria*	• very bad	• devastating flood since 1984 (except 1992)
PROBLEMS	• breaches of BRE • disease • female disease habitat • unemployment • lack of capital • lack of support from UP authorities • in-migration	• migration route closed • lack of spawning for fish • hatching catching in Jamuna • BRE breaching is threat for culture fisheries	• flooding due to BRE breaching • river bank erosion • food crisis • high prices of food • crop damage • homestead destructed • diarrhoea	• water congestion • 1st and 2nd kharif crop damage • high mortality rate of livestock and poultry • high input prices • disrupted road communication
SOLUTIONS	• build groyne immediately • ensure health support from local clinic and hospital • credit facilities • ensure UP authority's support	• stable BRE by groyne or other means • enough sluice gates for sufficient water flow • after creating migration route, hatchlings, catching should be stopped	• groyne at *Shimla/ Chormara* • stable BRE with sluice gate • capacity of culvert should be increased	• groyne - a must • stable BRE with sluice • bridge and culverts • medicare for clinics for livestock and poultry • low input price • better road communication
CONFLICTS	• none	• none	• none	• none

Table-B:

HYDROLOGY	ENVIRON
• flood affected area	• overall s is not good
• flood from the Jamuna • water congestion • poor communication due to flood • drought	• water congestion • drought • river ban erosion • homeste and kitchen gar destructed • high mo of livestock and poultry • flooding due to BRE breac • water bo diseases • crop dam
• village road to be made as embankment • strong BRE by any means • flushing and drainage sluice on embankment	• drainage • sluice in embankme • stable BR • medicare for livestock an poultry • ensure h support
• none	• none

Apart from views of different interest groups recorded regarding the water related problems. An overall view on hydrology and environment was also collected which is presented in the same fashio as under Table-B.

Checklist used in needs assessment; **APPENDIX 4**

HYDROLOGY

1 Rainfall flooding;
Locations normally flooded by rainfall
Locations where early/late rainfall causes damage to crops
Depth, duration and usual time of rainfall floods
Suggested improvements
Drought;
Locations with drought in the monsoon
Locations with drought in the dry season
Suggested improvements

2 River flooding;
Location flooded by river (including name of the river)
Depth, duration and silt/sand content river water
Locations flooded by both rainfall and river flooding
Flows during BRE breach (year, time)
Extent of damage to crops, public and private property
Suggested improvement

3 Sedimentation;
Locations affected by sedimentation
Type of sediment (sand/silt, positive, negative)
Sources of sedimentation
Suggested improvements

4 Drainage;
Locations facing water congestion
Depth, duration and period of drainage congestion
Describe drainage channel net-work and condition
History of siltation and re-excavation
Suggested improvements

5 Navigation;
How important is navigation?
Main routes (from-to)
Number, type of boats and types of cargo (people, types of goods)
Suggested improvements

6 Existing structures;
Identify all structures affecting the area
Are/were structures useful (now, in the past)
Who operates structures
Suggested improvements

7 Erosion;
Location of erosion spots
Erosion history
Suggested improvements

AGRICULTURE

Crops

1 Existing water situation in different seasons
2 Effects of existing water situation on agriculture
3 Farmers way of minimizing loss and distributing risk
4 Trends in water situation over last 5 years
5 Suggestions as to improvements
6 "Ideal" situation
7 Existing water users groups, their problems, solutions
8 Other agriculture related problems, solutions (credit, inputs, output)
9 Adverse impact of input use on soil and water

Livestock

1 Draft animals use, needs and suggested improvements
2 Cattle population trend
3 Livestock feed situation
4 Medicare facilities
5 Credit situation
6 Suggested improvements

Poultry

1 Trend in poultry numbers
2 Poultry feed situation
3 Poultry disease and medicare facilities
4 Credit situation
5 Suggested improvements

FISHERIES

General

1 Existing fisheries situation
2 Trends (at least 10 years) in capture and culture fisheries
3 Problems in capture and culture fisheries
4 Suggested improvements

Details

1 Existing water bodies, type (perennial, seasonal), status (private, khas, leased)
2 Extent of subsistence (capture) fisheries
3 History of previous waterbodies (silting up, source cut-off etc.)
4 Fish migration routes from river to floodplain (period/spawning time)
5 Fish predation, fish diseases (period; damage caused).

Social and institutional aspects
1 Location, number of professional and occasional fishermen households
2 History, religion, socio-economic conditions of fishermen households
3 Fishermen cooperative societies, NGO activities
4 Institutional facilities, Loan facility from Bank for fishermen.
5 Social conflicts regarding fisheries (history)
6 Water quality (general, pesticides, fertilizer)

NON-FARM ACTIVITIES

General
1 Major non-farm activities in the village
2 Existing water related situation and trend (at least last 10 years)
3 Main problems (if possible by occupational class)
4 Suggested solutions

Social and Institutional Aspects
1 Existing water related social conflicts and their history
2 Inventory of existing water management committees
3 Community leaders respected for their wisdom
4 Community leaders respected for their power

Details
1 Wage rate (with and with-out food) by types of labour (agricultural/skilled/unskilled) and season busy-lean period, (migration)
2 Literacy rate and present enrolment
3 Governmental and NGO/autonomous bodies societies/activities
4 Access to governmental facilities (Union Council Office, Post Office, F.P. Clinic, Health Clinic/Centres etc.)
5 Transport and communication facilities, particularly navigation (seasonal use of transport)
6 Markets, hats & bazaars in the area with marketing days (attendance)

WOMEN

General
1 Major female activities in the village
2 Existing water related situation (drinking, washing, bathing, floods) and trends (at least last 10 years)
3 Main problems (if possible by occupational class)
4 Suggested solutions

Social and Institutional Aspects
1 Existing water related social conflicts and their history
2 Inventory of existing water management committees
3 Community leaders respected for their wisdom
4 Community leaders respected for their power

Details

1 Wage rate and earnings of women
2 Impact of floods per class (health, communication, type of flooding etc.)
3 Sources of fuel and percentage use (periods of scarcity)
4 Extent of homestead gardening
5 Sources of drinking water
6 Health (sanitation), diseases (time and source)
7 Health related environment at working place (pregnancy/fertility)
8 Ratio female/male daily wage
9 Professional skills now under used
10 Knowledge of food values
11 Main social problems (dowry, divorce, discrimination etc.)

Sample of form used to report on separate interest group meetings (revised); APPENDIX 5

COMPARTMENTALIZATION PILOT PROJECT, FAP-20

REPORT OF CONSULTATION PROCESS MEETING (Initial)

SIRAJGANJ

General Information

Date:	02.02.94	FAP 20 Staff Present	M. Rahman, G. Mostafa, S. Azam, S. Hossain M. H. Rahman
Interest Group:	Fishermen (KSS)		
SC #	05		
Location:	Diar Pachil Govt. Primary School	Other Agency Staff	N. Haque (C.I), A. Rashid (V. Anowar (Insp.BRDB)
Village:	Diar Pachil (East)		
Union:	Khokshabari	Elected Public Representatives	: Nil
Starting Time:	04 : 15 pm	No. of Participants	25
Closing Time:	05 : 25 pm	Reporter	: G. Mostafa

Name of Villages to cover :	Participants attended from the Villages of :
a. Diar Pachil b. Par Pachil c. Pachil d. Kholishakora e. Nauda Soilabari f. Solia bari g. Daulatpur	a. Diar Pachil b. Kholishakora

Discussions and Findings of the Meeting

A. Major interventions presented in the Meeting		B. Likely positive & Negative impact will be derived from the proposed interventions.	
	Interventions as suggested by people	Positive Impact	Negative Impact
1.	Re-excavation of : a) Jhinaigati khal b) Ghorachara khal c) Baniajan khal	1. (a, b) Will remove drainage congestion and increase agricultural produces	1. (a,b,c) Land acquisition
2.	Vantage extension of Saluavita regulator	2. will increase drainage facilities and increase agricultural. produces	2. Land acquisition
3.	Deep and wide sluice gate on BRE at Vatpiary and Nauda Sailabari	3. To allow control flow of water and for retention of water	3. Land acquisition
4.	Village road repairing/improvement of Ghorachora, Gopirpara and Baira to Vatpiary	For improve communication	4. Land acquisition

Interventions as suggested by project	Positive Impact	Negative Impact
1. Re-excavation of Jhinaigati khal	1 to 3 Will remove drainage congestion and increase agricultural. produces	1-3. Land acquisition
2. Re-excavation of Ghorachara khal		
3. Re-excavation of Baniajan khal		
4. Vantage extension of Saluaviata regulator	4. Will increase drainage facilities and increase agricultural. produces	4. Land acquisition
5. Construction of flushing sluice on BRE at Vatpiary	5. To allow control flow of water	5. Land acquisition
6. Modification of sluice gate on BRE at Nauda-Soilabari	6. To allow control flow of water	6. Land acquisition
7. Construction of regulator at Chawk Fulkocha at Nauda-Soilabari	7. To allow control flow of water and for retention of water	7. Land acquisition
8. Construction of regulator at Jhinaigati	8. To allow control flow of water and for retention of water	8. Land acquisition
9. Construction of regulator at Dakatiabari	9. To allow control flow of water and for retention of water	9. Land acquisition
10. Construction of regulator at Aminpur	10. To allow control flow of water and for retention of water	10. Land acquisition
11. Construction of regulator at Decreepara	11. To allow control flow of water and for retention of water	11. Land acquisition
12. Construction of culverts at Purbo Ghora-chara, Khokshabari and West Ghorachara	12. For improve drainage and communications	12. Land acquisition
13. Construction of 5 no. drainage pipe	13. For improve drainage and communications	13. Nil
14. Upgrading of existing road Khokshabari to BRE	14. BRE breach mitigation and to develop communication system	14. Land acquisition
15. Upgrading of BRE (retired)	15. For flood protection and for improve communication	15. Land acquisition
16. Re-excavation of link canal from Vatpiary sluice to Baniajan river	16. Will remove drainage congestion & increase agricultural. produces	16. Land acquisition
17. Excavation of link canal from Diar Pachil to Baniajan river	17. Will remove drainage congestion & increase agricultural. produces	17. Land acquisition
18. Excavation of link canal from Paschim Ghorachara to borrowpit (along main road)	18. Will remove drainage congestion & increase agricultural. produces	18. Land acquisition
19. Excavation of link canal from borrowpit to Jhinaigati khal (along main road)	19. Will remove drainage congestion & increase agricultural. produces	19. Land acquisition

C. Peoples comment(s) to the proposed interventions by CPP	Reply on people comment(s) by the specialist(s) from CPP
1. The Baniajan river is being used for seed bed. We will loose this facility if it is re-excavated. So, no need to re-excavate this river from Decreepara to Shaluavita.	1. For greater interest some sacrifice should be done
2. It is too urgent to increase the vent size of Shaluavita existing sluice gate.	2. It has been planned.

D. Peoples acceptance of the interventions of the CPP

	Agreed	Disagree	No comment	
1 to 19	100%			

F. What are the major conflicts as observed ? NA

G. If majority of the participant disagree with any intervention, then what are the points of their disagreement and what are their alternative suggestions :

Points of Disagreement	Alternative Suggestions

1. The Baniajan river is being used for seed bed, they will loose this facility if it is re-excavated.	1. No need to re-excavate this river from Decreepara to Saluavita.

H. a) Reply from the CPP specialist(s) in respect of disagreement & alternative suggestions from the participants:

For greater interest of much people some sacrifice should be done.

b) Reply from the CPP specialist(s) in regard to conflicting interest (Ref.F) and suggested mitigation measures (if needed) for the disadvantaged groups/section with in the group.

NA

I. Any new suggestions/request from the participants

Any retention of water they requested to develop the earthen road from Pachil to Songacha, then the mouzas of Pachil, Par Pachil, Songacha and Diar Pachil would be benefitted.

J. No. of people participated in the discussion:	12 - 14
K. Flavor of contribution	Satisfactory

L. Name of contact people

Name	Father's/Husband Name	Village	Para
1. Mizanur Rahman Talukder	S/o Late Naimuddin Talukder	Diar Pachil	East
2. Nur Mahammad	S/o Late Moksed Ali	Diar Pachil	East
3. Shahiduzzaman	S/o Late Alimuddin Sk.	Diar Pachil	East
4. Shorab Ali	S/o Late Billat Hossain	Nauda Shailabari (Kholishakora)	
5. Abu Sayed	S/o Hanifuddin	Diar Pachil	

N. General comments (from the co-ordinator of the meeting)

Most of the participants joined the meeting from Diar Pachil village and only one joined from Kholishakhora. The Chief Inspector and the Vice Chairman from TCCA (BRDB) also joined the meeting. There was a pleasant atmosphere for discussion and the participants took part in the discussion very freely.

O. Check List Followed in Conducting a combined Meeting

Sl.	Particulars	Yes	No	Remarks
01.	CPP objective described	Yes		
02.	Project area described	Yes		
03.	Area of Sub-Compartment described	Yes		
04.	Project interventions described	Yes		
05.	Positive impact described	Yes		
06.	Negative impact described	Yes		
07.	Participation in LCS mentioned		No.	
08.	Institutionalization approach explained	Yes		
09.	Participation in WUG mentioned	Yes		
10.	Responsibility in O/M described		No.	Mistake
11.	List of contact person made	Yes		
12.	CPP leaf lets distributed	Yes		
13.	Attendance taken	Yes		

NEED ASSESSMENT - INTERVENTION (NA-I) MATRIX, CPP - TANGAIL; APPEND 6

SC #	PEOPLE'S NEEDS (As gathered Need assessment	PEOPLE'S SUGGESTION from the Need Survey)	OK (BY CPP)	OTHER NEEDS(Considered by SPECIALISTS/ AUTHORITY CPP)	SUGGESTIONS (BY SPECIALISTS CPP)	POSITIVE IMPACT (Of planned interventions)	NEGATIVE IMPACT (Of planned interventions)	ALTERNATIVE Suggestion/Plan (if any)	REMA
9				a) Peripheral flood protection and controlled flooding and controlled drainage for the compartment	-construction of 8-10 vent regulator on the Lohajang -Improvement of existing horseshoe embankment by re-sectioning & strengthening in some parts.	Ensure flood protection up to '88 level in the project area	-Land acquisition & displacement of people will occur.	Nil	
	a) Drainage improvement of the area	a) Re-excavation of existing canals viz. Jugini khal and Ghoshbari khal. And a link canal with Maithalbari khal (Beel Baghil to Jugini Daha and Jugini Daha to Ghoserbari)	Yes		- Dhitpur drain.	-Improve drainage in Dhitpur & Krishnapur beel will result production increase in agriculture	-Fisheries will be reduced -Land acquisition will be needed.	Nil	The interv sugge by people will be implem next y
				b) Drainage improvement of Dhitpur beel.	-Dhitpur CDO + Weir	-Improve drainage in Dhitpur & Krishnapur beel will result production increase in agriculture -Increase fish population during monsoon in the area	Land acquisition will occur.	Nil	
		-	-	c) Flood protection for the sub-compartment	-Regulator at Jugini khal mouth	-Reduce flood damage	-Navigation will be hampered -Fish migration will be reduced	Nil	
9				d) Controlled flooding and checking Sand Intrusion (in Krishnapur area)	-Embankment-cum-road. (From Dhitpur to main inlet along the Lohajang).	-Increase in agricultural production by checking sand intrusion & reduce flooding -Facilitate road communication	-Reduce fish population due to early drainage -Land acquisition and displacement of some people may occur.	Nil	
				e)Drainage of SC # 9 & flooding in SC # 10.	-Regulator at beel Baghil Eid-gah maidan	-Drainage improvement in SC # 9 -Flashing in SC #10	-Hamper fish migration & will reduce flood plain fishery.	Nil	

SC #	PEOPLE'S NEEDS (As gathered Need Assessment	PEOPLE'S SUGGESTION from the Survey)	OK (BY CPP)	OTHER NEEDS(Considered by SPECIALISTS/ AUTHORITY CPP)	SUGGESTIONS (BY SPECIALISTS CPP)	POSITIVE IMPACT (Of planned interventions)	NEGATIVE IMPACT (Of planned interventions)	ALTERNATIVE Suggestion/Plan (if any)	REMA
10	a) Removal of drainage congestion problem	Re-excavating all the existing silted up khals in the area including Binnafoir and Fatepur khals (others are Gopalpur khal:from Dhalar chak to Singairkona beel via Muntaz Munshi's house, Choubaria khal:from Gram Choubaria to chak Guradi, Rampal khal: from Pasbeel to Dannya Rampal and Dannya Rampal to Ghoramara khal, Dannya Choudhury khal:from Singarkona beel to Pasbeel, Choto Binnafoir khal:from Amir Khan's house to Ghoramara khal.	Partly (75%)		Re-excavation of: a) Rampal khal b) Binnafoir khal c) Dannya Ch.khal	-Improve drainage will facilitate production increase in agriculture	-Improve drainage will decrease in water bodies & hence fish population	Nil	
			-	a)Ensure better facility of operation of gates at Fatepur & Binnafoir	-Fall boards will be replaced by flap gates	-Will facilitate smooth operation of sluices at Binnafoir and Fatepur	Nil	Nil	
10	b) Facilitate navigation and flushing through Fatepur & Binnafoir khal	Replacing the regulators with bridges and re-excavation of the khals	No.	-	-	-	-	Nil	
	c) Ensure adequate flow of water through the Fatepur & Binnafoir sluices for increase in fishery.	Bigger regulator with low sill level	No.					Nil	
	d) Flood protection (for some households in Fatepur/ Alisakanda, Charabari area)	Advanced embankment from Alisakanda to Charabari	Under consider-ation			-100 household or 300-400 families will be protected from flood from the Dhaleswari.	-Land acquisition will occur.	Nil	
				b) Peripheral flood protection	-Improvement of existing horseshoe embankment by re-sectioning & strengthening in some parts.	-Ensure flood protection up to '88 level	-Land acquisition and shifting of houses will occur.	Nil	

SC #	PEOPLE'S NEEDS (As gathered Need Assessment	PEOPLE'S SUGGESTION from the Survey)	ACCEPTED (BY CPP)	OTHER NEEDS(Considered by SPECIALISTS/ AUTHORITY CPP)	SUGGESTIONS (BY SPECIALISTS CPP)	POSITIVE IMPACT (Of planned interventions)	NEGATIVE IMPACT (Of planned interventions)	ALTERNATIVE/ Suggestion/Plan (if any)	REMA
11	a) Removal of drainage congestion problem	Re-excavation of Ghoramara khal, Gaizabari khal, Kalibari khal, Dighulia khal & Chilabari khal	Partly, 90% (Except Kalibari khal)	a)Save crop (HYV Boro) in Singarkona beel area	-Singarkona beel Drain: draining out Singarkona beel in pre-monsoon. -A link canal from Singarkona beel to Dannya Choudhury khal	-Improvement in drainage & increase in agriculture production -Reduce damage of crops in the field resulting increase of agriculture production	-Land acquisition will occur. -Reduce in fish stocking & fish population will occur.	Nil	
			-	b)Removal of drainage congestion problem in Choto Binnafoir beel area (in pre-monsoon)	Charpara Drain:from Choto Binnafoir beel to Binnafoir khal at Rakhit Belta.	-Improve in drainage (in pre-monsoon) resulting increase in agriculture production	-Land acquisition will occur. -Stock of fish will reduce.	Nil	
11	b)Drainage congestion problem in Singarkona beel, Bara beel & Pasbeel area	Link canal between the beels and ultimate drainage in Ghoramara khal	Under consider-ation					Nil	
	c)To facilitate proper flow water in Charpara,Khanpur & Dighulia beel areas	3 No. of culverts: 1) In Charpara 2) In North of Laxmipur chak 3) In Sakrail	Under consider-ation					Nil	
				c)To regulate proper flow of water in SC # 10 & 11	-One regulator at the outfall of Gaizabari khal -A weir at Santosh Bridge -A CDO at outfall of Dighulia khal -A CDO at Khanpur Borrowpit near Karmakar para -A CDO at outfall of Dannya Choudhury khal (in connection with Singarkona beel drain).	-Drainage will be improved. -Flooding will be prevented. -Production in Agriculture will increase.	-Land acquisition will occur -Migration will be reduced. -Navigation will be hampered.	Nil	
				d)To enable flow at certain level between sub-compartment # 11 & 12 during extreme rainfall or flood	-Raising sill level of 5 nos. existing culverts; 3 nos at *Rakhitbelta*, 1 nos at *Porabari*, 1 nos at *Santosh* on *Santosh-Charabari* road (boundary of SC.# 11 & 12)	-Reduce drainage congestion problem of SC #12	-Reduce fish migration in SC. # 12. -Will hamper plying of country boats between the sub-compartments	Nil	