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MINISTRY OF WATER RESOURCES

Integrated Planning
for
Sustainable Water Management
(IPSWAM)

Technical Report No. 1:

Training Needs Assessment

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1. INTRODUCTION

The Integrated Planning for Sustainable Water Management (IPSWAM) Programme is undertaken by the Ministry of Water Resources of the Government of the People's Republic of Bangladesh in cooperation with the Government of the Kingdom of the Netherlands. It is implemented by the Third Planning Directorate (DP-III) of the Bangladesh Water Development Board (BWDB), with assistance of the consultants Arcadis-Euroconsult of the Netherlands and Socioconsult of Bangladesh. This report has been prepared for the programme under the direction of the Project Director, Mr. AHM Kausher.

The objective of the IPSWAM programme is to: “strengthen the institutional capacity of different water sector organisations responsibly to assume their different roles, as specified in the National Water Policy (NWPo) and other key policies.” It is self-evident that the early execution of a Training Needs Assessment is an essential step in achieving this objective.

This report has been prepared by Ms. Grace Ignacio, Training Advisor and Mr. Abul Kashem, Training Specialist, based on work carried out by them during February to April 2004. They were assigned to assess the training needs of the Directorate Planning (DP) III Planning Team Personnel, Southern and South Western Zonal Planning Staff of BWDB, the Water Management Organizations of different polders and Local Government Institutions (LGIs) who will be involved in implementing and managing IPSWAM Programme activities.

The scope of the assignment was wide since they were required to assess the individual training needs of BWDB central planning staff numbering around thirty-three in different categories and at different levels. Of course, it was a very challenging task and the scope extensive. But, due to extraordinary cooperation and assistance from the participating BWDB staff, the task was completed in an organized and efficient manner. The authors of the report would like to acknowledge the assistance and cooperation of the BWDB staff involved and to extend their sincere thanks to all, for their cooperation.

They would also like to give sincere thanks to all Zonal level BWDB and TA staff for their cooperation and the time spent in completing the Training Needs Assessment (TNA) Questionnaires, as well as support in arranging meetings and administering the TNA Questionnaires through Focus Group Discussion (FGD) to local groups and Union Parishads.

They also give heartiest thanks to the former Project Director, Mr. Musharrof Hossain for his comments on the draft TNA Guidelines and Formats and for providing us with the opportunity to discuss and meet with the Chief Training and Staff Development and with the Director of Training and the Director of Staff Development. They should also like to thank Mr. A H M Kausher the present Director of DP III for his valuable guidance and cooperation.

2. BACKGROUND

2.1. Background Information

Over the last decade, significant changes are shaping policies within the water sector in Bangladesh. The passage of the National Water Policy (NWPO) and the Guidelines on Participatory Water Management (GPWM) have an impact on the institutions involved in the water sector in terms of their approach and implementation strategies.

The various institutions involved in the water sector are the implementing agencies, the local government institutions, and the community-based people's organisations. Two of the implementing agencies involved are the Bangladesh Water Development Board (BWDB) and the Local Government Engineering Department (LGED). The local government institutions are the Districts (Zila Parishad), Sub-Districts (Upazila Parishad), the Union Parishads and the Villages (Gram Sarker), while the community based people's organizations are the Water Management Organisations (WMOs).

The Integrated Planning for Sustainable Water Management (IPWAM) Programme is formulated in the context of the recent NWPO, and will contribute to the operationalisation of the basic principles formulated in that policy, within the involved institutions. IPSWAM's objective is to strengthen the capacity of water sector organizations, including local level WMOs, the different offices of BWDB (central, regional/local levels) and to a limited extent, local government institutions (LGIs), to responsibly assume their roles as specified in the NWPO and the GPWM.

IPSWAM will do so by developing local level water management capability, stimulating the transfer of responsibilities for O&M to local level water management organizations, and enhancing the planning capacity of BWDB. Under IPSWAM, integrated water resources management will be introduced in nine sub-projects.

IPSWAM is directly implemented under the Directorate Planning (DP) III within BWDB. One of the priorities of IPSWAM is to develop the planning skills of the IPSWAM Planning Team and the Zonal Planning Staff, by providing an intensive programme of specific short training courses and on-the-job training.

The WMO is the key community organization for water management and maintenance of infrastructure. It is based upon existing (often informal) water management arrangements at the level of the villages or social units. It manages embankments, channels, small regulators, minor irrigation and other activities at local level.¹

It is the explicit aim of IPSWAM to introduce the approaches developed, into the regular BWDB planning practices. This implies the adoption of BWDB working procedures on the basis of approaches developed.

IPSWAM will formulate proposals for new or adapted procedures and guidelines for:

¹ Report of the Committee for the Reformulation of the IPSWAM Programme, January 2001, Dhaka

- Selection of sub-projects for rehabilitation
- Establishment of different levels of WMOs
- Establishment of LCS and contracting work
- Implementation Agreements between BWDB and WMA/WMF
- Formulating operation plans by WMOs
- By-laws for WMAs
- Annual maintenance plans for sub-projects
- Registration of WMAs and WMFs

On the basis of all these, training will be given to BWDB Planning Teams (DP III) at the Headquarters and Regional levels involved in IPSWAM implementation and for WMOs and LGIs in the 9 sub-projects where IPSWAM will be implemented. In line with IPSWAM's objectives and priority tasks, the Training Needs Assessment (TNA) was conducted in February-April 2004, to determine the specific training needs of the BWDB Planning personnel at the central and two zonal offices (Southern and South-Western Zones), the WMOs in the polders and to a limited extent, the local government institutions in order to prepare an appropriate and effective Training Plan.

This TNA Report will present the results of the activities conducted from February to April 2004. It will present the profiles of the TNA participants, the result of the assessment of the task competency of BWDB planning personnel, the assessment of WMOs and LGIs capability, recommendations on training, and provisional priority training to be conducted.

2.2. Scope and Coverage

The TNA was conducted with BWDB Central and Zonal Planning personnel, and with WMOs and LGIs in three polders. Specifically, it was administered to the following:

BWDB = 33

- | | | |
|-------------------------|---|----|
| • Central Planning Team | - | 10 |
| • Zonal Planning Teams | | |
| Barisal/Patuakhali | - | 7 |
| Khulna | - | 5 |
| • Support Staff | - | 11 |

WMOs = 16

- | | | |
|----------------|---|----|
| • Polder 43/2E | - | 10 |
| • Polder 43/2A | - | 4 |
| • Polder 22 | - | 2 |

LGIs (Union Parishad) = 3

- Polder 43/2E - 1
- Polder 43/2A - 1
- Polder 22 - 1

(See Annex A: List of TNA Participants)

2.3. Objectives

The Training Needs Assessment (TNA) was conducted to develop an appropriate Training Plan for BWDB Planning Personnel at the Central and Zonal Offices involved in IPSWAM implementation, the Water Management Organisations and Local Government Institutions in the three polders (Polders 43/2E, 43/2A and 22). Specifically, the objectives of the TNA are:

- To provide an opportunity for the Planning Staff, WMOs and LGIs to assess their level of competency and capacity in relation to their tasks and functions in IPSWAM.
- To identify knowledge and skills gap which can be improved by training.
- To generate realistic data (based on the needs of the planning staff, people/groups at the polders and the LGIs) for the formulation of the Training Plan; and
- To provide baseline data for the monitoring and evaluation of training effectiveness and application.

2.4. Methodology

The TNA was conducted using several methodologies: matrix format; self-administered questionnaire; focus group discussions for WMOs and LGIs; interviews, group discussions and observations.

Initially, a matrix format (see Annex B: Matrix on Proposed Training for IPSWAM) was discussed and distributed to concerned BWDB Central and Zonal Planning personnel and to members of the Technical Assistance Team to gather ideas and suggestions on the possible training courses to be conducted for the BWDB Planning personnel, the WMOs and LGIs in relation to IPSWAM objectives, approaches and activities. The data gathered from the matrix format was used in identifying the IPSWAM training requirements, which were incorporated in the TNA Questionnaire Format (See Annex C: TNA Guidelines and Format for BWDB Planning Personnel, WMOs and LGIs).

For the BWDB Central Planning Team, two Zonal Planning Teams and support staff, the TNA Guidelines and Format (Annex C: Formats 1.1. and 1.2) were discussed and administered individually. The members were given sufficient time to complete the format and submit it to the Training Team². The TNA was administered to the

² Training Team refers to the Training Advisor and Training Specialist who designed and administered the TNA Guidelines and Format

Directorate Planning III personnel who are involved in IPSWAM implementation on the assumption that these can be treated as a representative sample which can also represent the personnel from Planning Directorates I and II.

For the Water Management Organisations (WMOs) in the three polders, focus group discussions (FGD) were conducted using the Guidelines and Format for WMOs (Annex C: Format 2). In the absence of existing WMOs, representative sampling was done, wherein group meetings were conducted for at least one male and female group within the polders. Several FGDs were conducted in Polder 43/2E (8 Male and 2 Female Groups); Polder 43/2A (3 Male and 1 Female Groups) and Polder 22 (1 Male and 1 Female Group). One TNA Format was completed for each group.

For Local Government Institutions, one Union Parishad per polder was used as sample representative of LGIs within the polders. The TNA was administered through focus group discussion using the TNA Guidelines and Format for LGI (Annex C: Format 3).

Interviews, group discussions and observations were also used in identifying the training needs within BWDB Central and Zonal Planning Teams, WMOs and LGIs in the polders.

The accomplished TNA Formats from the BWDB Central and Zonal Planning Teams, the WMOs and the LGIs were collated and analysed. The raw data were entered and tabulated using MS Excel and further summarized for analysis. These are presented in the succeeding sections of this report.

It was apparent from the report that different methods and techniques were used, different documents reviewed and data/information collected in order to assess the actual training needs of individual staff. It is hoped that sincere comments and information will help in identifying specific training courses and preparing the training plan for IPSWAM.

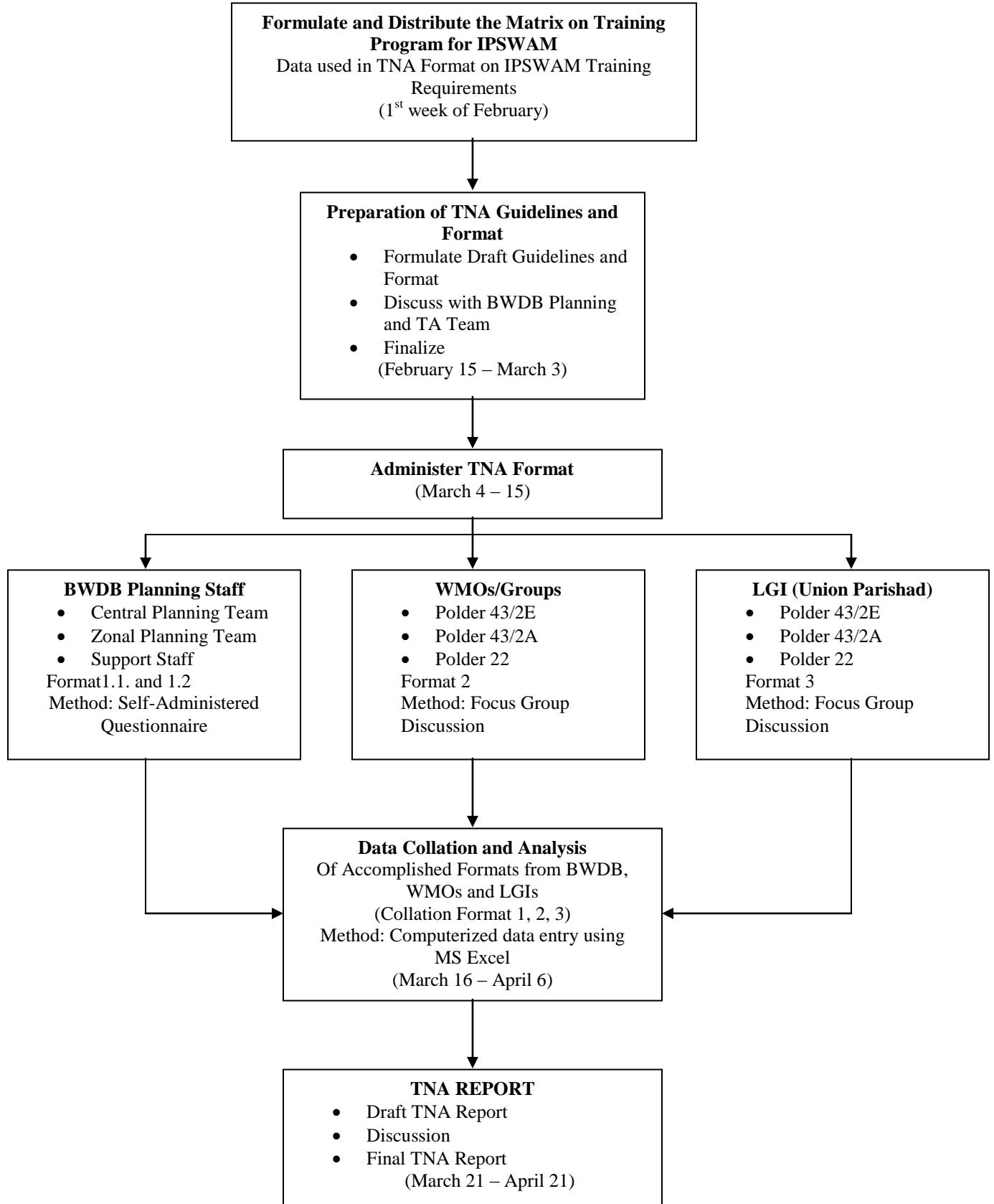
2.5. Limitations

Although the TNA was conducted with the full cooperation of those involved individuals and groups, there were still some limitations identified. When the Questionnaire was administered to the BWDB personnel, there was some difficulty answering the question on their Job Description and relating these to their specific responsibilities for IPSWAM. Another limitation is the absence of existing WMOs in the 3 polders. To address this limitation, group meetings were held separately for men and women's groups within the polders. These are used as representative samples for WMOs.

2.6. Flowchart of Activities

The flowchart below briefly illustrates the inter-relationship of the TNA activities and the time frame involved in conducting the activities:

Figure 1: Flowchart of TNA Activities



3. TNA RESULTS

3.1. Profile of TNA Participants

The data gathered provided information that is useful not only in identifying training needs but in understanding the target participants (BWDB Central, Zonal Planning Team and Support Staff; the WMOs or groups within the polders; and the LGIs such as the Union Parishads) for the IPSWAM training to be conducted. These are presented as profiles of the TNA participants and shown in Tables 1-5. The data on the profiles such as the educational level, age, work experience (for BWDB personnel) and previous training attended are also useful in identifying the appropriate methodology to be used in delivering the training.

3.1.1. BWDB Planning Personnel and Support Staff

TNA Participants:

There were 33 BWDB personnel who participated in the TNA. These are categorized into: the Central Planning Personnel (10); the Zonal Planning Personnel from Patuakhali (4), Barisal (3) and Khulna (5); and the Support Staff (11).

Academic Qualifications and Length of Working Experience:

At the Central Planning Team, 60% have an Engineering background and 40% belong to other disciplines such as Economics, Soil Science, Social Science and Computer Science. There is a wide range of working experience with a length that ranges from 12 to 26 years. On the whole, the Zonal Planning Teams have 75% Engineers and 25% other disciplines such as Agricultural Economics and Agriculture. The length of working experience ranges from 15 to 26 years. For the Support Staff at the Central level, 9% have a Bachelor's Degree in Draftsmanship, 36% have Higher Secondary Certificate, 36% have Secondary School Certificate and 18% have completed Class 10. The length of working experience ranges from 11 to 35 years. Presented in Table 1 are the details on the profile of BWDB Planning Personnel and Support Staff. It shows the names, positions, academic qualifications and length of working experience of these personnel.

Previous Training Attended:

The personnel from Central and Zonal Planning Teams have participated in numerous training courses such as:

- Induction Training Course
- Basic Computer Training, and the application of various software programmes
- Environment, Environmental Impact Assessment (EIA), Geographical Information Systems (GIS), Global Positioning System (GPS), Map Preparation
- Participatory Water Management
- Water Resources Engineering
- On-Farm Irrigation Management, Rice Production and Crop Production
- Flood Control
- Disaster Management

- Project Management and Planning
- Monitoring and Evaluation
- Financial Management for Non-Financial Managers
- Participator Rapid Appraisal (PRA)
- Gender Training
- Economic Management
- English Course
- Training of Trainers (ToT)

Presented in Table 2 are the details on the various training courses attended by the personnel from the Central and Zonal Planning Teams. It is also worth noting that the BWDB Personnel, with their wealth of work experience and training courses attended can be considered as the pool for resource speakers/trainers for training to be conducted at the Polder level and on training courses where they have an area of expertise. Presented in Table 3 are the various fields of expertise of the Central and Zonal Planning Personnel.

3.1.2. Water Management Organisations in the Polders

TNA Participants:

The TNA was conducted in the first three polders where IPSWAM is being implemented. There are no existing WMOs in these polders. To address this issue, meetings were held in several places at the polders and attended by various stakeholders. There were separate meetings for men and women to ensure that women's interests are represented. There were 16 groups who participated in the TNA meetings, attended by 168 participants of which 116 (69%) were male and 52 (31%) were female.

Level of Literacy:

To determine the literacy level, the participants were asked whether they can and write. Out of 168 participants, 48% can read and write and 52% cannot read and write. The literacy rate in Polder 43/2A is the highest with 65% compared to Polder 43/2E with 50% and Polder 22 with only 20%.

Age Distribution:

Around 81% of the participants are 50 years old and below. This is distributed as follows:

18 – 30 years old	-	40 (24%)
31 – 50 years old	-	95 (57%)
51 – 60 years old	-	28 (17%)
Above 60 years old	-	3 (2%)

Religion:

The TNA participants mostly belong to the Islamic religion (55%) followed by Hinduism (30%). 15% did not give their religious affiliation. Polders 43/2E and 43/2A are predominantly Muslim while Polder 22 is predominantly Hindu.

Occupation:

In terms of occupation, the participants are categorized into farmers (46%), fisherfolk (16%), merchants (5%), boatmen (0.5%), government worker (1%), NGO worker (0.5%), rickshaw driver (5%), school teachers (7%), earthwork laborers (2%) and those engaged in handicraft making (23%). There are also 7% that are unemployed. Some of the participants are engaged in more than one occupation, like the 23³ farmers in Polder 22 who said that they are also fisherfolk. Most of the women are engaged in handicraft making, fishing and as laborers in Landless Contracting Society (LCS) work.

Around 32 (19%) of the participants have experienced working in LCSs in previous projects such as Early Implementation Project and Delta Development Project (DDP) while 17 (10%) of which are presently involved in IPSWAM emergency works in Polders 43/2E and 43/2A. In terms of construction skills, 20 (12%) have masonry skills since they worked as assistant masons in previous projects and 5 (3%) have worked as carpenters.

Membership in other Community Based Organisations:

Some of the participants are members of community organizations which were formed by NGOs such as BRAC, ASA, Nijera Kori, Proshika, Uttar Shehakati Manob Kaliyan Sangstha, Grameen Bank and Islami Bank. Some of the participants are also members of the Village Defense Unit and the Gram Sarker (Village Council).

Attitude and Willingness to Participate in IPSWAM Activities:

To gauge the participants' attitude and willingness to participate in IPSWAM activities, they were asked the following:

- 1) Their willingness to participate in project activities from planning to O&M.
- 2) To contribute labor and materials during the rehabilitation work.
- 3) To assume O&M responsibilities.
- 4) To attend meetings and training.

The following Table presents the answers given by the participants:

Excerpt from Table 3: Willingness to Participate in IPSWAM Activities

Willingness to participate in IPSWAM activities	Polder 43/2E		Polder 43/2A		Polder 22		Total Ave.	
	Willing (%)	Not Willing (%)	Willing (%)	Not Willing (%)	Willing (%)	Not Willing (%)	Willing (%)	Not Willing (%)
1. Participate in Project activities from planning to O&M	98	2	100	0	99	1	99	1

³ The 23 fisher-folk accounts for the more than 100% total in the occupation distribution.

2. Contribute labor and materials during rehabilitation work.	46	54	94	6	80	20	73	27
3. Assume O%M responsibilities	48	52	70	30	100	0	73	27
4. Attend meetings and training	53	47	92	8	100	0	82	18

Overall, the data shows that the participants are willing to participate in IPSWAM activities. However, it is worth noting that in Polder 43/2E there are more who are not willing to contribute labor and materials during rehabilitation (54%), to assume O&M responsibilities (52%) and to attend meetings and training (47%) compared to Polder 43/2A and Polder 22. Though training can be one of the tools in changing attitude and behavior, it works best in combination with awareness raising, information campaign and the use of community organizing strategies and techniques.

Previous Training Attended:

Some of the participants in the TNA meetings were able to attend previous training conducted by other institutions and groups. Polders 43/2E and 22 have listed various training attended such as Tree Plantation, Computer Training, Adult Education, LCS Training, Village Defense Training, Road Maintenance Project, Child Care, Women’s Issues, Pest Control, Fish Culture and Afforestation. Participants from Polder 43/2A have not attended any training. (Presented in Table 4 is the detailed profile of the WMOs in each Polder.)

3.1.3. Profile of Local Government Institutions (Union Parishads)

TNA Participants:

The TNA meeting was conducted with one Union Parishad (UP) per polder. There were a total of 29 participants coming from the 3 UPs of Polder 43/2E (7), from Polder 43/2A (13) and from Polder 22 (9). There are 28 (97%) who can read and write and only 1 (3%) who cannot read and write. Polder 43/2E and Polder 22 have a higher literacy rate than Polder 43/2A. In terms of age distribution, 3 (10%) are 18-30 years old; 23 (79%) are within 31-50 years old and 3 (10%) belong to 51 – 60 years old. The predominant religion is Islam with 20 (69%) of the participants followed by Hinduism with 9 (31%).

Some members of the UP, mostly the Chairperson have attended various trainings such as: Management of UP, Water and Sanitation, Family Planning, Rural Maintenance Programme (RMP), Administration of Village Court, Agriculture and Fisheries Development, Disaster Management, Birth Registration, Awareness Raising, Gender Training and Formation of Gram Sarker (Village Government). Presented in Table 5 is the detailed profile of the Union Parishads in each Polder.

3.2. Assessment of Task Competency

The data from the assessment of task competencies provided the basis for identifying the knowledge and skills gaps of the TNA participants. Individual (BWDB Central, Zonal and Support Staff) and group (WMOs and LGIs) assessments were done on the tasks/functions in relation to the IPSWAM Training Requirements. These are grouped into main headings, which are enumerated as follows:

BWDB Central and Zonal Planning Teams	BWDB Support Staff	Water Management Organisations/Groups	Local Government Institutions (Union Parishad)
1. Planning 2. Operation and Maintenance 3. Social/Community Organisation 4. Gender and Development 5. Environment 6. Water Management 7. Management Information System 8. Management 9. Leadership Development 10. Training Skills 11. General (other issues) ⁴	1. IPSWAM Orientation 2. Computer Skills 3. Office Management 4. Interpersonal Skills 5. Job Motivation and Commitment 6. Gender Concepts	1. Organisational Mgt. 2. Gender Awareness 3. Managing Conflict 4. Financial Mgt. System 5. Participatory Water Management 6. Operation and Maintenance 7. Production Planning 8. Resource Mobilisation 9. Participatory M&E 10. Environment Awareness	1. Organisational Mgt. 2. Gender Awareness 3. Managing Conflict 4. Participatory Water Management 5. Operation and Maintenance 6. Environmental Awareness

3.2.1. Result of Assessment made by BWDB Central Planning Personnel

The TNA participants from BWDB assessed their task competencies in relation to IPSWAM training requirements. They assessed the level of competency using the rating scale of 1 to 5, which corresponds to the following:

- Rating of 1 = very limited knowledge
- Rating of 2 = limited or partial knowledge
- Rating of 3 = some knowledge/skill in performing the work but needs frequent supervision
- Rating of 4 = can perform work but need periodic supervision
- Rating of 5 = can perform work in all conditions without any supervision

Presented below are the results of the assessment made, arranged according to the main headings that the participants feel they have limited knowledge to the topics that they have sufficient knowledge and understanding. (See Table 6A for details)

⁴ This includes topics on development concepts, governance and human rights, report writing, computer skills, crop production and protection.

<u>Main Heading of IPSWAM Training</u>	<u>(Percentage of Participants)</u>		
	<u>Poor</u>	<u>Average</u>	<u>Good</u>
1. Gender and Development	84%	08%	08%
2. Environment	74%	14%	12%
3. Water Management	61%	22%	17%
4. Planning	59%	26%	15%
5. Operation and Maintenance	58%	25%	17%
6. Social/Community Organisation	53%	27%	20%
7. Management Information System	50%	45%	05%
8. Leadership Development	47%	30%	22%
9. Management	46%	42%	12%
10. Training Skills	46%	31%	23%
11. General Issues	46%	20%	34%

3.2.2. Result of Assessment made by BWDB Zonal Planning Personnel

The same rating scale and main headings are used in the assessment of task competencies of the BWDB Zonal Planning Personnel. Presented below is the result of the assessment made:

For Barisal and Patuakhali

<u>Main Heading of IPSWAM Training</u>	<u>(Percentage of Participants)</u>		
	<u>Poor</u>	<u>Average</u>	<u>Good</u>
1. Social/Community Organisation	56%	22%	22%
2. Management Information System	53%	33%	14%
3. Training Skills	46%	36%	18%
4. Planning	41%	41%	18%
5. Environment	41%	33%	26%
6. General Issues	28%	26%	46%
7. Operation and Maintenance	28%	22%	49%
8. Management	19%	36%	45%
9. Water Management	19%	19%	62%
10. Leadership Development	09%	29%	62%
11. Gender and Development	03%	43%	54%

For Khulna

<u>Main Heading of IPSWAM Training</u>	(Percentage of Participants)		
	Poor	Average	Good
1. Environment	73%	17%	10%
2. Gender and Development	50%	20%	30%
3. Training Skills	15%	50%	35%
4. Leadership Development	08%	48%	44%
5. Planning	08%	35%	57%
6. Social/Community Organisation	06%	37%	47%
7. General Issues	04%	24%	72%
8. Management	03%	53%	43%
9. Water Management	-	47%	53%
10. Operation and Maintenance	-	31%	69%
11. MIS	-	-	100%

(See Table 6B for details of Assessment of Task Competency of Zonal Planning Teams)

3.2.3. Result of the Assessment made by the BWDB Support Staff

<u>Main Heading of IPSWAM Training</u>	(Percentage of Participants)		
	Poor	Average	Good
1. IPSWAM Orientation	100%	-	-
2. Computer Skills	94%	6%	-
3. Office Management	49%	36%	15%
4. Interpersonal Skills	26%	65%	09%
5. Gender	18%	64%	18%
6. Job Motivation and Commitment	16%	09%	75%

(See Table 6C for the details on the Assessment of Task competency of BWDB Support Staff)

3.2.4. Water Management Organisations (WMOs)

The 16 groups within the polders who participated in the TNA assessed their capability as a group using the rating scale of (1) as not capable, (2) average and (3) as capable. Presented below are the results of the assessment made, arranged according to the main headings that the WMOs feel they are least capable to the topics that they feel they are most capable. (See Table 7 for details)

Polder 43/2E

<u>Main Heading of IPSWAM Training</u>	<u>(Percentage of WMOs/Groups)</u>		
	<u>Not Capable</u>	<u>Average</u>	<u>Capable</u>
1. Gender Awareness	90%	9%	1% no answer
2. Financial Mgt. System	90%	5%	5% no answer
3. Participatory M&E	85%	15%	
4. Resource Mobilisation	80%	20%	
5. Environment Awareness	80%	20%	
6. Participatory Water Mgt.	77%	20%	3% no answer
7. Organisational Mgt.	76%	18%	5%
8. Operation and Maintenance	60%	40%	
9. Managing Conflict	53%	47%	
10. Production Planning	43%	57%	

Polder 43/2A

<u>Main Heading of IPSWAM Training</u>	<u>(Percentage of WMOs/Groups)</u>		
	<u>Not Capable</u>	<u>Average</u>	<u>Capable</u>
1. Resource Mobilisation	100%	-	-
2. Participatory M&E	100%	-	-
3. Environment Awareness	100%	-	-
4. Gender Awareness	93%	7%	-
5. Organisational Mgt.	93%	7%	-
6. Participatory Water Mgt.	92%	-	8% no answer
7. Financial Mgt. System	90%	5%	5% no answer
8. Operation and Maintenance	50%	50%	-
9. Production Planning	42%	58%	-
10. Managing Conflict	25%	67%	8%

Polder 22

<u>Main Heading of IPSWAM Training</u>	<u>(Percentage of WMOs/Groups)</u>		
	<u>Not Capable</u>	<u>Average</u>	<u>Capable</u>
1. Operation and Maintenance	75%	25%	-
2. Environment Awareness	75%	25%	-
3. Managing Conflict	67%	33%	-
4. Participatory Water Management	66%	17%	17%
5. Gender Awareness	57%	43%	-
6. Organisational Management	55%	45%	-
7. Financial Management	50%	50%	-

8. Resource Mobilisation	50%	50%	-
9. Participatory M&E (25% no answer)	25%	25%	25%
10. Production Planning	17%	33%	50% no answer

3.2.5. Local Government Institutions (Union Parishads)

The three Union Parishads within the polders who participated in the TNA assessed their capability as a group using the rating scale of (1) not capable, (2) average and (3) capable. Based on the result of the assessment, Gender Awareness and Environment Awareness are the topics, which all the UPs mentioned that they are “least capable”. Presented below are the results of the assessment made, arranged according to the main headings that the LGIs feel they are least capable in, to the topics where they feel they are most capable. (See Table 8 for details)

Polder 43/2E

<u>Main Heading of IPSWAM Training</u>	<u>(Percentage of Union Parishads)</u>		
	<u>Not Capable</u>	<u>Average</u>	<u>Capable</u>
1. Gender Awareness	66%	17%	17%
2. Operation and Maintenance	33%	33%	33%
3. Environment Awareness	25%	75%	-
4. Organisational Management ⁵	20%	40%	20%
5. Participatory Water Management	-	100%	-
6. Managing Conflict	-	33%	67%

Polder 43/2A

<u>Main Heading of IPSWAM Training</u>	<u>(Percentage of Union Parishads)</u>		
	<u>Not Capable</u>	<u>Average</u>	<u>Capable</u>
1. Gender Awareness	83%	17%	-
2. Environment Awareness	50%	50%	-
3. Organisational Management	40%	60%	-
4. Managing Conflict	-	100%	-
5. Operation and Maintenance	-	100%	-
6. Participatory Water Management	-	100%	-

Polder 22

<u>Main Heading of IPSWAM Training</u>	<u>(Percentage of Unions Parishads)</u>		
	<u>Not Capable</u>	<u>Average</u>	<u>Capable</u>
1. Environment Awareness	100%	-	-
2. Gender Awareness	67%	33%	-
3. Managing Conflict	33%	67%	-
4. Participatory Water Management	50%	50%	-

⁵ 20% No answer

5. Organisational Management	20%	80%	-
6. Operation and Maintenance	-	100%	-

3.3. General Recommendations on Training

3.3.1. BWDB

There were several suggestions made by the Central and Zonal Planning Personnel regarding IPSWAM Training (See Table 9 for details). These are summarized as follows:

Training courses needed:

- Participatory Water Management
- Participatory Planning
- Monitoring and Evaluation
- Multi-disciplinary planning
- GIS
- Management Information Systems
- Extension Training
- Social/Community Organisation
- Development Economics
- Environment
- Gender Awareness
- Operation and Maintenance
- Quality Control of Hydraulic Structures
- Financial Management

Most of the participants have emphasized the need for in-country and out-country training. They suggested study tours and exchange programs to countries, which are successfully implementing participatory processes and multi-disciplinary planning and the application of GIS. They further suggested to carry out the study tours in the early part of the project so they will be able to apply whatever they gained from the study tour to the IPSWAM project.

3.3.2. Water Management Organisations

The summary of the suggestions made by the 16 WMOs is presented below (see also Table 10 for the details).

Emphasis should be given to the following training courses/topics:

- Practical training on water management
- Improved agricultural technology
- Cultivation of High Yielding Varieties and winter crops
- WMO Formation
- Conflict management
- Operation and maintenance of structures and embankments

- Adult education
- Flood protection
- Environment awareness
- Resource mobilization
- Organisational management
- Income Generating Activities
- Mitigation of iron and arsenic contamination
- Shrimp, poultry and livestock production

Participants for training should not be limited to leaders but should include the members of the group, to ensure sustainability.

3.3.3. Local Government Institutions

The summary of suggestions made by the Union Parishads is presented below (see Table 11 for details). Training courses requested are:

- WMO Formation
- Role of UP in O&M
- Water Management
- Maintenance of structures and sluice gates
- Improved agricultural practices
- Mitigation of iron and arsenic contamination
- Shrimp, poultry and livestock production

RECOMMENDATIONS

3.4. Training Needs and Priority Training

The result of the assessment on the task competencies in relation to IPSWAM, is the identification of the “knowledge and skills gap” of the participants. This is translated into topics and content areas for the training courses to be developed. Based on this assessment (enumerated in pages 11-15 of this report), and the specific training recommendations of the participants, the following are the priority training courses to be developed:

For BWDB Central and Zonal Planning Personnel:⁶

1. Environment
2. Planning (multi-disciplinary, multi-objective analysis, participatory approaches, planning tools, PRA)
3. Social/Community Organisation (including formation of WMOs)
4. Gender and Development
5. Training/Facilitation Skills
6. Management Information System
7. Geographic Information System (GIS)
8. Water Management
 - Participatory Water Management
 - New dimensions of water management as per NWPo
9. Leadership
10. Management
11. Operation and Maintenance
12. General Issues⁷

For BWDB Support Staff

1. IPSWAM Orientation
2. Computer Skills
3. Office Management
4. Interpersonal Skills
5. Gender and Development
6. Job Motivation and Commitment

For Water Management Organisations

1. Gender Awareness
2. Environment Awareness

⁶ Other suggested topics to be included under training courses enumerated are : BWDB Act 2000, NWPo 1999, NWMP, GPWM, Disaster Management and Preparedness, Multi-objective analysis, formation of WMOs, community based intervention, presentation skills, GIS data base, geo-informatics and hydro-informatics in water resource management, on-farm water management, organizational change management, project cycle, report writing, irrigation operation scheduling, preparation of O&M budget, financial management and accounting.

⁷ This includes Development Concepts, Governance and Human Rights, Report Writing, Computer Skills and Crop Production and Protection.

3. Resource Mobilisation
4. Organisational Management
5. Participatory M&E
6. Financial Management
7. Participatory Water Management
8. Operation and Maintenance
9. Managing Conflict
10. Production Planning

For Local Government Institutions

1. Gender Awareness
2. Environment Awareness
3. Organisational Management
4. Managing Conflict
5. Operation and Maintenance
6. Participatory Water Management

To identify the specific participants and training content of the training courses to be developed, the collation formats (Format 1.1, 1.2, 2.1 and 3.1) should be used as a basis because they contain the detailed data on the training needs identified by the participants. In addition, training topics should be developed and integrated in the above training courses, as IPSWAM develops guidelines and procedures on project activities such as selection of sub-projects for rehabilitation, establishment of different levels of WMOs, establishment of LCS and contracting work, implementation agreements between BWDB and WMA/WMF, formulation of operation plans by WMOs, by-laws for WMAs, annual maintenance plans for sub-projects and registration of WMAs/WMFs, others. Moreover, additional topics can be considered as new experiences and new problems arise during the IPSWAM implementation and from the results of the training monitoring and evaluation.

3.5. In-country and Out-country Study Tours

In recognition of the various projects implemented within Bangladesh that have successfully used the participatory approaches and multi-disciplinary planning methodologies, it is highly recommended that participants from BWDB Planning Teams and representatives from WMOs and selected LGIs be brought together as a team on a study tour to observe, interact and share their experiences with the implementers of these projects.

Out-of-country study tours are also recommended to observe and compare local experiences with those of other countries in order to develop a deeper understanding of how these projects are implemented, the problems and constraints encountered and how these were addressed. These study tours can also facilitate team-building and closer relationship within the Planning Teams at the central and zonal planning teams. Selected representatives (1 male and 1 female) of the best WMO in the 9 polders should also join

in the study tour, to be able to compare their experiences and learn from the best practices of community based people's organizations (Water Users Organisations, Farming/Fishing Cooperatives) in other countries. It is suggested that one WMO will be selected for each batch of polders to be implemented, giving the total to 3 WMOs with 6 representatives (3 male and 3 female) as participants to the out-of-country study tour.

3.6. Other Recommendations

- Active involvement of BWDB Planning Personnel in the development of training design and materials, and in implementation.

Considering the work experiences and wide range of training courses attended by the personnel in the Planning Teams at the central and zonal offices (as shown in the profile of TNA participants on pages 6-7), they should be involved in the development of the training design and materials for IPSWAM. They can also be tapped as trainers/resource speakers in the training to be conducted within BWDB and for WMOs and LGIs in the polders. However, training and facilitation skills should be further developed to enhance training delivery at the field level. A Training Core Group will be formed for the design and development of training courses and materials as well as training implementation.

- Competitions within IPSWAM zonal planning offices and WMOs can be held with the objective of organizing the best WMOs and in implementing the most effective water management practices in the polders. Training can be provided to the zonal planning teams and WMOs to support the attainment of this objective. The mechanics and guidelines on this competition can be developed as part of the training plan for IPSWAM. Selection of the best zonal planning team and WMO will be subjected to a selection criteria which will be formulated by the Training Core Group and decided by a panel composed of selected BWDB officials.
- Training in combination with awareness raising, information campaign, community organizing techniques and strategies can be an effective tool in changing attitudes and behavior of the WMOs and LGIs within the polders. Though not definitive, it is noted in the data gathered from WMOs (as noted in page 9 of this report), that focus should be given in creating behavioral and attitudinal change among members of the WMOs in terms of assuming responsibilities for O&M. This change should be initiated from the start of project implementation through awareness raising, information campaign, and the use of community organizing strategies and techniques and not just during the conduct of training.

Abbreviations

BWDB	Bangladesh Water Development Board
CO	Community Organizer
DP III	Directorate Planning III
DCA	Deputy Chief Agronomist
DCEO	Deputy Chief Extension Officer
DTL	Deputy Team Leader
DEO	Data Entry Operator
DMO	Data Management Operator
EO/XO	Extension Overseer
EIA	Environment Impact Assessment
FCD	Flood Control and Drainage
FCDI	Flood Control Drainage and Irrigation
FGD	Focus Group Discussion
GPWM	Guideline on Participatory Water Management
GIS	Geographic Information System
HSC	Higher Secondary School Certificate
IPSWAM	Integrated Planning for Sustainable Water Management
IRR	Internal Rate of Return
IGA	Income Generating Activities
LCS	Labor/Landless Contracting Societies
LD Clerk	Lower Development Clerk
LGI	Local Government Institutions
M&E	Monitoring and Evaluation
MIS	Management Information System
NWPo	National Water Policy
O&M	Operation and Maintenance
PD	Project Director
PRA	Participatory Rural Appraisal
PAPD	Participatory Action Plan Development
RMP	Rural Maintenance Programme
SAE	Sub Assistant Engineer
SDE	Sub Divisional Engineer
SE	Superintending Engineer
SIA	Social Impact Assessment
SO	Sectional Officer
SSC	Secondary School Certificate
TNA	Training Needs Assessment
TA	Technical Assistance
TL	Team Leader
UP	Union Parishad
VDP	Village Defense Party
WMA	Water Management Association
WMF	Water Management Federation
WMG	Water Management Group
WMO	Water Management Organization
XEN	Executive Engineer