

**Final Version**

**ASSESSMENT OF AWARENESS LEVEL OF  
STAKEHOLDERS REGARDING WETLAND RESOURCES  
AND BIO-DIVERSITY CONSERVATION**

August 2004

**MACH**

Management of Aquatic Ecosystems through Community Husbandry

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## ACRONYMS

|       |   |  |
|-------|---|--|
| AIGA  | : | Alternative Income Generating Activities                     |
| BCAS  | : | Bangladesh Center for Advanced Studies                       |
| CNRS  | : | Center for Natural Resource Studies                          |
| EC    | : | Executive Committee  |
| FGD   | : | Focus Group Discussion                                       |
| GB    | : | General Bodies   |
| HH    | : | Hail Haor  |
| KM    | : | Kangsha-Malijhee   |
| LGC   | : | Local Government Committee                                   |
| MACH  | : | Management of Aquatic Ecosystems through Community Husbandry |
| MoL   | : | Ministry of Land   |
| NGO   | : | Non-Governmental Organization                                |
| RMC   | : | Resource Management Committee                                |
| RMO   | : | Resource Management Organization                             |
| RUG   | : | Resource User Group  |
| TB    | : | Turag-Bongshi  |
| UFO   | : | Upazila Fishery Officer                                      |
| UNO   | : | Upazila Nirbahi Officer                                      |
| UP    | : | Union Parishad   |
| USAID | : | U.S. Agency for International Development                    |

## **EXECUTIVE SUMMARY**

### **MACH Communications Survey**

#### **Overview**

The Management of Aquatic-Ecosystems through Community Development (MACH) Project is a Government of Bangladesh program supported by USAID and implemented by found NGOs, Winrock International, BCAS, CARITAS Bangladesh and CNRS. The program was initiated to demonstrate to communities, local government representatives, policy makers the importance of community based wetland natural resource management and habitat conservation over an entire wetland ecosystems. The project which started field work in late 1999 is being implemented in three wetland areas, Hail Haor in Moulvibazar district, the Turag-Bongshi River Basin in Gazipur district and Kangsha-Malijhee Basin in Sherpur District

As part of the overall project activities MACH is attempting to change attitudes and raise awareness of communities and others of the importance of wetlands as well as awareness regarding the purpose and activities of the MACH project. MACH has and continues to use a variety of communication media and materials to enhance the knowledge and awareness of communities regarding the importance and services provided by wetlands and approaches needed to conserve those resources.

#### **Survey Purpose**

The broad objective of this communication study is to assess the awareness level and impact of MACH communication activities in raising interventions at different sites regarding wetland resources management and conservation of its bio-diversity. The objectives of the impact assessment study are:

- a) To assess the current awareness level of the community on the key issues of wetland resources where the MACH project is working.
- b) To compare the result of the awareness of wetland resource issues from the baseline information regarding the same issue. (Future surveys will use this survey to do the needful)
- c) To appraise the understanding about MACH, its approaches and different interventions.
- d) To identify the effective communication tools amongst the stakeholders and general community.

#### **Survey Methodology**

Interviews were conducted in all three MACH project sites with a total of 299 people interviewed. In addition focus group discussions (FGD) were conducted for RMO and RUG groups. Ten percent of all RUG groups took part in FGDs and 132 RUG members were interviewed separately. At each MACH site two RMOs (out of 16 RMOs overall) were the subject of FGDs and a total of 36 members individually interviewed. Ninety non-MACH RMO or RUG member households in the immediate vicinity of MACH wetlands were interviewed to identify non-MACH community awareness. The views of important local government individuals (UNO, UFO, UP Chairman), MACH staff were undertaken using prescribed survey. A survey team consisting of two members and four field investigators were involved in conducting FGDs with RMO and RUG members and individual interview the data processing for the study was done by computer software MS Access.

Questionnaires were developed jointly by the Socioconsult and the MACH Communications staff.

Under the survey, awareness levels of RMO and RUG members, general villagers, important stakeholders and MACH staff on wetland resource management and conservation, communication activities were *self-assessed* using a five point 'Likert' type scale scoring. "Likert" scoring is a popular method used for the development of qualitative information. Similar scoring was also used for measuring the effectiveness, media and materials used in MACH project. Given the self-assessment method used

### **Overall Findings**

It should be born in mind that all findings are based on self-assessment and focus group discussion. It is normal for people to feel that their level of knowledge and is average. Of concern are those who indicate they know nothing at all or to a lesser extent "very little". When reading the survey the key for the project is that there is awareness of the overall goals and objectives and

In general it was found that at the three MACH sites, all RMO and RUG members were aware of the project and its overall goals and objectives. RUG members had a lower level of awareness of MACH goals, objectives and the purpose of program when compared to RMO members. Villagers in general had a similar level of awareness to RUG members with the positive note that resource management activities such as sanctuaries were particularly well understood. Local government officials, a particular focus of MACH, were, in general, very aware of overall MACH goals, objectives and activities. On a site basis awareness level of RMOs, RUG members and villagers were comparatively higher in Hail Haor as compared to the Kangsha-Malijhee and Turag-Bongshi sites.

### **Impact of Communication Activities and Media**

RMOs, RUGs and villagers were asked which communication interventions they were most aware of as well as which ones were most effective. In general RMOs, RUGs and villagers all identified the Live Drama, miking and courtyard meetings as the three more effective MACH awareness activities. RMOs in addition identified rallies and exhibitions as they are generally take part in organizing those activities. As far as *media* were concerned they identified signboards and posters as the most effective media in use.

The main RMO members were aware mainly on some MACH communication interventions such as live drama, courtyard meeting, miking, fair/exhibition and rally. Their awareness was found near to average level on live drama, courtyard meeting and miking. The RUG members were also aware much from the same communication interventions. They were mainly aware from miking and courtyard meeting, which was followed by live drama. The awareness level of RMO and RUG members were found comparatively higher in Hail Haor site compared to Turag-Bongshi and Kangsha-Malijhee sites.

Considering the effectiveness of MACH communication interventions, RMO members assessed live drama, miking and courtyard meeting respectively as the most effective media and scored the effectiveness as average level. RUG members mentioned miking and courtyard meeting as the most effective media and scored the effectiveness at average level. MACH project used different communication materials to disseminate the MACH messages. In order to make communication interventions effective MACH used nine materials which

mainly include posters, signboards, hand bills, booklet and other educational materials. RMO and RUG members in three sites were mainly aware about MACH signboards and posters. They scored their awareness level and the effectiveness of these materials a very little.

#### Non-MACH Community Members

MACH implemented programs to raise awareness among the wetlands resource users, general villagers and the community as a whole to reduce pressure on floodplain resources. It was hoped that as result of MACH awareness activities and demonstration effect, the general villagers would also acquainted with the MACH approaches regarding wetland resource management and conservation. More than one-third the general villagers were aware on MACH activities on fish sanctuaries, alternative IGAs and tree plantation to some extend. But almost all the general villagers familiar with the name of MACH project. More than one-third knew about RMO and RUG and some of key messages of MACH project. Many villagers in three MACH sites were mainly aware about MACH activities and messages watching live dram and hearing miking arranged by the MACH project and also from MACH sign boards and posters.

#### FGD Results for RMOs and RUGs

In assessing the awareness level on key issues of wetland resources, FGDs were conducted with the RMO and RUG members. From the FGDs with RMO members it was found that most of them were aware highly on some wetland issues such as fish sanctuaries, tree plantation and navigation and some key messages like restoration of habitat for fish and migratory birds, stop hunting birds and wildlife. They also highly aware on wetland resource planning and management aspects. RMO members priority-wise ranked community level meeting, fair/exhibition and courtyard meeting as the popular and effective communication activities of MACH project. Among the MACH communication materials, MACH documentary (Bangla), signboards and posters were respectively ranked as effective communication materials. On the other hand, RUG members ranked TV programs and Baul (folk) song were the most effective communication activities of MACH project. RUG members were averagely aware on navigation tree plantation, restoration of habitat and issues related with alternative IGAs, wetland resource planning and management. RUG members ranked the effectiveness of MACH communication materials as the RMO members.

#### MACH Staff

About 84 percent MACH staff has high level of understanding on MACH goal and about 79 percent have high-level understanding on MACH objectives. Among the MACH partners, all the staffs of CARITAS have high level of understanding about MACH goal. Considering the three MACH sites, it was found that the level of awareness of MACH staff about the goal and objective of the project was highest among the staff of Hail Haor site.

According to MACH staff 7 (about 44 percent) of the MACH communication interventions were frequently used because of popular appear and better effectiveness while others did not. The effective MACH communication activities were fair/exhibition, rally, miking, courtyard meeting, live drama, important day observance and community level meeting. MACH project used different media to disseminate messages relating to wetland, alternative IGAs and improved livelihood. The project used festoon, placards, signboards, poster, handbill, documentary film, wall painting and printed Khatta to disseminate messages as an aid to communication activities. Considering the awareness messages, festoon, placards, signboards and posters were better effective to those who could read and understand the messages.

### **Communication Weaknesses**

There is a specific weakness in the understanding aspects of program objectives by both RMOs and particularly RUGs.

RMO and RUG members, general villagers, MACH staff and important stakeholders of the project identified different weakness of MACH project. The respondents also suggested recommendations to overcome the weaknesses. The main weaknesses of the MACH project were inadequate skill based training for the beneficiaries, lack of awareness raising training for the RMO members, the need for additional publicity on MACH project interventions, the need for RMO office buildings, fish norms were not practiced at satisfactory level, current nets were in use in other places including project areas, inadequate logistic supports to the field staff, RMO and LGC meetings were not held regularly and low literacy in the project in the project sites particularly in Sherpur. The suggested recommendations of the respondents were need based training for RMO and RUG members, assistance for RMO office building, intensified publicity for MACH interventions, adequate publicity through live drama and miking, increase of fish sanctuaries and obedience of fish laws/norms and massive mass education/adult literacy programs in the project sites. There should be provision for project based training for the MACH field staff along with necessary supports for program implementation.

Local government committee can play a vital role if MACH project could use it more gainfully to get hold of khas beels and wetlands and may act to disseminate MACH communication messages. Number of RMOs and RUGs need to be increased for popular acceptance and use of wetland resource and its management. These institutions could be linked with the other relevant government institutions, local government and NGOs. Co-ordination meetings among the MACH partners and relevant stakeholders should be held regularly. Loan ceiling for the RUG members could be increased for alternative IGAs/micro-enterprise development along with providing marketing support.

The communication interventions that were found effective at the field level should be emphasized in furthering the interventions. New communication materials and messages should be developed and used for getting more useful results. Finally, the sustainability of the project needs to be considered for future outcomes in other places in Bangladesh bring change regarding wetland resources management and conservation.

## TABLE OF CONTENTS

|   |           |
|---|-----------|
| ACRONYMS  | (i)       |
| EXECUTIVE SUMMARY   | (ii)      |
| <b>CHAPTER-ONE: INTRODUCTION</b>  |           |
| 1.1 The Background  | 01        |
| 1.2 Survey Objectives   | 02        |
| 1.3 Methodology   | 02        |
| 1.3.1 Selection of Study Areas and Population   | 02        |
| 1.3.2 Selection of Sample and Data Collection Tools   | 02        |
| 1.3.3 Data Analysis   | 03        |
| 1.3.4 Data Processing and Quality Control   | 03        |
| 1.4 Limitations   | 04        |
| <b>CHAPTER-TWO: MACH AWARENESS PROGRAMS AND ITS EFFECTIVENESS<br/>TOWARDS WETLANDS RESOURCE MANAGEMENT<br/>AND CONSERVATION</b>         |           |
| <b>2.1 Awareness of RMO Members about MACH Communication Activities and its<br/>Effectiveness</b>                                       | <b>05</b> |
| 2.1.1 Resource Management Organization (RMO) and its Role in Awareness<br>Raising towards Wetlands Resource Management and Conservation | 05        |
| 2.1.2 Awareness of RMO Members on MACH Goal, Objectives and<br>Management Approaches  | 06        |
| 2.1.3 Awareness of RMO Members on MACH Communication Media and<br>Materials and its Effectiveness                                       | 07        |
| <b>2.2 Awareness of RUG Members about MACH Communication Activities and its<br/>Effectiveness</b>                                       | <b>10</b> |
| 2.2.1 Awareness of Resource User Groups (RUGs) Regarding Wetlands<br>Resource Management and Conservation                               | 10        |
| 2.2.2 Awareness of RUG Members on MACH Goal, Objectives and<br>Management Approaches  | 10        |
| 2.2.3 Awareness of RUG Members on MACH Communication Media,<br>Materials and its Effectiveness  | 11        |
| <b>2.3 Awareness of General Villagers on Wetland Resources, Communication<br/>Activities and its Effectiveness</b>                      | <b>13</b> |
| 2.3.1 Knowledge and Awareness of General Villagers on MACH Activities and<br>Management Approaches                                      | 13        |
| 2.3.2 Awareness Level of General Villagers about MACH Activities  | 14        |
| 2.3.3 Awareness Level of General Villagers about MACH Communication Materials<br>and Its Effectiveness                                  | 15        |
| <b>2.4 Understanding of MACH Staff about MACH Communication Activities and its<br/>Effectiveness</b>                                    | <b>16</b> |
| 2.4.1 Understanding of MACH Staff Regarding MACH Goal, Objectives and<br>Communication Activities                                       | 16        |
| 2.4.2 Understanding Level of MACH Staff about Communication Interventions<br>and Its Messages   | 17        |
| 2.4.3 Understanding of MACH Staff about MACH Communication Media and Materials<br>and its Effectiveness                                 | 18        |

|            |   |           |
|------------|---|-----------|
| <b>2.5</b> | <b>AWARENESS OF UNO, UFO AND UP CHAIRMAN ABOUT MACH GOAL AND OBJECTIVES, COMMUNICATION ACTIVITIES AND ITS EFFECTIVENESS</b> | <b>20</b> |
| 2.5.1      | Awareness of UNO, UFO and UP Chairman on MACH Goal and Objectives   | 20        |
| 2.5.2      | Awareness of UNO, UFO and UP Chairman on MACH Communication Media, Materials and Messages and its Effectiveness             | 21        |

**CHAPTER- THREE: RESULTS OF FOCUS GROUP DISCUSSIONS WITH RMO AND RUG MEMBERS ABOUT MACH AWARENESS PROGRAMS**

|       |  |    |
|-------|--|----|
| 3.1.1 | Awareness Level of RMO Members on Key Issues of Wetland Resources and its Management   | 24 |
| 3.1.2 | Effectiveness of MACH Communication Media and Materials at RMO Level towards Sustainable Wetlands Resource Management and Conservation     | 25 |
| 3.1.3 | Awareness of RMO Members about Messages of MACH Communication Activities   | 27 |
| 3.2.1 | Awareness Level of RMO Members on Key Issues of Wetland Resources and its Management   | 27 |
| 3.2.2 | Effectiveness of MACH Communication Media and Materials at the RUG Level towards Sustainable Wetlands Resource Management and Conservation | 28 |
| 3.2.3 | Awareness of RUG Members about Messages of MACH Communication Activities   | 30 |

**CHAPTER-FOUR: ISSUES RELATED TO MACH COMMUNICATION ACTIVITIES AND SUGGESTED RECOMMENDATIONS**

|     |   |    |
|-----|---|----|
| 4.1 | Issues Raised by the RMO and RUG Members and General Villagers and their Suggested Recommendations  | 31 |
| 4.2 | Major Limitations Identified through Focus Group Discussion (FGD) with RMO and RUG Members and their Suggested Recommendations                  | 33 |
| 4.3 | Issues Raised by the MACH Staff and UNO, UFO and UP Chairman Regarding MACH Activities, Communication Media and their Suggested Recommendations | 34 |

## LIST OF TABLES

|              |  |    |
|--------------|--|----|
| Table- 1.1   | : Categories and the Number of Sample Respondents under Three MACH Sites                                   | 03 |
| Table-2.1.1  | : Awareness Level of RMO (EC and GB) Members on MACH Goal  | 06 |
| Table-2.1.2  | : Awareness Level of RMO (EC and GB) Members on MACH Overall Objectives                                    | 06 |
| Table-2.1.3  | : Awareness Level of RMO (EC and GB) Members on MACH Management Approaches                                 | 07 |
| Table-2.1.4  | : Awareness Level of RMO (EC and GB) Members about MACH Communication Activities                           | 08 |
| Table-2.1.5  | : Effectiveness of Communication Activities According to the RMO (EC and GB) Members                       | 09 |
| Table-2.1.6  | : Awareness Level of RMO (EC and GB) Members about MACH Communication Materials                            | 09 |
| Table-2.2.1  | : Awareness Level of RUG Members on MACH Goal  | 11 |
| Table-2.2.2  | : Awareness Level of RUG Members on MACH Overall Objectives  | 11 |
| Table-2.2.3  | : Awareness Level of RUG Members about MACH Communication Activities                                       | 12 |
| Table-2.2.4  | : Effectiveness of MACH Communication Activities According to RUG Members                                  | 12 |
| Table-2.2.5  | : Awareness Level of RUG Members about MACH Communication Materials  | 13 |
| Table-2.3.1  | : Awareness Level of General Villagers about MACH Communication Activities                                 | 15 |
| Table-2.3.2  | : Awareness Level of General Villagers about MACH Communication Materials                                  | 15 |
| Table-2.4.1  | : Understanding Level of MACH Staff on MACH Goal   | 16 |
| Table-2.4.2  | : Overall Awareness Level of MACH Staff on MACH Project Objectives   | 17 |
| Table-2.4.3  | : Understanding Level of MACH Staff about MACH Communication Activities                                    | 18 |
| Table-2.4.4  | : Effectiveness of MACH Communication Interventions According to the MACH Staff                            | 19 |
| Table- 2.5.1 | : Awareness Level of MACH Important Stakeholders (UNO, UFO and UP Chairman) about MACH Goal and Objectives | 21 |
| Table-2.5.2  | : Knowledge / Understanding Level of UNO, UFO and UP Chairman about MACH Communication Activities          | 22 |
| Table-2.5.3  | : Effectiveness of MACH Communication Activities According to UNO, UFO and UP Chairman                     | 23 |
| Table-3.1.1  | : Awareness Level of RMO Members on Key Issues of Wetland Resources and its Management                     | 25 |
| Table 3.1.2  | : Effectiveness of MACH Communication Activities for Wetlands Resource Management According to RMO Members | 26 |
| Table 3.1.3  | : Priority-wise Ranking by the RMO Members about Effectiveness of MACH Communication Materials             | 27 |
| Table-3.1.4  | : Awareness Level of RUG Members on the Key Issues of Wetland Resources and its Management                 | 28 |
| Table 3.1.5  | : Effectiveness of MACH Communication Activities for Wetlands Resource Management According to RUG Members | 29 |
| Table-3.1.6  | : Priority-wise Ranking by the RUG Members about Effectiveness of MACH Communication Materials             | 30 |
| Table-4.1.1  | : Limitations Raised by the RMO Members Regarding MACH Activities  | 31 |
| Table-4.1.2  | : Limitations Raised by the RUG Members Regarding MACH Activities  | 32 |
| Table-4.1.3  | : Issues Raised by the General Villagers   | 33 |
| Table 4.1.4  | : Major Limitations Identified through FGDs with RMO and RUG Members and their Suggested Recommendations   | 34 |

## LIST OF ANNEXURE

|                  |  |    |
|------------------|--|----|
| Annexure – I     | : Name of RMOs and RUGs  | 36 |
| Annexure – II    | : Awareness Level of RMO Members on MACH Objectives  | 37 |
| Annexure – III   | : Effectiveness of MACH Communication Materials According to the RMO Members   | 37 |
| Annexure – IV    | : Awareness Level of RUG Members on MACH Management Approaches   | 38 |
| Annexure – V     | : Awareness Level of RUG Members on MACH Objectives  | 38 |
| Annexure – VI    | : Effectiveness of MACH Communication Materials According to the RUG Members   | 39 |
| Annexure – VII   | : Knowledge and Awareness Level of General Villagers on Different Activities of MACH Project                                 | 39 |
| Annexure – VIII  | : Responsibilities Performed by the MACH Partners According to General Villagers   | 39 |
| Annexure – IX    | : Awareness of General Villagers about Key Messages of MACH Project  | 40 |
| Annexure – X     | : Effectiveness of MACH Communication Activities According to the General Villagers  | 41 |
| Annexure – XI    | : Understanding Level of MACH Staff and its Partners on Project Goal (HH site, Km and TB Sites)                              | 41 |
| Annexure – XII   | : Awareness Level of MACH Staff on MACH Objectives (HH site, KM and TB Sites)  | 42 |
| Annexure – XIII  | : Understanding Level of MACH Staff and its Partners about MACH Communication Activities (HH site, KM and TB sites)          | 44 |
| Annexure – XIV   | : Understanding of MACH Project Awareness Messages by MACH Staff   | 46 |
| Annexure – XV    | : Effectiveness of MACH Communication Materials According to UNO, UFO and UP Chairman  | 48 |
| Annexure – XVI   | : Understanding of UNO, UFO, UP Chairman about Roles/ Initiatives Regarding Awareness Messages and Materials of MACH Project | 48 |
| Annexure – XVII  | : Understanding of RMO Members about Roles/Initiatives Regarding Awareness MACH Messages and Materials                       | 50 |
| Annexure – XVIII | : Awareness Level on MACH Communication Materials According to RMO Members   | 52 |
| Annexure – XIX   | : Understanding of RUG Members about Roles/Initiatives Regarding Awareness Messages and Materials of MACH Project            | 53 |
| Annexure – XX:   | Awareness Level on MACH Communication Materials According to RUG Members   | 55 |
| Annexure – XXI   | : Suggested Recommendations of RMO Members to Overcome the Limitations   | 55 |
| Annexure – XXII  | : Suggested Recommendations of RUG Members to Overcome the Limitations   | 56 |
| Annexure – XXIII | : Issues Raised by the MACH Staff  | 56 |
| Annexure – XXIV  | : Suggested Recommendations by the MACH Staff to Improve the Situation   | 58 |
| Annexure – XXV   | : Issues Raised by UNO, UFO and UP Chairman Regarding MACH Activities and Approaches   | 59 |
| Annexure – XXVI  | : Suggested Recommendations of the UNO, UFO and UP Chairman to Improve the Situation   | 60 |

## LIST OF APPENDICES

|                |  |    |
|----------------|--|----|
| Appendix – I   | : ToR for the Baseline Study on Assessment of Awareness Level of Stakeholders Regarding Wetland Resources and Bio-diversity Conservation | 61 |
| Appendix – II  | : Checklist for FGD with RMO/RUG Members   | 68 |
| Appendix – III | : Questionnaire for RMO/RUG Members  | 73 |
| Appendix – IV  | : Questionnaire for General Villagers  | 78 |
| Appendix – V   | : Questionnaire for MACH Staff   | 82 |
| Appendix – VI  | : Questionnaire (Checklist) for UNO, UFO and UP Chairman   | 87 |
| Appendix – VII | : Policy Recommendations   | 92 |

# CHAPTER-ONE

## INTRODUCTION

### 1.1 The Background

The floodplains of Bangladesh form one of the world's most important wetlands – home for hundreds of species of unique fish, plants and wildlife and habitat for thousands of migrating birds. Due to project interventions and overuse of natural resources, the inland fisheries and floodplains catch of Bangladesh as well as the overall plant and animal bio-diversity within these wetlands continue to decline alarmingly over the years. Recognizing the need for new approaches to floodplain and wetland resource conservation and management, the Government of Bangladesh and United States Agency for International Development (USAID) jointly developed a project entitled "Management of Aquatic Ecosystems through Community Husbandry (MACH)." Winrock International with the cooperation of three partner organizations, the Bangladesh Centre for Advanced Studies (BCAS), Center for Natural Resource Studies (CNRS) and CARITAS BANGLADESH are implementing the project since September 1998.

The MACH project is being implemented in three sites, Hail Haor in Moulvibazar district, Turag-Bangshi in Gazipur district and Kangsha-Malijhee in Sherpur district mainly to demonstrate to communities, local government representatives and policy makers regarding the viability of a community approach to natural resource management and habitat conservation over an entire wetland ecosystem. The 'communities' mean all people in a given area especially the poor, who depend either economically or nutritionally on the floodplain and/or its products of all wetland resources. The inherent aims are the conservation and proper management of wetlands and their resources for sustainable wetland ecosystem. MACH has emphasized to establish community-based management for the major water bodies and riparian zones through forming community based organizations in its three project sites for the purpose of managing their local resources in an environmentally sound manner. MACH project makes some interventions through a multi-disciplinary, multi-sectoral and participatory process of planning, implementation and monitoring for sustainable wetland resource management. MACH project also includes some supplementary income generating activities for reviving the wetland fisheries and others directly depending on fishing.

In the three areas, MACH project has taken initiatives to enhance the knowledge and awareness of the community people regarding the importance of wetland resources, its services and different approaches to ensure preservation and conservation of wetland resources. The main aim of the project is to demonstrate to communities, local governments and policy planners about community approaches to natural resource management and habitat conservation in the floodplains and surrounding wetlands in Bangladesh. The project makes effort to involve the community and local government through expanded outreach and public education efforts and helps them to raise their voices regarding wetland resources management and conservation of its bio-diversity. MACH project awareness activities, like meetings, workshops, drama and large rallies on auspicious days, have some common themes stressing the importance of improvement in the lives of community members and their responsibility in maintaining and bringing about improvements in ecosystem. In the present context, the project intends to assess the usefulness of communication media and materials used and the level of awareness achieved by the beneficiaries especially the Resource User

Groups (RUGs), Resource Management Organizations (RMOs) and the community as a whole regarding the key issues of wetland resources in the three sites of MACH project.

## **1.2 Survey Objectives**

The broad objective of the survey was to assess the awareness level of the wetlands resource user groups and the community as a whole due to MACH project interventions regarding wetland resources management and conservation of its bio-diversity. The specific objectives of the survey were to:

- a) assess the current awareness level of the community on the key issues of wetland resources where the MACH project is working;
- b) compare the results of the study with the baseline information on the awareness level of the community members regarding wetland resource management issues;
- c) appraise the understanding of the community members about MACH project – its purpose, approaches and interventions;
- d) identify the effective communication media and materials for disseminating messages relating to wetland resources and MACH approaches among the stakeholders and general community.

## **1.3 Methodology**

### **1.3.1 Selection of Study Areas and Population**

The study was conducted at three MACH project sites – Hail Haor in Moulvibazar district, Turag-Bangshai in Gazipur district and Kangsha-Malijhee in Sherpur district as per ToR (Appendix-I). The study mainly followed Focus Group Discussion (FGD) with the Resource User Groups (RUGs) and members of Resource Management Organizations (RMOs) along with in-depth interview. Secondary sources of information like office records and project documents were also consulted in the study.

### **1.3.2 Selection of Sample and Data Collection Tools**

Ten per cent of the Resource User Groups (RUGs) and two Resource Management Organizations (RMOs) in each project site were selected as the sample organizations (Annexure-I) for conducting Focus Group Discussions (FGDs) and individual interview. Focus Group Discussions (FGDs) with RUG and RMO members were conducted by the consultant team using a checklist (Appendix-II).

From each of the sample RUG, six members were selected as respondents for interview using prescribed survey protocol (Appendix-III). In addition, five general villagers (on-lookers) were also interviewed to know their views about MACH interventions using a structured questionnaire (Appendix-IV). The villagers were selected considering diversified professions. From each selected RMO, 6 Executive Committee Members (3 EC and 3 GB members) were interviewed using prescribed survey protocol (Appendix-III). Four trained field investigators interviewed the RMO and RUG members and the general villagers.

Individual interview with 50% of the MACH field staff (working with RUGs and RMOs) were conducted to assess their awareness and understanding level about MACH goal, objectives and communication interventions through a questionnaire (Appendix-V). The consultant team interviewed the MACH field staff. The number of respondents considered for individual interviews under different categories is given in the following Table- 1.1.

Table-1.1: Categories and the Number of Sample Respondents under Three MACH Sites

| MACH Project Site           | RMO Members | RUG Members | General Villagers | UNO, UFO & UP Chairman | MACH Staff | Total      |
|-----------------------------|-------------|-------------|-------------------|------------------------|------------|------------|
| Turag-Bongshi (Gazipur)     | 12          | 24          | 20                | 2                      | 8          | 66         |
| Kangsha- Malijhee (Sherpur) | 12          | 60          | 40                | 4                      | 11         | 127        |
| Hail Haor (Moulvibazar)     | 12          | 48          | 30                | 4                      | 12         | 106        |
| <b>Total:</b>               | <b>36</b>   | <b>132</b>  | <b>90</b>         | <b>10</b>              | <b>31</b>  | <b>299</b> |

Opinions from the Upazila Nirbahi Officer (UNO), Upazila Fishery Officer (UFO) and UP Chairman were also collected through informal interview using a prescribed checklist (Appendix-VI). A senior official of MACH project conducted interviews with the UNO and UFO in three project sites and the consultant team interviewed the UP Chairman.

Moreover, observations were also made by the consultant team to see the operational and qualitative status of the MACH communication activities.

### 1.3.3 Data Analysis

The quantitative data of the stated sources were processed and analyzed by using simple statistical techniques, such as arithmetic mean (average), percentage supported by tables. The qualitative information was presented in a narrative or tabulated (weighted) form to measure the awareness and understanding level of the community people. To assess the awareness and understanding level of the community people a five point Likert type scale scoring was used. The responses of the respondents were scored as 'not at all', 'very little', 'average', 'high' and 'very high', and also weighted as 0,1,2,3 and 4 in respect of measuring awareness and understanding level about wetland resource management, conservation and its effectiveness.

### 1.3.4 Data Processing and Quality Control

For reporting purpose, data processing was done by computer software MS Access. The quality control of data collection was done through spot-checking of filled in questionnaire by the consultant team and the Computer Programmer also did scrutiny/verification. The consultant team provided necessary guidance for data collection and the quality of data were ensured through in-depth field visits and supervision. For the purpose of data processing, MIS Officer of MACH project and a data entry operator assisted the consultant team for providing output in tabular form.

#### 1.4 Limitations

MACH project has emphasized to promote ecologically sound management of floodplain resources through involving the community especially the poor for sustainable supply of their food (fish and other wetland products). In three of the MACH sites, wetland resource users especially the RUG members and general villagers are almost illiterate. Majority of the grass-root level respondents have little understanding about resource conservation for aquatic ecosystems and bio-diversity. Sometimes it becomes difficult for the study team to measure their awareness and understanding level regarding MACH awareness interventions. Despite of the limitations, the survey will provide to get an insight of the awareness and understanding level of the stakeholders regarding MACH interventions on wetland resource management and conservation.

## **CHAPTER-TWO**

### **MACH AWARENESS PROGRAMS AND ITS EFFECTIVENESS TOWARDS WETLANDS RESOURCE MANAGEMENT AND CONSERVATION**

#### **2.1 AWARENESS OF RMO MEMBERS ABOUT MACH COMMUNICATION ACTIVITIES AND ITS EFFECTIVENESS**

##### **2.1.1 Resource Management Organization (RMO) and its Role in Awareness Raising towards Wetlands Resource Management and Conservation**

In three MACH sites, RMOs have been formed by the initiatives of MACH-CNRS with the co-operation of the communities and Local Government Committee (LGC), which intends to demonstrate sound management of natural resources in floodplains through effective community participation and strong local government. The composition of RMO allows representation from the entire resource users community and all social and occupational classes including fishers, farmers, wage laborers, elite and women around the particular wetlands or river section. Each RMO is responsible for awareness raising and other activities through a multi-step process, which generally include: identification of target villagers, resource users and interventions; formation and support the RUG groups; identification of problems and interventions sites; formation of Resource Management Committee (RMC) and Local Government Committee (LGC), and implementation of wetlands activities. MACH – CNRS is responsible for generating environmental awareness and monitoring impacts of project activities through involving RMOs. Information dissemination, motivation, knowledge sharing and interaction with communities and related stakeholders at all steps of the project activities by the RMOs through meeting and different communication interventions formed a platform to enhance proper resource management practices by the users communities. The improved management practices of RMOs generally include interventions like swamp plantation, wetland sanctuary, habitat rehabilitation, excavation, riparian vegetation development etc. The RUG villages were emphasized for inclusion in the improved management area of MACH. The main activities of the RMO are to establish management resumes to ensure the sustainable production of fish and generate income from their water bodies along with various measures appropriate to local situations in wetland areas under their management.

In order to implement best management practices and make MACH initiatives and approaches sustainable, RMO maintains proper co-ordination with and receive guidance from the concerned Union Parishads and the Upazila Parishad for ensuring conservation and management of renewable resources. MACH project has taken various steps such as briefing sessions, meetings and workshops including informal training and field visits for increasing their knowledge/skill as well as raising awareness and also providing managerial and technical supports in accomplishing various natural resource development activities.

In the present context, it becomes necessary to assess how far the RMOs are able to raise community awareness regarding wetland resources with their jurisdiction for sustainable wetland eco-systems. MACH project also intends to know the usefulness of communication media and materials used and the level of awareness achieved by the RMO members

regarding the important issues of wetland resources. The following sub-sections will provide some insights about the relevant issues of wetland resources.

### 2.1.2 Awareness of RMO Members on MACH Goal, Objectives and Management Approaches

Opinion of the RMO (EC and GB) members were taken on MACH goal, objectives, management approaches and communication interventions, which will provide an insight of awareness level of the RMO members and also the effectiveness of MACH communication activities regarding wetlands resource management and conservation.

**Awareness on MACH Goal and Objectives:** RMO members in three MACH sites were aware about the MACH goal to some extent, which is scored below the average level (1.64). Here it can be mentioned that the awareness level of the RMO members in Hail Haor site in Sreemongal was found near to average level with a score of 1.75. Table-2.1.1 shows the awareness level of RMO (EC and GB) members on MACH goal in three MACH sites.

Table-2.1.1: Awareness Level of RMO (EC and GB) Members on MACH Goal

| MACH Project Site           | Awareness on MACH Goal |          |             |                 |                | Average Score |
|-----------------------------|------------------------|----------|-------------|-----------------|----------------|---------------|
|                             | Very High (4)          | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| Turag- Bongshi (Gazipur)    | 0                      | 0        | 8           | 3               | 1              | 1.58          |
| Kangsha- Malijhee (Sherpur) | 0                      | 0        | 7           | 5               | 0              | 1.58          |
| Hail Haor (Moulvibazar)     | 0                      | 0        | 9           | 3               | 0              | 1.75          |
| <b>Total:</b>               | <b>0</b>               | <b>0</b> | <b>24</b>   | <b>11</b>       | <b>1</b>       | <b>1.64</b>   |

RMO (EC and GB) members in three MACH sites were also aware very little about MACH objectives. The average awareness level of RMO members on MACH overall objectives in three MACH sites was 1.16 (Table-2.1.2). The RMO members mainly acquainted with the MACH objectives-2 (Maintain and recover the selected natural floodplain eco-systems and associated fisheries) and objective-3 (Identify activities to generate alternative income that result in a reduction of pressure from fishing and agriculture) compared to objective-1 (Raise awareness about the importance of floodplain resources to secure food and income security) (See Annexure- II). Awareness level of RMO members in Hail Haor site was found higher than the Turag-Bongshi and Kangsha-Malijhee sites.

Table-2.1.2: Awareness Level of RMO (EC and GB) Members on MACH Overall Objectives

| MACH Project Site           | Awareness on MACH Overall Objectives |          |             |                 |                | Average Score |
|-----------------------------|--------------------------------------|----------|-------------|-----------------|----------------|---------------|
|                             | Very High (4)                        | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| Turag-Bongshi (Gazipur)     | 0                                    | 0        | 4           | 5               | 3              | 1.08          |
| Kangsha- Malijhee (Sherpur) | 0                                    | 0        | 4           | 4               | 4              | 0.97          |
| Hail Haor (Moulvibazar)     | 0                                    | 0        | 6           | 5               | 1              | 1.42          |
| <b>Total:</b>               | <b>0</b>                             | <b>0</b> | <b>14</b>   | <b>14</b>       | <b>8</b>       | <b>1.16</b>   |

**Awareness on MACH Management Approaches:** MACH approach has allowed communities to have direct management responsibility for their natural resources through involving them into RMO activities and management and also providing assistance to RUGs. MACH also facilitated dissemination of the MACH approaches through cross visits and outreach sessions with fishers and respective local government agencies and NGOs. RMO (EC and GB) members were asked to mention their awareness level mainly on RMO formation and management and their responsibilities.

MACH conducted training courses and workshops for the RMO members and provided supports by the MACH partners to build institutional capacity and develop linkages between the RMO and local government at the Union and Upazila levels. Table-2.1.3 shows very little awareness level of the RMO members regarding formation of RMO and its byelaws, management of RMO, their roles and responsibilities to RMO and RUG activities at three MACH sites. Awareness level of RMO members in Hail Haor site was found comparatively higher than the Turag-Bongshi and Kangsha-Malijhee sites.

Table-2.1.3: Awareness Level of RMO (EC and GB) Members on MACH Management Approaches

| MACH Management Approaches           | Average Awareness Score under Different Sites |                  |             | Awareness Score |
|--------------------------------------|---|------------------|-------------|-----------------|
|                                      | Turag-Bongshi                                 | Kangsha-Malijhee | Hail Haor   |                 |
| a) Formation of RMO and its Bye laws | 1.00  | 1.25             | 1.42        | 1.22            |
| b) Management of RMO                 | 1.00  | 1.17             | 1.58        | 1.25            |
| c) Roles and Responsibilities        | 1.50  | 1.58             | 1.83        | 1.64            |
| d) Activities of RUG                 | 1.33  | 1.08             | 2.00        | 1.47            |
| <b>Overall Awareness Score:</b>      | <b>1.21</b>                                   | <b>1.27</b>      | <b>1.71</b> | <b>1.40</b>     |

### 2.1.3 Awareness of RMO Members on MACH Communication Media and Materials and its Effectiveness

**Awareness on MACH Activities and Communication Media:** MACH-CNRS facilitated formation of RMOs in three project sites aiming at raising awareness on conservation and sustainable management of wetlands through involving the communities and stakeholders. MACH-CARITAS also involved with the awareness related activities at the RUG level. MACH project initiated different communication interventions such as MACH introductory programs (meetings and workshops) at community, Union and Upazila levels, courtyard meetings (Uthan Baithaks) and village campaigns at the grass-roots level to disseminate various wetlands and environmental messages. MACH organized live dramas, baul (folk) songs, miking and arranged video shows to spread environmental awareness at the community and village levels. Moreover, MACH also arranged different programs on the occasion of important day observance to support its message for sustainable resource use or memorization, which included different activities such as mass rallies, discussion meetings, schoolchildren awareness sessions, field visits, video shows, art/essay/quiz competitions etc. MACH activities were also been broadcast nationwide on popular BTV program 'Mati-o-Manush'. These awareness programs covered a wide range of issues related to wetlands resource management and conservation. MACH project used different communication materials like posters, signboards, leaflets and so on for effectiveness of MACH communication interventions.

It was expected that RMO members should know about the communication activities initiated by the MACH project for public awareness on wetland resources and its effectiveness in attaining MACH goal, objectives and approaches. With a view to measuring the awareness level and its effectiveness, the RMO members were asked to mention their awareness about MACH communication activities and materials used for wetlands resource conservation and its bio-diversity.

Among the MACH communication activities, awareness level of RMO members was increased near to average level as a result of some MACH communication interventions such as live drama, courtyard meeting and miking (Table-2.1.4). Raising awareness of RMO members through MACH communication activities in Hail Haor was found higher compared to Turag-Bongshi and Kangsha-Malijhee sites. Almost all the RMO members did not aware about drawing, essay, and quiz competitions of MACH project.

Table-2.1.4: Awareness Level of RMO (EC and GB) Members about MACH Communication Activities

| Sl. No. | MACH Communication Interventions            | Average Awareness Score under Different Sites |                  |           | Overall Awareness Score |
|---------|---|---|------------------|-----------|-------------------------|
|         |   | Turag-Bongshi                                 | Kangsha-Malijhee | Hail Haor |                         |
| 1       | Live Drama                                  | 1.83  | 2.00             | 1.92      | 1.92                    |
| 2       | Courtyard Meeting                           | 1.75  | 1.67             | 1.92      | 1.78                    |
| 3       | Miking                                      | 1.67  | 1.58             | 1.92      | 1.72                    |
| 4       | Fair/Exhibition                             | 1.83  | 1.25             | 0.75      | 1.28                    |
| 5       | Rally                                       | 0.92  | 1.17             | 1.42      | 1.17                    |
| 6       | Community Level Meeting                     | 0.92  | 1.00             | 1.17      | 1.03                    |
| 7       | Video Show on Wetland Resources             | 0.67  | 0.83             | 1.42      | 0.97                    |
| 8       | MACH Project Introductory Meeting           | 0.83  | 0.50             | 1.17      | 0.83                    |
| 9       | Important Day Observance                    | 0.42  | 1.00             | 1.08      | 0.83                    |
| 10      | Baul (folk) Song                            | 0.17  | 1.25             | 0.58      | 0.67                    |
| 11      | Environment Education in School             | 0.00  | 0.75             | 0.67      | 0.47                    |
| 12      | Briefing Session for Different Stakeholders | 0.17  | 0.42             | 0.33      | 0.31                    |
| 13      | TV Programs                                 | 0.25  | 0.17             | 0.25      | 0.22                    |
| 14      | Drawing Competition                         | 0.00  | 0.08             | 0.00      | 0.03                    |
| 15      | Quiz Competition                            | 0.08  | 0.00             | 0.00      | 0.03                    |
| 16      | Essay Competition                           | 0.00  | 0.00             | 0.00      | 0.00                    |

RMO members expressed their views regarding the effectiveness of MACH communication activities. According to them live dramas, miking, courtyard meetings were effective. But they assessed the effectiveness of these communication activities as average level. RMO members those attended in rallies, fair/exhibition and watched video shows assessed the activities as very little effective. Some of the RMO members did not attend most of the MACH communication activities due to their preoccupations. Effectiveness of MACH communication activities was found higher effective in Hail Haor site than the Turag-Bongshi and Kangsha-Malijhee sites. Table-2.1.5 shows the effectiveness score of communication activities in three sites of MACH project.

Table-2.1.5: Effectiveness of Communication Activities According to the RMO (EC and GB) Members

| Sl. No. | MACH Communication Interventions            | Average Awareness Score under Different Sites |                  |           | Overall Awareness Score |
|---------|---|---|------------------|-----------|-------------------------|
|         |   | Turag-Bongshi                                 | Kangsha-Malijhee | Hail Haor |                         |
| 1       | Live Drama                                  | 1.92  | 2.08             | 2.42      | 2.14                    |
| 2       | Miking                                      | 1.75  | 1.83             | 2.17      | 1.92                    |
| 3       | Courtyard Meeting                           | 1.67  | 1.58             | 2.17      | 1.81                    |
| 4       | Fair/Exhibition                             | 1.75  | 1.25             | 0.92      | 1.31                    |
| 5       | Rally                                       | 0.83  | 1.00             | 1.75      | 1.19                    |
| 6       | Community Level Meeting                     | 0.83  | 1.00             | 1.42      | 1.08                    |
| 7       | Video Show on Wetlands Resources            | 0.67  | 0.83             | 1.67      | 1.06                    |
| 8       | MACH Project Introductory Meeting           | 0.92  | 0.67             | 1.33      | 0.97                    |
| 9       | Important Day Observance                    | 0.33  | 0.83             | 1.50      | 0.89                    |
| 10      | Baul (folk) Song                            | 0.17  | 1.25             | 0.75      | 0.72                    |
| 11      | Environment Education in School             | 0.00  | 0.75             | 1.00      | 0.58                    |
| 12      | TV Programs                                 | 0.25  | 0.25             | 0.50      | 0.33                    |
| 13      | Briefing Session for Different Stakeholders | 0.08  | 0.25             | 0.50      | 0.28                    |
| 14      | Drawing Competition                         | 0.00  | 0.08             | 0.00      | 0.03                    |
| 15      | Quiz Competition                            | 0.08  | 0.00             | 0.00      | 0.03                    |
| 16      | Essay Competition                           | 0.00  | 0.00             | 0.00      | 0.00                    |

**Awareness Level about MACH Communication Materials and Its Effectiveness:** MACH used different communication materials to disseminate the MACH messages in order to make MACH interventions effective. MACH communication materials mainly include posters, signboards, booklets, handbills and other educational materials on wetland resources. The RMO members in three MACH sites were mainly aware about MACH signboards and posters. But most of the RMO members were not able to aware the MACH messages due to low education level and lack of motivation about importance of the materials used by the project. Table-2.1.6 shows the awareness level of RMO members about communication materials used by MACH project.

Table-2.1.6: Awareness Level of RMO (EC and GB) Members about MACH Communication Materials

| Sl. No. | MACH Communication Materials           | Average Awareness Score under Different Sites |                  |           | Overall Awareness Score |
|---------|--|---|------------------|-----------|-------------------------|
|         |  | Turag-Bongshi                                 | Kangsha-Malijhee | Hail Haor |                         |
| 1       | Signboards (4 types)                   | 1.58  | 1.67             | 1.75      | 1.67                    |
| 2       | Posters (4 types)                      | 1.25  | 0.92             | 1.08      | 1.08                    |
| 3       | MACH Cap                               | 0.75  | 0.92             | 0.67      | 0.78                    |
| 4       | Education Materials (Wetland Messages) | 0.25  | 0.50             | 0.00      | 0.25                    |
| 5       | Wall Painting                          | 0.00  | 0.67             | 0.00      | 0.22                    |
| 6       | Folders (2 types)                      | 0.00  | 0.42             | 0.17      | 0.19                    |
| 7       | Handbills (3 types)                    | 0.17  | 0.33             | 0.00      | 0.17                    |
| 8       | Booklet (1 type)                       | 0.08  | 0.17             | 0.00      | 0.08                    |
| 9       | MACH Documentary (Bangla)              | 0.00  | 0.00             | 0.00      | 0.00                    |

Communication materials used in three MACH sites were not found effective according to the RMO members except signboards and posters (see Annexure-III). The effectiveness of communication materials in Hail Haor site was found comparatively higher than Turag-Bongshi and Kangsha-Malijhee sites. Booklets, folders and handbills were found less effective due to low education level of RMO members and limited circulation of some of the materials.

## **2.2 AWARENESS OF RUG MEMBERS ABOUT MACH COMMUNICATION ACTIVITIES AND ITS EFFECTIVENESS**

### **2.2.1 Awareness of Resource User Groups (RUGs) Regarding Wetlands Resource Management and Conservation**

CARITAS Bangladesh, a national NGO as a MACH partner is responsible for MACH community development activities through formation of RUGs with the poor wetland resource users and providing supports in training and skills development for groups as well as erudite assistance for attentive income generating activities (AIGAs) and other social assistance. The main objective of forming RUG with economically or socially disadvantaged men, women including fishers are to ensure equitable access and participation of the poor in management of floodplain resources. In addition to group formation, MACH program has been providing assistance for strengthening group development, proper records keeping and awareness rising on environmental issues, nutrition and health and other relevant aspects.

MACH aware raising programs include 'Uthan Baithak' (courtyard meeting), which focused on RUG issues and activities including the importance of fish sanctuaries and tree planting in wetlands for habitat restoration and fish conservation. Many other awareness-raising programs were also organized highlighting problems of overexploitation of and degradation of resources, importance of resource conservation and search for alternative IGAs to reduce much dependency on wetland resources. In the present contest, MACH project intends to know the usefulness of MACH communication interventions and materials used for the RUG members for wetlands resource management and conservation for sustainable wetland ecosystems.

### **2.2.2 Awareness of RUG Members on MACH Goal, Objectives and Management Approaches**

Opinion of RUG members were taken on MACH goal, objectives, management approaches and its activities in order to know their awareness level regarding wetlands resource management and conservation. Knowledge and awareness level of the RUG members on MACH goal in three MACH sites was very little. But awareness level of RUG members in Turag-Bongshi site was found near to average level (Table-2.2.1). The awareness level of RUG members in three MACH sites on management approaches especially formation and management of RUG and the activities of RUGs were very little and awareness level on formation and objectives of RMO was negligible (Annexure-IV). RUG Members in three MACH sites were also aware very little about MACH objectives (Table 2.2.2). RUG members in Kangshi-Malijhee and Hail Haor sites were not at all aware about the MACH Objective-1 (Raise awareness about the importance of floodplain resources to secure food and income security) (See Annexure- V).

Table-2.2.1: Awareness Level of RUG Members on MACH Goal

| MACH Project Site           | Awareness on MACH Goal |          |             |                 |                | Average Score |
|-----------------------------|------------------------|----------|-------------|-----------------|----------------|---------------|
|                             | Very High (4)          | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| Turag- Bongshi (Gazipur)    | 0                      | 0        | 14          | 10              | 0              | 1.58          |
| Kangsha- Malijhee (Sherpur) | 0                      | 1        | 28          | 30              | 1              | 1.48          |
| Hail Haor (Moulvibazar)     | 0                      | 0        | 19          | 29              | 0              | 1.40          |
| <b>Total:</b>               | <b>0</b>               | <b>1</b> | <b>61</b>   | <b>69</b>       | <b>1</b>       | <b>1.47</b>   |

Table-2.2.2: Awareness Level of RUG Members on MACH Overall Objectives

| MACH Project Site           | Awareness on MACH Overall Objectives |          |             |                 |                | Average Score |
|-----------------------------|--------------------------------------|----------|-------------|-----------------|----------------|---------------|
|                             | Very High (4)                        | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| Turag- Bongshi (Gazipur)    | 0                                    | 0        | 5           | 12              | 7              | 0.89          |
| Kangsha- Malijhee (Sherpur) | 0                                    | 0        | 8           | 25              | 27             | 0.69          |
| Hail Haor (Moulvibazar)     | 0                                    | 0        | 9           | 25              | 14             | 0.90          |
| <b>Total:</b>               | <b>0</b>                             | <b>0</b> | <b>22</b>   | <b>62</b>       | <b>48</b>      | <b>0.81</b>   |

### 2.2.3 Awareness of RUG Members on MACH Communication Media, Materials and its Effectiveness

MACH- CARITAS involved in formation of RUGs in three MACH sites aiming at raising awareness about importance of wetlands resource conservation and sustainable management and search for alternative IGAs to reduce much dependency on fishing as well as agriculture. MACH project initiated different communication interventions at community and village levels such as MACH introductory meetings, courtyard meetings, live drama, baul (folk) song, rallies, miking, video shows etc. to spread over awareness on wetland resources and environment balance. MACH project used different materials like posters, signboards, leaflets and so on for effectiveness of communication interventions. It was expected that RUG members should know the MACH communication activities and different media and materials used by the MACH project. RUG members were asked to mention their awareness level about media and materials used by MACH project.

As a result of some MACH communication initiatives like miking and courtyard meetings, awareness level of RUG members increased to average level. They were also aware very little from live drama and rallies. Table-2.2.3 shows the awareness level of RUG members raised on different MACH communication activities. Awareness level of RUG members in Hail Haor sides was found comparatively better than the other two sites except live drama, fair/exhibition.

Table-2.2.3: Awareness Level of RUG Members about MACH Communication Activities

| Sl. No. | MACH Communication Interventions            | Average Awareness Score under Different Sites |                  |           | Overall Awareness Score |
|---------|---|---|------------------|-----------|-------------------------|
|         |   | Turag-Bongshi                                 | Kangsha-Malijhee | Hail Haor |                         |
| 1       | Miking                                      | 1.79  | 1.78             | 1.88      | 1.82                    |
| 2       | Courtyard Meeting                           | 1.50  | 1.52             | 1.77      | 1.61                    |
| 3       | Live Drama                                  | 1.50  | 1.48             | 0.75      | 1.22                    |
| 4       | Rally                                       | 1.08  | 0.57             | 0.77      | 0.73                    |
| 5       | Fair/Exhibition                             | 0.92  | 0.62             | 0.25      | 0.54                    |
| 6       | Video Show on Wetland Resources             | 0.29  | 0.38             | 0.58      | 0.44                    |
| 7       | Community Level Meeting                     | 0.29  | 0.20             | 0.69      | 0.39                    |
| 8       | MACH Project Introductory Meeting           | 0.21  | 0.27             | 0.38      | 0.30                    |
| 9       | Important Day Observance                    | 0.08  | 0.15             | 0.46      | 0.25                    |
| 10      | Baul (folk) Song                            | 0.04  | 0.42             | 0.06      | 0.22                    |
| 11      | Environment Education in School             | 0.04  | 0.17             | 0.23      | 0.17                    |
| 12      | TV Programs                                 | 0.00  | 0.08             | 0.25      | 0.13                    |
| 13      | Briefing Session for Different Stakeholders | 0.00  | 0.02             | 0.08      | 0.04                    |
| 14      | Drawing Competition                         | 0.00  | 0.03             | 0.00      | 0.02                    |
| 15      | Quiz Competition                            | 0.00  | 0.00             | 0.02      | 0.01                    |
| 16      | Essay Competition                           | 0.00  | 0.00             | 0.00      | 0.00                    |

According to the RUG members miking and courtyard meetings were found average effective with a score of 1.98 and 1.92 respectively. Live drama and fair/exhibition were found very little effective (Table- 2.2.4). Considering the three MACH sites most of the communication interventions in Hail Haor was found higher effective than the other two sites.

Table-2.2.4: Effectiveness of MACH Communication Activities According to RUG Members

| Sl. No. | MACH Communication Interventions            | Effectiveness of Communication Activities under Different Sites |                  |           | Overall Effectiveness Score |
|---------|---|---|------------------|-----------|-----------------------------|
|         |   | Turag-Bongshi   | Kangsha-Malijhee | Hail Haor |                             |
| 1       | Miking                                      | 1.83  | 1.93             | 2.13      | 1.98                        |
| 2       | Courtyard Meeting                           | 1.46  | 1.97             | 2.10      | 1.92                        |
| 3       | Live Drama                                  | 1.42  | 1.65             | 0.96      | 1.36                        |
| 4       | Rally                                       | 1.04  | 0.82             | 1.04      | 0.94                        |
| 5       | Fair/Exhibition                             | 0.88  | 0.83             | 0.27      | 0.64                        |
| 6       | Video Show on Wetlands Resources            | 0.33  | 0.47             | 0.67      | 0.52                        |
| 7       | Community Level Meeting                     | 0.25  | 0.25             | 0.94      | 0.50                        |
| 8       | MACH Project Introductory Meeting           | 0.21  | 0.40             | 0.50      | 0.40                        |
| 9       | Important Day Observance                    | 0.08  | 0.27             | 0.56      | 0.34                        |
| 10      | Baul (folk) Song                            | 0.04  | 0.52             | 0.08      | 0.27                        |
| 11      | Environment Education in School             | 0.04  | 0.22             | 0.33      | 0.23                        |
| 12      | TV Programs                                 | 0.00  | 0.12             | 0.29      | 0.16                        |
| 13      | Briefing Session for Different Stakeholders | 0.00  | 0.02             | 0.15      | 0.06                        |
| 14      | Drawing Competition                         | 0.00  | 0.05             | 0.00      | 0.02                        |
| 15      | Quiz Competition                            | 0.00  | 0.00             | 0.04      | 0.02                        |
| 16      | Essay Competition                           | 0.00  | 0.00             | 0.00      | 0.00                        |

RUG Members in three MACH sites were aware very little from the communication materials signboards and posters out of 9 types of materials used (Table- 2.2.5). RUG members in Hail Haor and Kangsha-Malijhee sites were aware much than the Turag-Bongshi site. In case of communication materials of MACH project similar findings were also observed in effectiveness of communication materials like the RMO members (Annexure-VI).

Table-2.2.5: Awareness Level of RUG Members about MACH Communication Materials

| Sl. No. | MACH Communication Interventions       | Awareness Score under Different Sites |                  |           | Overall Awareness Score |
|---------|--|---------------------------------------|------------------|-----------|-------------------------|
|         |  | Turag-Bongshi                         | Kangsha-Malijhee | Hail Haor |                         |
| 1       | Signboards (4 types)                   | 1.38                                  | 1.07             | 1.00      | 1.10                    |
| 2       | Posters (4 types)                      | 1.33                                  | 0.78             | 0.73      | 0.86                    |
| 3       | MACH Cap                               | 0.67                                  | 0.40             | 0.23      | 0.39                    |
| 4       | Education Materials (Wetland Messages) | 0.25                                  | 0.00             | 0.00      | 0.05                    |
| 5       | Handbills (3 types)                    | 0.04                                  | 0.02             | 0.02      | 0.02                    |
| 6       | Folders (2 types)                      | 0.04                                  | 0.00             | 0.02      | 0.02                    |
| 7       | Wall Painting                          | 0.08                                  | 0.00             | 0.00      | 0.02                    |
| 8       | Booklet (1 type)                       | 0.00                                  | 0.02             | 0.00      | 0.01                    |
| 9       | MACH Documentary (Bangla)              | 0.00                                  | 0.00             | 0.00      | 0.00                    |

### 2.3 AWARENESS OF GENERAL VILLAGERS ON WETLAND RESOURCES, COMMUNICATION ACTIVITIES AND ITS EFFECTIVENESS

Most of the perennial water bodies in Bangladesh have become seasonal due to continuous siltation in wetlands causing acute shortage of water mainly in the dry reason and thus affecting irrigation, navigation and the productivity of vegetation and capture fisheries. MACH implemented programs to raise awareness among the wetlands resource users (including fishers) and the community as a whole to reduce pressure on floodplain resources. MACH implemented different activities in its project sites to encourage profitable agricultural activities like cultivation of wheat, maize and winter vegetables instead of winter rice, which require less water and also environmentally less damaging than existing practices. MACH emphasized demonstration activities to motivate and help the poor wetland users and the general villagers for tree plantation by the side of wetlands, establishment of fish sanctuaries and obedience of fish laws. The survey also intends to know the usefulness of MACH communication interventions and watersheds used in the eyes of general villagers.

#### 2.3.1 Knowledge and Awareness of General Villagers on MACH Activities and Management Approaches

Opinion of the general villagers from three MACH sites were taken to know how far the villagers acquainted with the MACH activities, its main management approaches and communication interventions in raising awareness regarding wetlands resource management and conservation. Among the respondents (villagers), about 96 percent familiar with the name of MACH project and about 36 percent and 30 percent respectively knew the name of RMO and RUG in their location.

Knowledge and awareness level of the villagers on MACH activities on sanctuaries and alternative IGAs were found very little and also very negligible awareness on the issues of wetland resource planning and management and environmental/ecological balance (Annexure- VII). According to the villagers MACH partners performed their responsibilities very little on sanctuaries and alternative IGAs (Annexure-VIII). About 17 per cent villagers participated in different MACH activities such as excavation of khals/carals, tree plantation and establishment of fish sanctuary.

### **2.3.2 Awareness Level of General Villagers about MACH Activities**

MACH-CNRS and MACH-CARITAS were responsible for generating environmental awareness and awareness-related activities at the village and community levels covering a range of issues related to project goal and approaches to issues related to wetlands and watersheds. MACH partners organized introductory meetings and campaigns at the community and village levels to acquaint MACH project goal, objectives, approaches and interventions related to wetlands. MACH also organized live dramas, baul (folk) songs, miking and arranged video shows at the villages and important centres or market places to spread environmental awareness.

It is expected that like the RUGs the villagers should also know about the MACH project activities as a result of the program outcome or demonstration effect. The general villagers in the program villages were asked to mention their awareness level about MACH programs/activities.

The general villagers became aware about some of the important messages of MACH project. More than one-third of the villagers aware on the messages shall not catch fish fries and shall not kill brood fish/shall not catch brood fish, shall not do harm to the country. Some villagers able to know the MACH messages stop bird shooting save all varieties/hunting migratory birds is illegal, establish fish sanctuary ensure the habitat of fishes (See Annexure-IX).

In the survey it was found that many villagers in three MACH sites were mainly aware about the MACH activities and messages through watching live drama and hearing miking arranged by the MACH project. Table-2.3.1 shows the awareness level of the villagers about MACH communication activities.

Table-2.3.1: Awareness Level of General Villagers about MACH Communication Activities

| Sl. No. | MACH Communication Interventions            | Awareness Score under Different Sites |                  |           | Overall Awareness Score |
|---------|---|---------------------------------------|------------------|-----------|-------------------------|
|         |   | Turag-Bongshi                         | Kangsha-Malijhee | Hail Haor |                         |
| 1       | Miking                                      | 1.00                                  | 1.58             | 1.77      | 1.51                    |
| 2       | Live Drama                                  | 1.20                                  | 1.35             | 0.63      | 1.08                    |
| 3       | Courtyard Meeting                           | 0.50                                  | 0.48             | 0.90      | 0.62                    |
| 4       | Baul (folk) Song                            | 0.10                                  | 0.53             | 0.17      | 0.31                    |
| 5       | Video Show on Wetland Resources             | 0.40                                  | 0.23             | 0.33      | 0.30                    |
| 6       | Rally                                       | 0.25                                  | 0.30             | 0.00      | 0.19                    |
| 7       | Environment Education in School             | 0.05                                  | 0.20             | 0.20      | 0.17                    |
| 8       | TV Programs                                 | 0.25                                  | 0.18             | 0.03      | 0.14                    |
| 9       | Fair/Exhibition                             | 0.25                                  | 0.13             | 0.07      | 0.13                    |
| 10      | MACH Project Introductory Meeting           | 0.15                                  | 0.13             | 0.07      | 0.11                    |
| 11      | Community Level Meeting                     | 0.00                                  | 0.00             | 0.17      | 0.06                    |
| 12      | Important Day Observance                    | 0.00                                  | 0.03             | 0.07      | 0.03                    |
| 13      | Briefing Session for Different Stakeholders | 0.00                                  | 0.00             | 0.00      | 0.00                    |
| 14      | Drawing Competition                         | 0.00                                  | 0.00             | 0.00      | 0.00                    |
| 15      | Quiz Competition                            | 0.00                                  | 0.00             | 0.00      | 0.00                    |
| 16      | Essay Competition                           | 0.00                                  | 0.00             | 0.00      | 0.00                    |

Among the MACH communication activities in three MACH sites, miking, live drama and courtyard meetings were found comparatively better effective than the other communication activities. The effectiveness of communication activities in Kangsha-Malijhee site was found comparatively higher than the Turag-Bongshi and Hail-Hour sites (Annexure-X).

### 2.3.3 Awareness Level of General Villagers about MACH Communication Materials and Its Effectiveness

The general villagers under three MACH sites were mainly aware about signboards and posters used by the MACH project (Table-2.3.2). But they were aware very little about the MACH activities from the signboards and posters and other communication materials used by MACH project due to their illiteracy. The general villagers scored MACH signboards and posters as very little effective.

Table-2.3.2: Awareness Level of General Villagers about MACH Communication Materials

| Sl. No. | MACH Communication Materials           | Awareness Score under Different Sites |                  |           | Overall Awareness Score |
|---------|--|---------------------------------------|------------------|-----------|-------------------------|
|         |  | Turag-Bongshi                         | Kangsha-Malijhee | Hail Haor |                         |
| 1       | Signboards (4 types)                   | 1.20                                  | 1.08             | 0.60      | 0.94                    |
| 2       | Posters (4 types)                      | 0.70                                  | 0.78             | 0.50      | 0.67                    |
| 3       | MACH Cap                               | 0.05                                  | 0.35             | 0.17      | 0.22                    |
| 4       | Handbills (3 types)                    | 0.10                                  | 0.15             | 0.00      | 0.09                    |
| 5       | Education Materials (Wetland Messages) | 0.05                                  | 0.08             | 0.00      | 0.04                    |
| 6       | Wall Painting                          | 0.05                                  | 0.03             | 0.00      | 0.02                    |
| 7       | Folders (2 types)                      | 0.00                                  | 0.03             | 0.00      | 0.01                    |
| 8       | Booklet (1 type)                       | 0.00                                  | 0.03             | 0.00      | 0.01                    |
| 9       | MACH Documentary (Bangla)              | 0.00                                  | 0.00             | 0.00      | 0.00                    |

## 2.4 UNDERSTANDING OF MACH STAFF ABOUT MACH COMMUNICATION ACTIVITIES AND ITS EFFECTIVENESS

Before measuring the understanding level of MACH staff about MACH communication interventions, it is necessary to know the duration of their service in the project and their level of education. MACH project started its activities in three areas at three different times. In Sreemongal-Moulvibazar area (Hail-Haor site), the project is under implementation for more than five years since September 1998 and in Sherpur district (Kangsha-Malijhee site), the project activities have been continuing for about four years since June 1999. In Kaliakoir area (Turag-Bongshi site), under Gazipur district, the activities of the project have been implemented for about five years since July 2000. Hail-Haor site is, therefore, the oldest area where many of the MACH staff has been working for more than five years. Many of the project staff at Kaliakoir has been working there for about five years, while in Kangsha-Malijhee site many staff have work experience of four years. During the period, there were a few inter-site transfers of staff. Meanwhile, some new recruitment was made. The work experience of MACH staff ranged from one year to more than five years.

Among the respondents, most of the MACH staff were graduate; some however, have post-graduation degree. The Sub-Assistant Engineers recruited by the Winrock International were Diploma holders. The MACH staff include: Site Coordinator, Senior Field Officer, Field Officer, Assistant Field Officer, Agricultural Extension Officer, Field Biologist, Sub-Assistant Engineer, Surveyor and Survey Assistant.

### 2.4.1 Understanding of MACH Staff Regarding MACH Goal, Objectives and Communication Activities

The study attempted to assess the level of understanding of the MACH staff about project goal and objectives. The goal of MACH project is to promote ecologically sound management of floodplain resources (fisheries and other wetland products) for sustainable supply of food to the poor of Bangladesh. About 84 percent of the staff claimed to have high level of understanding and the rest (about 16 percent respondents) had average understanding about MACH goal. Among the MACH partners, all the staff of CARITAS interviewed by the consultant team had high level of understanding about MACH goal. Among 26 staff reporting to have high understanding (54 percent) were from CARITAS, (31 percent) from CNRS and 4 (about 15 percent) from Winrock International. It appears that the overall understanding of the MACH staff about MACH project goal was satisfactory (Table 2.4.1). Considering the three MACH sites, it was found that the understanding about the goal of the project was highest among the staff of Hail Haor site (Annexure-XI).

Table-2.4.1: Understanding Level of MACH Staff on MACH Goal

| Understanding Level          | WI (No.) | CNRS (No.) | CARITAS (No.) | Total (No.) | Percentage on Total |
|------------------------------|----------|------------|---------------|-------------|---------------------|
| Very High (4)                | 0        | 0          | 0             | 0           | 0.00                |
| High (3)                     | 4        | 8          | 14            | 26          | 83.87               |
| Average (2)                  | 2        | 3          | 0             | 5           | 16.13               |
| Very Little (1)              | 0        | 0          | 0             | 0           | 0.00                |
| Not at All (0)               | 0        | 0          | 0             | 0           | 0.00                |
| Total                        | 6        | 11         | 14            | 31          | 100.00              |
| Average Understanding Score: | 2.67     | 2.73       | 3.00          | 2.84        |                     |

The Overall awareness level of the MACH staff on project objectives is discussed in this section. The objectives of the MACH project are related to natural floodplain resources to secure food and income security, natural floodplain ecosystems and associated fisheries and alternative income that result in a reduction of pressure on fishing and agriculture. The Table-2.4.2 indicates that about 69 percent of the MACH staff were highly aware about the objective of the MACH project while, about 27 percent had average level of awareness. Only one respondent had very high level of awareness. Two respondents had no idea of MACH objectives. Among the three sites, the awareness level of the MACH staff of Hail Haor site was the highest.

Table-2.4.2: Overall Awareness Level of MACH Staff on MACH Project Objectives

| Understanding Level                 | WI<br>(No.) | CNRS<br>(No.) | CARITAS<br>(No.) | Total<br>(No.) | Percentage<br>on Total |
|-------------------------------------|-------------|---------------|------------------|----------------|------------------------|
| Very High (4)                       | 0.00        | 0.00          | 0.33             | 0.33           | 1.08                   |
| High (3)                            | 3.67        | 6.67          | 11.00            | 21.33          | 68.82                  |
| Average (2)                         | 2.00        | 4.00          | 2.33             | 8.33           | 26.88                  |
| Very Little (1)                     | 0.00        | 0.00          | 0.33             | 0.33           | 1.08                   |
| Not at All (0)                      | 0.33        | 0.33          | 0.00             | 0.67           | 2.15                   |
| <b>Average Understanding Score:</b> | <b>2.50</b> | <b>2.55</b>   | <b>2.81</b>      | <b>2.66</b>    |                        |

In the three tables given in the Annexure-XII, it was found that awareness of MACH staff on the project objectives was high. About 55 percent of the staff had high awareness about the importance of natural floodplain resources to secure food and income security, about 55 percent had high awareness about the floodplain ecosystem and associated fisheries and about 82 percent had high awareness about alternative income generation to reduce pressure on fishing and agriculture. It further appears that among the three sites, Hail Haor site had the highest awareness about the objectives and highest understanding of MACH goal.

#### 2.4.2 Understanding Level of MACH Staff about Communication Interventions and Its Messages

The MACH project designed and implemented communication interventions to change the people's attitude and make them aware about wetland resources and its conservation. It was necessary for the MACH staff to understand the MACH approaches and communication interventions. MACH awareness activities have had importance on wetland resources, environment and lives of community and their responsibilities in maintaining and bringing about improvements. Awareness raising activities include a variety of traditional and innovative activities. In order to achieve project output, MACH implemented its activities through sixteen communication interventions, but all of them were not equally effective. It came out that courtyard meeting, rally, important day observance, miking, fair/exhibition, community level meeting and live drama had better score as communication interventions to disseminate MACH messages.

According to MACH staff seven communication interventions had popular appeal. MACH staff had better understanding of all the methods of interventions. MACH staff used different methods based on field situation and resources. Among the communication interventions, environment education, drawing competitions, quiz competition, essay competition were introduced in primary schools to enhance the awareness of the students. But their

effectiveness was limited. Yet, these were giving some idea to the students about the environment, wetland resources and the need of resource conservation. Effectiveness of communication interventions can be seen in Table-2.4.3.

Table-2.4.3: Understanding Level of MACH Staff about MACH Communication Activities

| Sl. No. | MACH Communication Interventions            | Average Understanding Score |      |         | Average Score |
|---------|---|-----------------------------|------|---------|---------------|
|         |   | WI                          | CNRS | CARITAS |               |
| 1       | Courtyard Meeting                           | 2.50                        | 2.91 | 2.93    | 2.84          |
| 2       | Rally                                       | 2.50                        | 2.73 | 2.86    | 2.74          |
| 3       | Important Day Observance                    | 2.50                        | 2.73 | 2.79    | 2.71          |
| 4       | Miking                                      | 2.33                        | 2.91 | 2.71    | 2.71          |
| 5       | Fair/Exhibition                             | 1.83                        | 2.64 | 3.00    | 2.65          |
| 6       | Community Level Meeting                     | 1.83                        | 2.64 | 2.79    | 2.55          |
| 7       | Live Drama                                  | 2.17                        | 2.45 | 2.07    | 2.23          |
| 8       | MACH Project Introductory Meeting           | 1.50                        | 1.73 | 2.29    | 1.94          |
| 9       | Video Show on Wetland Resources             | 1.50                        | 1.73 | 2.00    | 1.81          |
| 10      | Baul (folk) Song                            | 1.33                        | 1.64 | 1.64    | 1.58          |
| 11      | Environment Education in School             | 0.33                        | 1.73 | 1.86    | 1.52          |
| 12      | Quiz Competition                            | 1.33                        | 1.55 | 1.57    | 1.52          |
| 13      | Briefing Session for Different Stakeholders | 0.50                        | 1.27 | 0.79    | 0.90          |
| 14      | TV Programs                                 | 0.50                        | 0.73 | 1.21    | 0.90          |
| 15      | Drawing Competition                         | 0.50                        | 0.82 | 0.79    | 0.74          |
| 16      | Essay Competition                           | 0.33                        | 0.45 | 1.07    | 0.71          |

When the understanding level of MACH staff of three different sites was considered, seven intervention methods in all sites had more than average level of understanding. Understanding level of MACH partners in three sites can be seen in Annexure-XIII.

#### 2.4.3 Understanding of MACH Staff about MACH Communication Media and Materials and its Effectiveness

Almost all the staff was involved in the interventions, e.g. fair/exhibition, rally, miking, courtyard meeting, live drama, community level meeting and important day observance. Though 16 methods of intervention were implemented a total of only two methods had nearly high effectiveness. These were fair/exhibition and rally.

Considering three different sites, a different picture emerged; the understanding level of MACH staff was different in three sites. MACH staffs in Hair Haor site were highly aware six methods, in Kangsha-Malijhee site eight methods and in Turag-Bongshi site five methods out of 16 methods of interventions (Annexure XIII).

The interventions were made through some media about which the MACH staffs were quite aware. Some of these media facilitated dissemination of the messages to the beneficiaries, common villagers and other stakeholders to mould their attitude, particularly the wetland resource users (Annexure-XIV). In MACH Calendar there were 12 pages with impressive picture with messages on wetland resources. The Calendar had good and lasting impact but

this was discontinued after one publication. In festoon and placards 24 messages were disseminated, which had popular appeal. Under signboards and wall paintings mainly three different messages were given. These were widely used. Similarly, printed khatas containing messages for environmental education program for primary school students were distributed. But this was also discontinued. This approach had limited impact. Same was the result with quiz questions for the students. Messages on sun caps were imprinted to impress the viewers. Signboards and posters were effective to those who could read and understand the messages.

It is evident in the Table-2.4.4 that six communication interventions namely fair/exhibition, rally, miking, courtyard meeting, live drama and important day observance were more effective compared to other 10 interventions.

Table-2.4.4: Effectiveness of MACH Communication Interventions According to the MACH Staff

| Sl. No. | MACH Communication Activities               | Effectiveness Score |          |             |                 |                | Average Score |
|---------|---|---------------------|----------|-------------|-----------------|----------------|---------------|
|         |   | Very High (4)       | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| 1       | Fair/Exhibition                             | 2                   | 20       | 6           | 0               | 3              | 2.58          |
| 2       | Rally                                       | 0                   | 18       | 12          | 0               | 1              | 2.52          |
| 3       | Miking                                      | 2                   | 7        | 19          | 2               | 1              | 2.23          |
| 4       | Courtyard Meeting                           | 2                   | 5        | 22          | 1               | 1              | 2.19          |
| 5       | Live Drama                                  | 1                   | 15       | 7           | 1               | 7              | 2.06          |
| 6       | Important Day Observance                    | 0                   | 5        | 22          | 4               | 0              | 2.03          |
| 7       | Community Level Meeting                     | 0                   | 2        | 25          | 1               | 3              | 1.84          |
| 8       | MACH Project Introductory Meeting           | 2                   | 2        | 18          | 1               | 8              | 1.65          |
| 9       | Video Show on Wetland Resources             | 0                   | 6        | 13          | 2               | 10             | 1.48          |
| 10      | Baul (folk) Song                            | 0                   | 11       | 4           | 0               | 16             | 1.32          |
| 11      | Environment Education in School             | 1                   | 1        | 14          | 4               | 11             | 1.26          |
| 12      | Quiz Competition                            | 0                   | 4        | 11          | 5               | 11             | 1.26          |
| 13      | Briefing Session for Different Stakeholders | 0                   | 1        | 9           | 3               | 18             | 0.77          |
| 14      | Drawing Competition                         | 0                   | 2        | 5           | 3               | 21             | 0.61          |
| 15      | Essay Competition                           | 0                   | 1        | 8           | 0               | 22             | 0.61          |
| 16      | TV Programs                                 | 0                   | 0        | 7           | 3               | 21             | 0.55          |

## **2.5 AWARENESS OF UNO, UFO AND UP CHAIRMAN ABOUT MACH GOAL, OBJECTIVES, COMMUNICATION ACTIVITIES AND ITS EFFECTIVENESS**

MACH project has been involving concerned Ministry/Government departments, local government and NGOs officials at the Upazila and Union levels in implementing MACH activities. MACH project and local government institutions have established LGC chaired by the respective UNO and the UFO acted as the member secretary. The other members include UP chairman, relevant Upazila officers, MACH concerned staff and others as appropriate with the LGC. With the decision of the LGCs, MACH has been providing supports to the communities and the LGCs in gaining control through water bodies (jhalmohals) from the Ministry of Land (MoL) for fishing or permanent sanctuaries for conservation and protection by the community. MACH project has been trying to make liaison with the UFO in exercising and/or enforcing fish laws and regulations with a view to ensuring fishery resource management and conservation, extension services, training and collection of information. The community based MACH approaches provided opportunity to the local government institutions at the Upazila and Union levels in formulating strategies for open water and wetland management and conservation. MACH project also involved different Upazila officers to ensure the services from the nation building departments in skill training for resource users and RMO members and also for required technical guidance for the project regarding wetland resource management and conservation including environmental issues.

As important stakeholders of MACH project, UNO, UFO and UP chairman were selected as the key respondents for the survey, who have continuously been providing supports in implementing MACH activities especially in wetland resource management and conservation and environment awareness programs. It was hoped that the views of the important stakeholders would provide opportunity in formulating future strategies in implementing MACH communication activities.

### **2.5.1 Awareness of UNO, UFO and UP Chairman on MACH Goal and Objectives**

Most of the important stakeholders in three MACH sites were highly aware about MACH goal and Objectives (Table- 2.5.1). Among the respondents, 30 percent were very highly aware about MACH goal and objectives. The awareness level of the stakeholders in Hail Haor site was found lower than the Turag-Bongshi and Kangsha-Malijhee sites. Here it can be mentioned that most of the chairmen, who elected as UP chairman in last local government election were not aware about MACH goal and objectives at least at average level.

Table- 2.5.1: Awareness Level of MACH Important Stakeholders (UNO, UFO and UP Chairman) about MACH Goal and Objectives

| Awareness Level | Awareness of MACH Stakeholders |             |          | Total     | Percentage    |
|-----------------|--------------------------------|-------------|----------|-----------|---------------|
|                 | UNO                            | UP Chairman | SUFO/UFO |           |               |
| Very High (4)   | 1                              | 1           | 1        | 3         | 30.00         |
| High (3)        | 1                              | 1           | 2        | 4         | 40.00         |
| Average (2)     | 0                              | 2           | 0        | 2         | 20.00         |
| Very Little (1) | 0                              | 1           | 0        | 1         | 10.00         |
| Not at All (0)  | 0                              | 0           | 0        | 0         | 00.00         |
| <b>Total:</b>   | <b>2</b>                       | <b>5</b>    | <b>3</b> | <b>10</b> | <b>100.00</b> |

### 2.5.2 Awareness of UNO, UFO and UP Chairman on MACH Communication Media, Materials and Messages and its Effectiveness

Most of the stakeholders of MACH project have involved in different MACH activities through assisting/participating important day observance to support its messages for sustainable resource use. Activities on important international day observance of the MACH project mainly include- World Environmental Day, Earth Day, World Wetland Day and World Biodiversity Day etc, Activities on international days among others include mass rallies, discussion meetings, awareness meetings, awareness meetings/workshops, quiz/art/essay competition and tree plantation, where most of MACH stakeholders ensured their participation. Besides, at the Upazila level meetings, concerned government officials including UNO, UP chairman, NGO staff and local elites participated in MACH activities for providing assistance as national programs. This process allows MACH stakeholders to be aware about the MACH communication activities and messages for sustainable resource use.

In the survey it was observed that majority of the MACH stakeholders were mainly aware about 8 communication activities out of 16. These were- miking, community level meeting, live drama, courtyard meeting, fair/exhibition and important day observance. Their awareness and understanding level on these communication activities was at average level. Table- 2.5.2 shows the awareness and understanding level of UNO, UFO and UP Chairman on MACH communication interventions.

Table-2.5.2: Knowledge / Understanding Level of UNO, UFO and UP Chairman about MACH Communication Activities

| Sl. No. | MACH Communication Activities               | Understanding Score |          |             |                 |                | Average Score |
|---------|---|---------------------|----------|-------------|-----------------|----------------|---------------|
|         |   | Very High (4)       | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| 1       | Miking                                      | 1                   | 6        | 1           | 1               | 1              | 2.50          |
| 2       | Community Level Meeting                     | 1                   | 2        | 7           | 0               | 0              | 2.40          |
| 3       | Rally                                       | 0                   | 6        | 3           | 0               | 1              | 2.40          |
| 4       | MACH Project Introductory Meeting           | 0                   | 6        | 2           | 0               | 2              | 2.20          |
| 5       | Live Drama                                  | 1                   | 5        | 1           | 0               | 3              | 2.10          |
| 6       | Courtyard Meeting                           | 1                   | 3        | 3           | 1               | 2              | 2.00          |
| 7       | Fair/Exhibition                             | 0                   | 4        | 3           | 0               | 3              | 1.80          |
| 8       | Important Day Observance                    | 0                   | 3        | 4           | 0               | 3              | 1.70          |
| 9       | Briefing Session for Different Stakeholders | 0                   | 3        | 3           | 0               | 4              | 1.50          |
| 10      | Environment Education in School             | 0                   | 3        | 3           | 0               | 4              | 1.50          |
| 11      | Quiz Competition                            | 0                   | 1        | 4           | 0               | 5              | 1.10          |
| 12      | Baul (folk) Song                            | 0                   | 2        | 2           | 0               | 6              | 1.00          |
| 13      | Video Show on Wetland Resources             | 0                   | 2        | 2           | 0               | 6              | 1.00          |
| 14      | Essay Competition                           | 0                   | 0        | 3           | 0               | 7              | 0.60          |
| 15      | Drawing Competition                         | 0                   | 0        | 2           | 0               | 8              | 0.40          |
| 16      | TV Programs                                 | 0                   | 0        | 2           | 0               | 8              | 0.40          |

According to UNO, UFO and UP Chairman, miking and community level meetings respectively were the most effective communication interventions of MACH project. Live drama and courtyard meeting were followed by these interventions considering its effectiveness (Table- 2.5.3). They scored the effectiveness of these interventions at average level.

Table-2.5.3: Effectiveness of MACH Communication Activities According to UNO, UFO and UP Chairman

| Sl. No. | Communication Activities                    | Understanding Score |          |             |                 |                | Average Score |
|---------|---|---------------------|----------|-------------|-----------------|----------------|---------------|
|         |   | Very High (4)       | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| 1       | Miking                                      | 1                   | 7        | 0           | 1               | 1              | 2.60          |
| 2       | Community Level Meeting                     | 1                   | 3        | 6           | 0               | 0              | 2.50          |
| 3       | Live Drama                                  | 1                   | 6        | 0           | 0               | 3              | 2.20          |
| 4       | Courtyard Meeting                           | 1                   | 3        | 4           | 0               | 2              | 2.10          |
| 5       | Rally                                       | 0                   | 3        | 6           | 0               | 1              | 2.10          |
| 6       | MACH Project Introductory Meeting           | 0                   | 5        | 2           | 1               | 2              | 2.00          |
| 7       | Fair/Exhibition                             | 0                   | 4        | 3           | 0               | 3              | 1.80          |
| 8       | Briefing Session for Different Stakeholders | 1                   | 3        | 1           | 1               | 4              | 1.60          |
| 9       | Important Day Observance                    | 0                   | 3        | 3           | 1               | 3              | 1.60          |
| 10      | Environment Education in School             | 1                   | 1        | 3           | 1               | 4              | 1.40          |
| 11      | Quiz Competition                            | 0                   | 1        | 4           | 0               | 5              | 1.10          |
| 12      | Video Show on Wetland Resources             | 1                   | 1        | 2           | 0               | 6              | 1.10          |
| 13      | Baul (folk) Song                            | 0                   | 2        | 2           | 0               | 6              | 1.00          |
| 14      | Essay Competition                           | 0                   | 0        | 3           | 0               | 7              | 0.60          |
| 15      | Drawing Competition                         | 0                   | 0        | 2           | 0               | 8              | 0.40          |
| 16      | TV Programs                                 | 0                   | 0        | 2           | 0               | 8              | 0.40          |

Considering the dissemination of MACH messages and its effectiveness, UNO, UFO and UP Chairman opined miking signboards and posters as the most effective communication materials (Annexure-XV). As important stakeholders of the MACH project UNO, UFO and UP Chairman were aware about the MACH messages regarding wetland and environment to some extent (Annexure-XVI). They were aware about some media and materials, which were used to disseminate MACH messages in posters and signboards. They were also aware on some messages disseminated through rally, workshop and the festoon and placards etc. used in different day observance. They stated some limitations about MACH communication interventions and also suggested some recommendations thereto, which are discussed in chapter four.

## **CHAPTER- THREE**

### **RESULTS OF FOCUS GROUP DISCUSSIONS WITH RMO AND RUG MEMBERS ABOUT MACH AWARENESS PROGRAMS**

In assessing the awareness level of beneficiaries regarding wetland resources, FGDs were conducted with the members of Resource User Groups (RUGs) by the consultant team as per the ToR. Consultant team organized FGDs with 2 RMOs and 10 percent RUGs in each MACH site. A total of 6 FGDs with RMO members and 22 FGDs with RUG members were organized considering major issues related to wetland resources and its management. In implementing MACH communication activities, media and materials were emphasized as per objectives and issues outlined in the ToR. The consultant team organized FGDs with RMO and RUG members in the respected areas using a checklist, which were used as the main basis for facilitating the discussions in FGDs. Opinion of RMO and RUG members regarding awareness were taken on the key issues of wetland resources, where they also ranked effectiveness of communication activities and materials used by MACH projects. The results of FGDs on MACH project with an overall finding ranking are given below.

#### **3.1.1 Awareness Level of RMO Members on Key Issues of Wetland Resources and its Management**

Due to reduce of perennial water bodies and overuse of wetland resources causing acute shortage of water especially in the dry season and thus effecting irrigation, navigation and capture fisheries. In conducting FGDs with RMO members, they were asked to mention their awareness level on the important issues of wetland resources and its management. In FGDs, it was found that RMO members were aware highly on some wetland issues such as fish sanctuaries (2.93), tree plantation (2.86) and navigation (2.76) because of MACH interventions (Table-3.1.1). RMO members were aware above the average level on some wetland issues like restoration of habitats for fish and migratory birds, stop hunting birds and wildlife. The awareness level of RMO members is Hail Haor and Kangsha Malijhee sites were higher than the Turag-Bongshi site.

Table-3.1.1: Awareness Level of RMO Members on Key Issues of Wetland Resources and its Management

| Sl. No.   | Key Issues   | Average Awareness Score under Different Sites |                  |           | Average Awareness Score |
|---|--|---|------------------|-----------|-------------------------|
|   |  | Turag-Bongshi                                 | Kangsha-Malijhee | Hail Haor |                         |
| <b>a) Wetland Resources:</b>                        |  |   |                  |           |                         |
| 1   | Fish Sanctuaries                                     | 2.90  | 2.67             | 3.06      | 2.93                    |
| 2   | Tree Plantation                                      | 2.30  | 2.73             | 3.09      | 2.86                    |
| 3   | Navigation   | 2.10  | 2.60             | 3.03      | 2.76                    |
| 4   | Restoration of Habitats                              | 2.20  | 2.07             | 2.94      | 2.59                    |
| 5   | Fish Resource  | 2.00  | 2.93             | 2.58      | 2.57                    |
| 6   | Habitat for Migratory Birds                          | 2.00  | 2.87             | 2.58      | 2.55                    |
| 7   | Aquatic Vegetation                                   | 1.90  | 2.53             | 2.73      | 2.53                    |
| 8   | Surface Water Irrigation                             | 2.00  | 2.27             | 2.58      | 2.40                    |
| 9   | Bird/Wildlife Hunting                                | 1.90  | 1.87             | 2.79      | 2.40                    |
| 10  | Bio-diversity Conservation/<br>Environmental Balance | 1.80  | 2.73             | 2.27      | 2.31                    |
| 11  | Flood Pollution/Control                              | 2.10  | 2.13             | 2.18      | 2.16                    |
| <b>b) Wetland Resource Planning and Management:</b> |  |   |                  |           |                         |
| 12  | Alternative IGAs for Livelihood Development          | 2.30  | 2.53             | 3.33      | 2.95                    |
| 13  | Participatory Wetland Resource Problem Assessment    | 2.40  | 2.53             | 2.79      | 2.66                    |
| 14  | Integrated Wetland Resource Planning and Management  | 1.40  | 2.33             | 2.88      | 2.48                    |

RMO members were also highly aware on wetland resource planning and management particularly on wetland resources problem assessment and alternative IGAs for livelihood development (Table- 3.1.1).

### 3.1.2 Effectiveness of MACH Communication Media and Materials at RMO Level towards Sustainable Wetlands Resource Management and Conservation

MACH project implemented different interventions such as MACH introductory meetings/workshops at community/Union and Upazila levels; courtyard meetings, live drama, baul (folk) song, video show and miking at the village/community level to raise awareness of the community and stakeholders. Moreover, MACH also organized different programs such as quiz/drawing/essay/competition, fair/exhibition on the occasion of different day observance to disseminate or support its messages. The RMO members priority-wise ranked the effectiveness of MACH communication interventions. The RMO members ranked community level meeting, fair/exhibition, courtyard meeting and MACH introductory meeting as the top priority considering their effectiveness (Table- 3.1.2).

Table 3.1.2: Effectiveness of MACH Communication Activities for Wetlands Resource Management According to RMO Members

| Sl. No. | MACH Communication Activities               | Priority-wise Ranking under Different Sites |      |         |      |         |      | Overall |      |
|---------|---|---|------|---------|------|---------|------|---------|------|
|         |   | TB Site                                     |      | KM Site |      | HH Site |      | Score   | Rank |
|         |   | Score                                       | Rank | Score   | Rank | Score   | Rank |         |      |
| 1       | Community Level Meeting                     | 3.00  | 9    | 2.53    | 7    | 1.58    | 1    | 2.07    | 1    |
| 2       | Fair/Exhibition                             | 2.00  | 1    | 2.50    | 6    | 1.93    | 8    | 2.12    | 2    |
| 3       | Courtyard Meeting                           | 2.88  | 8    | 2.73    | 9    | 1.67    | 2    | 2.13    | 3    |
| 4       | MACH Project Introductory Meeting           | 2.63  | 5    | 2.33    | 4    | 1.91    | 7    | 2.13    | 3    |
| 5       | Video Show on Wetland Resources             | 2.00  | 1    | 2.27    | 3    | 2.21    | 10   | 2.19    | 4    |
| 6       | Live Drama                                  | 2.70  | 7    | 2.13    | 2    | 2.14    | 9    | 2.26    | 5    |
| 7       | Environment Education in School             | 2.67  | 6    | 2.47    | 5    | 1.89    | 6    | 2.26    | 5    |
| 8       | Essay Competition                           | 5.00  | 12   | 0.00    | 11   | 1.82    | 5    | 2.31    | 6    |
| 9       | TV Programs                                 | 3.43  | 10   | 2.00    | 1    | 1.75    | 4    | 2.33    | 7    |
| 10      | Miking                                      | 2.30  | 2    | 2.13    | 2    | 2.45    | 11   | 2.34    | 8    |
| 11      | Baul (folk) Song                            | 2.30  | 2    | 2.13    | 2    | 2.65    | 12   | 2.42    | 9    |
| 12      | Quiz Competition                            | 5.00  | 12   | 0.00    | 11   | 1.70    | 3    | 2.46    | 10   |
| 13      | Rally                                       | 2.50  | 3    | 2.27    | 3    | 2.81    | 13   | 2.61    | 11   |
| 14      | Drawing Competition                         | 4.00  | 11   | 3.25    | 10   | 1.70    | 3    | 2.62    | 12   |
| 15      | Important Day Observance                    | 2.50  | 3    | 2.53    | 7    | 3.03    | 14   | 2.81    | 13   |
| 16      | Briefing Session for Different Stakeholders | 2.57  | 4    | 2.60    | 8    | 3.52    | 15   | 3.15    | 14   |

It was found from the Table- 3.1.2 that regarding effectiveness of MACH communication activities, community level meeting and courtyard meeting ranked the first and second priority by the RMO members in Hail Haor site, while video show and fair/exhibition and miking and baul (folk) song respectively ranked the first and second priority by the RMO members in Turag-Bonashi site. In Kangsha-Malijhee site, RMO members ranked TV programs, miking and baul (folk) song as the most priority media considering effectiveness of MACH communication activities in raising awareness about wetland resources.

Considering the effectiveness of MACH communication materials, RMO members ranked MACH documentary (Bangla), signboards and posters as the most effective communication materials used by MACH project. Table- 3.1.3 shows the effectiveness of MACH communication materials in three sites of the project.

Table 3.1.3: Priority-wise Ranking by the RMO Members about Effectiveness of MACH Communication Materials

| Sl. No. | MACH Communication Materials           | Effectiveness Score |      |         |      |         |      | Overall Effectiveness |      |
|---------|--|---------------------|------|---------|------|---------|------|-----------------------|------|
|         |  | TB Site             |      | KM Site |      | HH Site |      | Score                 | Rank |
|         |  | Score               | Rank | Score   | Rank | Score   | Rank |                       |      |
| 1       | MACH Documentary (Bangla)              | 4.00                | 7    | 2.00    | 1    | 2.17    | 3    | 2.45                  | 1    |
| 2       | Sign Boards                            | 3.30                | 3    | 2.33    | 2    | 2.09    | 2    | 2.57                  | 2    |
| 3       | Posters                                | 3.10                | 1    | 2.73    | 4    | 2.00    | 1    | 2.70                  | 3    |
| 4       | Booklet                                | 3.17                | 2    | 2.00    | 1    | 0.00    | 5    | 2.88                  | 4    |
| 5       | Handbills                              | 3.40                | 4    | 2.70    | 3    | 0.00    | 5    | 2.93                  | 5    |
| 6       | MACH Cap                               | 3.60                | 5    | 3.00    | 5    | 2.25    | 4    | 3.19                  | 6    |
| 7       | Education Materials (Wetland Messages) | 3.80                | 6    | 0.00    | 7    | 2.00    | 1    | 3.29                  | 7    |
| 8       | Wall Painting                          | 5.00                | 9    | 3.33    | 6    | 0.00    | 5    | 4.38                  | 8    |
| 9       | Folders                                | 4.60                | 8    | 0.00    | 7    | 0.00    | 5    | 4.60                  | 9    |

### 3.1.3 Awareness of RMO Members about Messages of MACH Communication Activities

MACH project used different materials as an aid of communication activities to disseminate messages on wetland resources and improved livelihood. Almost all the RMO members were aware on the messages- stop catching spawn-rich fish; shall not catch spawn-rich fish, shall not harm to the country/if the spawn-rich fish are caught, the country will face serious problems; stop hunting migratory birds/stop hunting birds, save all varieties, and save biodiversity, stop using current nets and establish fish sanctuaries, ensure fish habitat (Annexure-XVII). Understanding level of RMO members mainly increased due to different communication materials such as festoon, placards used in important day observance/rallies and signboards, posters used by the MACH project (Annexure- XVIII).

### 3.2.1 Awareness Level of RMO Members on Key Issues of Wetland Resources and its Management

In conducting FGDs with RUG members they were also asked to mention their awareness level on the key issues of wetland resources and its management like the RMO members. In FGDs it was observed that RUG members were also aware almost all the essential issues of wetland resources at an average level. Among the essential wetland issues, RUG members were aware much on navigation, tree plantation and restoration of habitats. Table- 3.1.4 shows the awareness level of RUG members on important issues of wetland resource.

Table-3.1.4: Awareness Level of RUG Members on the Key Issues of Wetland Resources and its Management

| Sl. No.   | Key Issues   | Average Awareness Score under Different Sites |                  |           | Average Awareness Score |
|---|--|---|------------------|-----------|-------------------------|
|   |  | Turag-Bongshi                                 | Kangsha-Malijhee | Hail Haor |                         |
| <b>a) Wetland Resources:</b>                        |  |   |                  |           |                         |
| 1   | Navigation   | 2.19  | 2.34             | 2.59      | 2.43                    |
| 2   | Tree Plantation                                      | 1.84  | 2.29             | 2.73      | 2.41                    |
| 3   | Restoration of Habitats                              | 1.68  | 2.14             | 2.70      | 2.31                    |
| 4   | Bird/Wildlife Hunting                                | 1.84  | 2.24             | 2.51      | 2.30                    |
| 5   | Fish Sanctuaries                                     | 1.84  | 1.97             | 2.50      | 2.18                    |
| 6   | Surface Water Irrigation                             | 2.00  | 1.96             | 2.44      | 2.17                    |
| 7   | Aquatic Vegetation                                   | 1.94  | 1.78             | 2.54      | 2.13                    |
| 8   | Habitat for Migratory Birds                          | 2.00  | 1.70             | 2.43      | 2.06                    |
| 9   | Flood Pollution/Control                              | 1.77  | 1.73             | 2.40      | 2.02                    |
| 10  | Fish Resource  | 1.32  | 1.84             | 2.04      | 1.85                    |
| 11  | Bio-diversity Conservation/<br>Environmental Balance | 1.19  | 1.83             | 2.03      | 1.82                    |
| <b>b) Wetland Resource Planning and Management:</b> |  |   |                  |           |                         |
| 12  | Alternative IGAs for Livelihood Development          | 1.77  | 2.59             | 2.86      | 2.58                    |
| 13  | Participatory Wetland Resource Problem Assessment    | 1.55  | 2.34             | 2.72      | 2.39                    |
| 14  | Integrated Wetland Resource Planning and Management  | 1.26  | 2.24             | 2.84      | 2.36                    |

It implies from the above Table- 3.1.4 that the awareness level of RUG members in Hail Haor was remarkably better than Turag-Bongshi site. The awareness level of RUG members on different aspects of wetland resource planning and management was found more than the average level. However, the awareness level of RUG members on the same issues in Turag-Bongshi site was found weakest among the three MACH sites.

### 3.2.2 Effectiveness of MACH Communication Media and Materials at the RUG Level towards Sustainable Wetlands Resource Management and Conservation

MACH project implemented different communication activities and campaign at the community and village levels to disseminate MACH messages to raise awareness among the RUG members and the community. Considering the effectiveness of MACH communication activities, RUG members ranked the activities. TV programs and baul (folk) song were ranked as the top communication activities according to effectiveness score (Table- 3.1.5). Here it can be mentioned that the RUG members in Torag-Bongshi site did not see baul (folk) song. RUG members in Hail Haor site ranked fair/exhibition as second priority considering its effectiveness.

Table 3.1.5: Effectiveness of MACH Communication Activities for Wetlands Resource Management According to RUG Members

| Sl. No. | MACH Communication Activities               | Priority-wise Ranking under Different Sites |      |         |      |         |       | Overall |      |
|---------|---|---|------|---------|------|---------|-------|---------|------|
|         |   | TB Site                                     |      | KM Site |      | HH Site |       | Score   | Rank |
|         |   | Score                                       | Rank | Score   | Rank | Score   | Rank  |         |      |
| 1       | TV Programs                                 | 1.00  | 1    | 0.00    | 16   | 1.42    | 1.00  | 1.36    | 1    |
| 2       | Baul (folk) Song                            | 0.00  | 14   | 2.17    | 2    | 2.29    | 10.00 | 2.19    | 2    |
| 3       | Quiz Competition                            | 2.00  | 2    | 2.29    | 4    | 0.00    | 14.00 | 2.25    | 3    |
| 4       | MACH Project Introductory Meeting           | 2.35  | 5    | 2.66    | 9    | 1.87    | 4.00  | 2.29    | 4    |
| 5       | Miking                                      | 2.20  | 4    | 2.60    | 7    | 2.03    | 8.00  | 2.30    | 5    |
| 6       | Video Show on Wetland Resources             | 3.50  | 12   | 2.33    | 5    | 1.92    | 6.00  | 2.31    | 6    |
| 7       | Drawing Competition                         | 3.00  | 11   | 2.00    | 1    | 2.00    | 7.00  | 2.33    | 7    |
| 8       | Fair/Exhibition                             | 2.52  | 8    | 2.81    | 12   | 1.50    | 2.00  | 2.36    | 8    |
| 9       | Rally                                       | 2.50  | 7    | 2.35    | 6    | 2.36    | 12.00 | 2.39    | 9    |
| 10      | Courtyard Meeting                           | 2.03  | 3    | 2.98    | 13   | 1.90    | 5.00  | 2.40    | 10   |
| 11      | Community Level Meeting                     | 2.68  | 10   | 2.70    | 10   | 2.06    | 9.00  | 2.43    | 11   |
| 12      | Live Drama                                  | 2.40  | 6    | 2.64    | 8    | 1.54    | 3.00  | 2.46    | 12   |
| 13      | Environment Education in School             | 2.60  | 9    | 2.73    | 11   | 2.33    | 11.00 | 2.66    | 13   |
| 14      | Important Day Observance                    | 3.89  | 13   | 2.25    | 3    | 2.49    | 13.00 | 2.82    | 14   |
| 15      | Essay Competition                           | 0.00  | 14   | 3.00    | 14   | 0.00    | 14.00 | 3.00    | 15   |
| 16      | Briefing Session for Different Stakeholders | 0.00  | 14   | 4.91    | 15   | 0.00    | 14.00 | 4.91    | 16   |

Like the RMO members, RUG members similarly priority-wise ranked MACH documentary (Bangla), signboards, handbills and posters as the most effective communication materials of MACH project (Table- 3.1.6).

Table-3.1.6: Priority-wise Ranking by the RUG Members about Effectiveness of MACH Communication Materials

| Sl. No. | MACH Communication Interventions       | Awareness Score |      |         |      |         |      | Overall Awareness |      |
|---------|--|-----------------|------|---------|------|---------|------|-------------------|------|
|         |  | TB Site         |      | KM Site |      | HH Site |      | Score             | Rank |
|         |  | Score           | Rank | Score   | Rank | Score   | Rank |                   |      |
| 1       | MACH Documentary (Bangla)              | 2.67            | 3    | 2.73    | 2    | 2.08    | 3    | 2.36              | 1    |
| 2       | Sign Boards                            | 2.55            | 2    | 2.44    | 1    | 2.14    | 4    | 2.37              | 2    |
| 3       | Handbills                              | 2.00            | 1    | 3.25    | 5    | 2.00    | 1    | 2.50              | 3    |
| 4       | Posters                                | 3.00            | 5    | 2.78    | 3    | 2.06    | 2    | 2.59              | 4    |
| 5       | Folders                                | 3.00            | 5    | 0.00    | 8    | 0.00    | 6    | 3.00              | 5    |
| 6       | Wall Painting                          | 0.00            | 6    | 3.00    | 4    | 0.00    | 6    | 3.00              | 5    |
| 7       | MACH Cap                               | 2.80            | 4    | 3.94    | 6    | 2.40    | 5    | 3.17              | 6    |
| 8       | Education Materials (Wetland Messages) | 0.00            | 6    | 4.50    | 7    | 0.00    | 6    | 4.50              | 7    |
| 9       | Booklet                                | 0.00            | 6    | 0.00    | 8    | 0.00    | 6    | 0.00              | 8    |

### 3.2.3 Awareness of RUG Members about Messages of MACH Communication Activities

In order to disseminate messages, MACH project used different materials as the tools of communication activities. More than half of the RUG members only aware about some important messages of MACH activities such as-shall not catch spawn-rich fish, shall not harm to the country; plant tree and save it; if spawn-rich fish are caught, the country will face serious problem; obey the fish norms (Annexure- XIX). The awareness level of RUG members mainly increased due to different communication media used in important day observance/rallies and the sign boards displayed in different roadsides of three project sites (Annexure- XX).

## CHAPTER-FOUR

### ISSUES RELETED TO MACH COMMUNICATION ACTIVITIES AND SUGGESTED RECOMMENDATIONS

The MACH project began its activities in September 1998 in Hail-Haor site. It gradually spread to Kangsha-Malijhee site in June-1999 and then to Turag-Bangshi site in July- 2000. During this period the MACH project has implemented a number of communication interventions to make the wetland resource users, the general villagers, rural women, local elite, local bodies and others aware of their resources, their needs and conservation. The study tried to assess the effect of the communication interventions in raising awareness among the MACH stakeholders along with its limitation. Some important issues raised by different stakeholders in relation to wetland resource management and conservation are given below:

#### 4.1 Issues Raised by the RMO and RUG Members and General Villagers and their Suggested Recommendations

**4.1.1 Issues Raised by RMO Members:** It seems that in the life of an organization a place to sit and have social, political and economic interactions play an important role in building up the strength of the institution. It further gives the feeling to the members that the institution has come to stay for them. Training can also play a vital role in building up manpower of an institution. Low awareness of the RMO members was due to their inadequate exposure to MACH goal, objectives and activities. On the other hand, the number of beneficiary groups was limited and they were not provided with sufficient loan in some cases. The issues raised by RMO members regarding MACH activities is shown in Table-4.1.1. The RMO members also suggested some recommendations thereto to improve the situation (Annexure-XXI).

Table-4.1.1: Limitations Raised by the RMO Members Regarding MACH Activities

| Sl. No. | Limitations of MACH Activities  | No. of Responses | %     |
|---------|---|------------------|-------|
| 1       | Number of groups is minimum   | 16               | 41.45 |
| 2       | Loan is not given as per need of the members  | 12               | 33.35 |
| 3       | Skill development training for alternative income generation activities is inadequate | 11               | 30.55 |
| 4       | Monitoring of activities by the field workers (CNRS) at field level is limited        | 3                | 8.35  |
| 5       | Publicity for awareness development is minimum  | 2                | 5.55  |
| 6       | Members on many occasions do not get loan in time                                     | 2                | 5.55  |
| 7       | Awareness at national level is low  | 1                | 2.78  |
| 8       | Interest rate on loan is high (12%)   | 1                | 2.78  |

**4.1.2 Issues Raised by RMO Members:** The RUG members raised many issues regarding MACH activities of which some of them were not directly related with the communication activities. More than one-third of the RUG members raised that number of beneficiary groups was minimum and the project did not provided loans to them according to their needs, skill development training for alternative IGAs was also inadequate. Issues raised by the RUG members is presented in Table-4.1.2 below:

Table-4.1.2: Limitations Raised by the RUG Members Regarding MACH Activities

| Sl. No. | Limitations of MACH Activities   | No. of Responses | %     |
|---------|--|------------------|-------|
| 1       | Loan is not given as per need of the members                                       | 51               | 38.64 |
| 2       | Skill development training for alternative income generation is inadequate         | 49               | 37.12 |
| 3       | Number of beneficiary groups is minimum  | 47               | 35.61 |
| 4       | Monitoring of activities by the field workers (CNRS) at the field level is limited | 7                | 5.30  |
| 5       | Publicity for awareness development is minimum                                     | 6                | 4.55  |
| 6       | Publicity for wetlands resource preservation is minimum                            | 5                | 3.79  |
| 7       | Awareness at national level is low   | 4                | 3.03  |
| 8       | Interest rate on loan is high (12%)  | 4                | 3.03  |
| 9       | Members on many occasions do not get loan in time                                  | 3                | 2.27  |
| 10      | Accounts of total yearly savings are not provided to the members                   | 1                | 0.76  |
| 11      | Seeds and seedlings are not provided in time                                       | 1                | 0.76  |

The RUG members also pointed out that in the meeting discussions about MACH activities were not done adequately. Limited discussion about MACH activities in the meetings has created little scope to enhance their awareness. Among the MACH interventions, live drama was one of the media for disseminating messages. It would be gainful for the project if the live drama could be arranged somewhere close to the reach of women preferably in school or UP office premises. Skill development training as perceived by the beneficiaries need to be increased to make micro credit effective and gainful. Number of beneficiary groups and loan ceiling for beneficiary members also need to be increased (Annexure-XXII). The MACH field staffs need to be more active to improve the situation.

**4.1.3 Issues Raised by the General Villagers:** General villagers raised minimum publicity of MACH project as a vital issue. They also raised some issues like canals were excavated without any plan, catching fish in the sanctuary was continuing, bird shooting did not stop, inadequate training for income generating activities and decreasing of tree plantation by the side of haor and streams. Issues raised by general villagers in three sites are given in the following Table-4.1.3.

Table-4.1.3: Issues Raised by the General Villagers

| Sl. No. | Weaknesses   | MACH Project Sites |                  |           | Total Response |       |
|---------|--|--------------------|------------------|-----------|----------------|-------|
|         |  | Turag-Bongshi      | Kangsha-Malijhee | Hail Haor | No.            | %     |
| 1       | Publicity of MACH Project is minimum   | 3                  | 6                | 14        | 23             | 25.56 |
| 2       | Use of current net is continuing in fish sanctuary as well as in rivers and khals                    | 0                  | 6                | 0         | 6              | 6.67  |
| 3       | Unplanned excavation of canals   | 0                  | 3                | 0         | 3              | 3.33  |
| 4       | Tree plantation by the side of haor and canals (Sharra) is decreasing                                | 0                  | 0                | 3         | 3              | 3.33  |
| 5       | Catching fish in fish sanctuary  | 0                  | 2                | 0         | 2              | 2.22  |
| 6       | No bridge over Pathargona canal  | 0                  | 2                | 0         | 2              | 2.22  |
| 7       | Publicity of live drama is minimum as it is staged at market place, women are unwilling to attend it | 0                  | 1                | 0         | 1              | 1.11  |
| 8       | Bird shooting has not stopped  | 0                  | 1                | 0         | 1              | 1.11  |
| 9       | Inadequate training for alternative income generation activities.                                    | 0                  | 1                | 0         | 1              | 1.11  |

#### 4.2 Major Limitations Identified through Focus Group Discussions (FGDs) with RMO and RUG Members and their Suggested Recommendations

Limitations in relation to MACH communication activities were also identified through Focus Group Discussions (FGDs) with the RMOs and RUGs members. These were also discussed in the previous section. One of the major problems raised in the FGDs was low literacy rate. Due to this the understanding of the communications written messages was limited. This is a national problem. Some interventions regarding mass education or adult education is one of the possible options left to the project.

It was found that RMO, RUG members and the community knew little about wetland resources due to low literacy rate, which resulting limited understanding about written communication messages. MACH education/adult education was suggested in the FGDs as one of the possible future activities for the project to address the issue.

Inadequate number of meetings of RMO result in little scope for discussion about MACH activities. Less awareness of the people was responsible for continued use of current nets. UPs and the LGCs could take initiatives to solve the problem in their respective areas. Trawler or speedboat may be appropriate for supporting the fishery activities of RMOs.

The number of fish sanctuary was not adequate mainly due to lack of awareness and limited project interventions. The community based RMOs could play a vital role to identify their problems and could take probable measures thereto with the help of the MACH project. The summary of issues raised in FGDs is presented in the Table-4.1.4.

**Table 4.1.4: Major Limitations Identified through FGDs with RMO and RUG Members and their Suggested Recommendations**

| <b>Sl. No.</b> | <b>Limitations</b>  | <b>Suggested Recommendations</b>   |
|----------------|---|--|
| 1              | Literacy rate was very low  | Mass education or adult education program need to be intensified                   |
| 2              | Local people knew little about wetland resources                      | More publicity about wetland resources is needed                                   |
| 3              | Some training courses were organized in the past on skill development | Skill development training for income raising activities is to be increased        |
| 4              | RMO meetings were minimum   | Regular meeting of RMO and RMOs meeting with people are to be increased            |
| 5              | Current nets was being used in other places of project areas          | Government measures are to be taken against the users of current nets              |
| 6              | Problems faced in implementing fishery activities by the RMOs         | Trawler or speed boat support is needed to strengthen fisheries activities of RMOs |
| 7              | Number of fish sanctuary in the beel was inadequate.                  | Number of fish sanctuaries is to be increased.                                     |

#### **4.3 Issues Raised by the MACH Staff and UNO, UFO and UP Chairman Regarding MACH Activities, Communication Media and their Suggested Recommendations**

##### **4.3.1 Issued Raised by MACH Staff and their Suggested Recommendations**

While discussing with the MACH staff they raised some issues about MACH communication interventions and suggested some recommendations to improve the situation. Some MACH staff expressed that communication activities could not be fielded properly due to lack of adequate and skilled field staff. They suggested need-based staff training and regular supervision of the work of field staff as an ongoing process. Fortnightly progress review meeting of field staff and site coordinator could be held on regular basis. Decisions in the meetings and the recorded proceedings would give the Site Coordinator and the MACH Headquarter the scope to identify the point of weaknesses, review of activities and take corrective measures.

It was also raised by the MACH staff that two important communication interventions namely courtyard meeting and miking, which had high effectiveness were not done in time. Regular courtyard meetings and miking are to be ensured to increase the awareness of the community people. On the other hand, need based communication materials (e.g. signboards, red flags etc.) are to be supplied promptly. Training materials could also be developed and supplied during training/briefing session. Besides, appropriate training methods need to be used to increase the effectiveness of training. It was also pointed out that absence of training allowance was one of the reasons for limited participation of beneficiaries in the training classes. Provision of some allowance in addition to T.A may be considered.

The MACH staff also pointed out that RMO meetings were not held regularly and some RMOs did not take signatures of the members during meetings. These irregularities are to be taken care of by the MACH staff. Issues raised related to communication interventions and the recommendations given by the MACH staff can be seen in Annexure-XXIII and XXIV respectively.

#### **4.3.2 Issues Raised by UNO, UFO and UP Chairman Regarding MACH Activities**

UNO, UFO and UP Chairman mentioned more than twenty issues that have been affecting MACH activities. Major issues were- inadequate coordination of activities among different stakeholders, no special contingency for UNO and the UP chairmen to meet the cost for the project, khals/shharas (canals) were silted, lack of transparency in excavation though this issue raised in LGC meeting (Annexure- XXV). Among these issues, the first two were directly related to communication activities of MACH project. The issues related to communication were raised by 30 percent of the respondents.

UNO, UFO and UP Chairman also suggested many measures to improve the situation. The major suggestions were-number of signboards, poster/leaflets shall have to be increased, wide publicity need to be given about the activities of the project and their benefits, re-excavation of shhara (canals) should be undertaken, MACH activities should be focused in Radio and TV, awareness activities may be designed in consultation with UNOs (Annexure-XXVI).

In order to improve the wetland resource management the MACH project may think over of some of the issues and measures thereto regarding policy matters as given in Appendix-VII.

**Annexure-I****Name of RMO and RUG**

| Sl. No. | Name of the RMO  |
|---------|--|
| 1       | Alua Beel Resource Management Welfare Samity                       |
| 2       | Turag River Resource Management Welfare Samity                     |
| 3       | Takimari Darabashia Wetland Resource Management Development Samity |
| 4       | Dhali Baila Beel Wetland Resource Management Samity                |
| 5       | Dumuria Beel Resource Management Samity                            |
| 6       | Shananda Development Samity  |

| Sl. No. | Name of the RUG                                    |
|---------|--|
| 1       | Modi Ashulai Mohila Samity                         |
| 2       | Derchala Jhinok Samity (Purush)                    |
| 3       | Shwlimala Mohila Samity                            |
| 4       | Bashtali Matshajibi Samity                         |
| 5       | Baniapara Dolanchapa Mahila Samity                 |
| 6       | Baniapara Motshajibi Purus Samity                  |
| 7       | Hawranij Chingri Purus Samity                      |
| 8       | Tilkandi Sing Matshajibi Purus Samity.             |
| 9       | Tilkandi Saluk Mohila Samity                       |
| 10      | Purbo Julgao Jaba Mohila Samity                    |
| 11      | Uttar Kanduli Matshajibi Samity                    |
| 12      | Sarikalinagar Koi Matshajibi Samity                |
| 13      | Darikalinagar (Nangesher) Basna Motsahajibi Samity |
| 14      | Bakarkanda Katta Matshajibi Samity                 |
| 15      | Mainamati Matshajibi Samity (Baruna)               |
| 16      | Sapla Mohila Samity (Baruna)                       |
| 17      | Rupchanda Mohila Samity (Hajipur)                  |
| 18      | Upahar Jubok Samity (Hajipur)                      |
| 19      | Uttjal Jubok Samity (Pashchim Sreemongal)          |
| 20      | Probhati Purus Samity (Lamapara)                   |
| 21      | Rupali Matshajibi Samity                           |
| 22      | Karnafuli Mahila Samity (Rajpara)                  |

## Annexure-II

### Awareness Level of RMO Members on MACH Objectives:

(a) Awareness Level of RMO (EC and GB) Members on MACH Objective-1

(Raise awareness about the importance of natural flood plain resources to secure food and income security)

| MACH Project Site           | Awareness on MACH Objectives-1 |             |                |                    |                   | Average Score |
|-----------------------------|--------------------------------|-------------|----------------|--------------------|-------------------|---------------|
|                             | Very High<br>(4)               | High<br>(3) | Average<br>(2) | Very Little<br>(1) | Not at All<br>(0) |               |
| Turag-Bongshi (Gazipur)     | 0                              | 0           | 0              | 5                  | 7                 | 0.42          |
| Kangsha- Malijhee (Sherpur) | 0                              | 0           | 3              | 2                  | 7                 | 0.67          |
| Hail Haor (Moulvibazar)     | 0                              | 0           | 4              | 4                  | 4                 | 1.00          |
| <b>Total</b>                | <b>0</b>                       | <b>0</b>    | <b>7</b>       | <b>11</b>          | <b>18</b>         | <b>0.69</b>   |

(b) Awareness Level of RMO (EC and GB) Members on MACH Objective-2

(Maintain and recover the selected natural flood plain ecosystems and associated fisheries)

| MACH Project Site           | Awareness on MACH Objectives-2 |             |                |                    |                   | Average Score |
|-----------------------------|--------------------------------|-------------|----------------|--------------------|-------------------|---------------|
|                             | Very High<br>(4)               | High<br>(3) | Average<br>(2) | Very Little<br>(1) | Not at All<br>(0) |               |
| Turag-Bongshi (Gazipur)     | 0                              | 0           | 5              | 6                  | 1                 | 1.33          |
| Kangsha- Malijhee (Sherpur) | 0                              | 0           | 6              | 4                  | 2                 | 1.33          |
| Hail Haor (Moulvibazar)     | 0                              | 0           | 7              | 5                  | 0                 | 1.58          |
| <b>Total</b>                | <b>0</b>                       | <b>0</b>    | <b>18</b>      | <b>15</b>          | <b>3</b>          | <b>1.42</b>   |

(c) Awareness Level of RMO (EC and GB) Members on MACH Objective-3

(Identify activities to generate alternative income that result in a reduction of pressure from fishing and agriculture)

| MACH Project Site           | Awareness on MACH Objectives-3 |             |                |                    |                   | Average Score |
|-----------------------------|--------------------------------|-------------|----------------|--------------------|-------------------|---------------|
|                             | Very High<br>(4)               | High<br>(3) | Average<br>(2) | Very Little<br>(1) | Not at All<br>(0) |               |
| Turag-Bongshi (Gazipur)     | 0                              | 0           | 6              | 3                  | 3                 | 1.25          |
| Kangsha- Malijhee (Sherpur) | 0                              | 0           | 2              | 7                  | 3                 | 0.92          |
| Hail Haor (Moulvibazar)     | 0                              | 0           | 8              | 4                  | 0                 | 1.67          |
| <b>Total</b>                | <b>0</b>                       | <b>0</b>    | <b>16</b>      | <b>14</b>          | <b>6</b>          | <b>1.28</b>   |

## Annexure-III

### Effectiveness of MACH Communication Materials According to the RMO Members

| Sl. No. | MACH Communication Materials           | Effectiveness of Communication Materials under Different Sites |                  |           | Overall Effectiveness Score |
|---------|--|--|------------------|-----------|-----------------------------|
|         |  | Turag-Bongshi  | Kangsha-Malijhee | Hail Haor |                             |
| 1       | Signs Boards (4 types)                 | 1.58   | 1.83             | 2.00      | 1.81                        |
| 2       | Posters (4 types)                      | 1.00   | 1.00             | 1.67      | 1.22                        |
| 3       | MACH Cap                               | 0.50   | 0.75             | 0.83      | 0.69                        |
| 4       | Education Materials (Wetland Messages) | 0.17   | 0.50             | 0.00      | 0.22                        |
| 5       | Folders (2 types)                      | 0.00   | 0.42             | 0.17      | 0.19                        |
| 6       | Hand Bills (3types)                    | 0.08   | 0.33             | 0.00      | 0.14                        |
| 7       | Wall Painting                          | 0.00   | 0.42             | 0.00      | 0.14                        |
| 8       | Book let (1 type)                      | 0.08   | 0.17             | 0.00      | 0.08                        |
| 9       | MACH Documentary (Bangla)              | 0.00   | 0.00             | 0.00      | 0.00                        |

## Annexure-IV

### Awareness Level of RUG Members on MACH Management Approaches

| MACH Management Approaches         | Average Awareness Score under Different Sites |                  |             | Average Awareness Score |
|------------------------------------|---|------------------|-------------|-------------------------|
|                                    | Turag-Bongshi                                 | Kangsha-Malijhee | Hail Haor   |                         |
| a) Formation of RMO                | 0.83  | 0.33             | 0.73        | 0.57                    |
| b) Objectives of RMO Formation     | 0.79  | 0.37             | 0.50        | 0.49                    |
| c) Formation and Management of RUG | 1.29  | 1.10             | 1.71        | 1.36                    |
| d) Activities of RUG               | 1.33  | 1.30             | 1.73        | 1.46                    |
| <b>Overall Awareness Score</b>     | <b>1.06</b>                                   | <b>0.78</b>      | <b>1.17</b> | <b>0.97</b>             |

## Annexure- V

### Awareness Level of RUG Members on MACH Objectives:

#### (a) Awareness Level of RUG Members on MACH Objectives-1

(Raise awareness about the importance of natural flood plain resources to secure food and income security)

| MACH Project Site           | Awareness on MACH Objectives-1 |          |             |                 |                | Average Score |
|-----------------------------|--------------------------------|----------|-------------|-----------------|----------------|---------------|
|                             | Very High (4)                  | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| Turag-Bongshi (Gazipur)     | 0                              | 0        | 3           | 7               | 14             | 0.54          |
| Kangsha- Malijhee (Sherpur) | 0                              | 0        | 1           | 10              | 49             | 0.20          |
| Hail Haor (Moulvibazar)     | 0                              | 0        | 2           | 13              | 33             | 0.35          |
| <b>Total</b>                | <b>0</b>                       | <b>0</b> | <b>6</b>    | <b>30</b>       | <b>96</b>      | <b>0.32</b>   |

#### (b) Awareness Level of RUG Members on MACH Objectives-2

(Maintain and recover the selected natural flood plain ecosystems and associated fisheries)

| MACH Project Site           | Awareness on MACH Objectives-2 |          |             |                 |                | Average Score |
|-----------------------------|--------------------------------|----------|-------------|-----------------|----------------|---------------|
|                             | Very High (4)                  | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| Turag-Bongshi (Gazipur)     | 0                              | 0        | 4           | 16              | 4              | 1.00          |
| Kangsha- Malijhee (Sherpur) | 0                              | 0        | 12          | 30              | 18             | 0.90          |
| Hail Haor (Moulvibazar)     | 0                              | 0        | 9           | 34              | 5              | 1.08          |
| <b>Total</b>                | <b>0</b>                       | <b>0</b> | <b>25</b>   | <b>80</b>       | <b>27</b>      | <b>0.98</b>   |

#### (c) Awareness Level of RUG Members on MACH Objectives-3

(Identify activities to generate alternative income that result in a reduction of pressure from fishing and agriculture)

| MACH Project Site           | Awareness on MACH Objectives-3 |          |             |                 |                | Average Score |
|-----------------------------|--------------------------------|----------|-------------|-----------------|----------------|---------------|
|                             | Very High (4)                  | High (3) | Average (2) | Very Little (1) | Not at All (0) |               |
| Turag-Bongshi (Gazipur)     | 0                              | 0        | 7           | 13              | 4              | 1.13          |
| Kangsha- Malijhee (Sherpur) | 0                              | 0        | 12          | 35              | 13             | 0.98          |
| Hail Haor (Moulvibazar)     | 0                              | 0        | 17          | 27              | 4              | 1.27          |
| <b>Total</b>                | <b>0</b>                       | <b>0</b> | <b>36</b>   | <b>75</b>       | <b>21</b>      | <b>1.11</b>   |

### Annexure-VI

#### Effectiveness of MACH Communication Materials According to the RUG Members

| Sl. No. | MACH Communication Materials           | Effectiveness of Communication Materials under Different Sites |                  |           | Overall Effectiveness Score |
|---------|--|--|------------------|-----------|-----------------------------|
|         |  | Turag-Bongshi  | Kangsha-Malijhee | Hail Haor |                             |
| 1       | Signs Boards (4 types)                 | 1.42   | 1.60             | 1.25      | 1.44                        |
| 2       | Posters (4 types)                      | 1.17   | 1.30             | 1.17      | 1.23                        |
| 3       | MACH Cap                               | 0.54   | 0.57             | 0.25      | 0.45                        |
| 4       | Education Materials (Wetland Messages) | 0.25   | 0.00             | 0.00      | 0.05                        |
| 5       | Hand Bills (3types)                    | 0.04   | 0.03             | 0.02      | 0.03                        |
| 6       | Folders (2 types)                      | 0.04   | 0.00             | 0.02      | 0.02                        |
| 7       | Wall Painting                          | 0.08   | 0.00             | 0.00      | 0.02                        |
| 8       | Book let (1 types)                     | 0.00   | 0.02             | 0.00      | 0.01                        |
| 9       | MACH Documentary (Bangla)              | 0.00   | 0.00             | 0.00      | 0.00                        |

### Annexure-VII

#### Knowledge and Awareness Level of General Villagers on Different Activities of MACH Project

| MACH Activities                             | Knowledge and Awareness Level under Different Sites |                  |           | Average Score |
|---|---|------------------|-----------|---------------|
|   | Turag-Bongshi                                       | Kangsha-Malijhee | Hail Haor |               |
| a) Sanctuaries                              | 1.05  | 1.00             | 0.77      | 0.93          |
| b) Alternative IGAs                         | 0.85  | 0.93             | 0.33      | 0.71          |
| c) Environmental Balance                    | 0.40  | 0.38             | 0.30      | 0.36          |
| d) Issues of Fishing                        | 0.00  | 0.13             | 0.17      | 0.11          |
| e) Wetland Resource Planning and Management | 0.00  | 0.20             | 0.03      | 0.10          |

### Annexure-VIII

#### Responsibilities Performed by the MACH Partners According to General Villagers

| MACH Activities                             | Responsibilities Performed by MACH Partners under Different Sites |                  |           | Average Score |
|---|---|------------------|-----------|---------------|
|   | Turag-Bongshi   | Kangsha-Malijhee | Hail Haor |               |
| a) Sanctuaries                              | 0.85  | 1.08             | 1.17      | 1.06          |
| b) Alternative IGAs                         | 0.75  | 0.85             | 0.40      | 0.68          |
| c) Environmental Balance                    | 0.25  | 0.38             | 0.43      | 0.37          |
| d) Issues of Fishing                        | 0.00  | 0.13             | 0.20      | 0.12          |
| e) Wetland Resource Planning and Management | 0.00  | 0.18             | 0.07      | 0.10          |

## Annexure-IX

### Awareness of General Villagers about Key Messages of MACH Project

| General Villagers Acquainted with MACH Messages  | MACH Project Sites |                  |           | No. | %     |
|--|--------------------|------------------|-----------|-----|-------|
|  | Turag-Bongshi      | Kangsha-Malijhee | Hail Haor |     |       |
| 1. Shall not catch fish fries, shall not kill brood fish   | 5                  | 20               | 11        | 36  | 40.00 |
| 2. Shall not catch brood fish, shall not do harm to the country  | 7                  | 13               | 13        | 33  | 36.37 |
| 3. Close current net, save fish fry  | 5                  | 8                | 10        | 23  | 25.56 |
| 4. Establish fish sanctuary, ensure the habitat of fishes  | 3                  | 5                | 7         | 15  | 16.67 |
| 5. Hunting migratory birds is illegal  | 2                  | 4                | 8         | 14  | 15.56 |
| 6. Stop bird shooting, save all varieties  | 2                  | 4                | 4         | 10  | 11.11 |
| 7. If no fish is caught in the months of Baishakh and Jaistha a happy life will follow for twelve months | 6                  | 3                | 0         | 9   | 10.00 |
| 8. If brood fish are caught, it will be detrimental to the country                                       | 2                  | 5                | 0         | 7   | 7.78  |
| 9. Stop catching brood fish  | 0                  | 1                | 5         | 6   | 6.67  |
| 10. Plant trees by the side of your home   | 0                  | 4                | 0         | 4   | 4.44  |
| 11. All beels will not be sprinkled all fishes will not be caught  | 0                  | 2                | 0         | 2   | 2.22  |
| 12. Save wetland resources   | 0                  | 1                | 0         | 1   | 1.11  |
| 13. Obey fish laws   | 0                  | 1                | 0         | 1   | 1.11  |
| 14. Ascertain the habitat of fishes fill in the deficiency of nutrition                                  | 0                  | 1                | 0         | 1   | 1.11  |
| 15. Save the fish fry  | 0                  | 1                | 0         | 1   | 1.11  |
| 16. Shall not destroy the lineage of fish  | 0                  | 0                | 1         | 1   | 1.11  |

## Annexure-X

### Effectiveness of MACH Communication Activities According to the General Villagers

| MACH Communication Interventions                | Effectiveness of Communication Activities under Different Sites |                  |           | Overall Effectiveness Score |
|---|---|------------------|-----------|-----------------------------|
|   | Turag-Bongshi   | Kangsha-Malijhee | Hail Haor |                             |
| 1. Miking                                       | 1.05  | 1.78             | 2.10      | 1.72                        |
| 2. Live Drama                                   | 1.15  | 1.40             | 0.80      | 1.14                        |
| 3. Courtyard Meeting                            | 0.40  | 0.65             | 1.30      | 0.81                        |
| 4. Baul (folk) song                             | 0.10  | 0.58             | 0.20      | 0.34                        |
| 5. Video Show on Wetland Resources              | 0.45  | 0.23             | 0.33      | 0.31                        |
| 6. Rally  | 0.25  | 0.25             | 0.00      | 0.17                        |
| 7. Environment Education in School              | 0.10  | 0.18             | 0.20      | 0.17                        |
| 8. TV Programs                                  | 0.25  | 0.18             | 0.07      | 0.16                        |
| 9. Fair / Exhibition                            | 0.25  | 0.15             | 0.07      | 0.14                        |
| 10. MACH Project Introductory Meeting           | 0.10  | 0.15             | 0.13      | 0.13                        |
| 11. Community Level Meeting                     | 0.00  | 0.00             | 0.20      | 0.07                        |
| 12. Important Day Observance                    | 0.00  | 0.03             | 0.07      | 0.03                        |
| 13. Briefing Session for Different Stakeholders | 0.00  | 0.00             | 0.00      | 0.00                        |
| 14. Drawing Competition                         | 0.00  | 0.00             | 0.00      | 0.00                        |
| 15. Quiz Competition                            | 0.00  | 0.00             | 0.00      | 0.00                        |
| 16. Essay Competition                           | 0.00  | 0.00             | 0.00      | 0.00                        |

## Annexure-XI

### Understanding Level of MACH Staff and its Partners on Project Goal (HH site, Km and TB Sites):

#### Understanding Level of MACH Staff and Its Partners on MACH Project Goal KM Site

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No.) |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 2     | 2     | 6       | 10    | 90.91              |
| Average (2)         | 0     | 1     | 0       | 1     | 9.09               |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 3.00  | 2.67  | 3.00    | 2.91  | 100.00             |

#### Understanding Level of MACH Staff and Its Partners on MACH Project Goal (TB Site)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No.) |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 0     | 2     | 3       | 5     | 62.50              |
| Average (2)         | 2     | 1     | 0       | 3     | 37.50              |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 2.00  | 2.67  | 3.00    | 2.63  | 100.00             |

Understanding Level of MACH Staff and Its Partners on MACH Project Goal (HH Site)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No.) |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 2     | 4     | 5       | 11    | 91.67              |
| Average (2)         | 0     | 1     | 0       | 1     | 8.33               |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 3.00  | 2.80  | 3.00    | 2.92  | 100.00             |

**Annexure-XII**

Awareness Level of MACH Staff on MACH Objectives (HH site, KM and TB Sites):

(a) Awareness Level of MACH Staff on MACH Project Objective-1 KM Site

(Objective 1: Raise awareness about the importance of natural flood plain resources to secure food and income security)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No.) |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 0     | 2     | 4       | 6     | 54.55              |
| Average (2)         | 2     | 1     | 2       | 5     | 45.45              |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 2.00  | 2.67  | 2.67    | 2.55  | 100.00             |

(b) Awareness Level of MACH Staff on MACH Project Objective-2 KM Site

(Objective 2: Maintain and recover the selected natural flood plain ecosystems and associated fisheries)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No.) |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 0     | 2     | 4       | 6     | 54.55              |
| Average (2)         | 2     | 1     | 2       | 5     | 45.45              |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 2.00  | 2.67  | 2.67    | 2.55  | 100.00             |

(c) Awareness Level of MACH Staff on MACH Project Objective-3 KM Site

(Objective 3: Identify activities to generate alternative income that result in a reduction of pressure from Fishing and agriculture)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No.) |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 1     | 2     | 6       | 9     | 81.82              |
| Average (2)         | 1     | 1     | 0       | 2     | 18.18              |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 2.50  | 2.67  | 3.00    | 2.82  | 100.00             |

(a) Awareness Level of MACH Staff on MACH Project Objective-1(TB Site)

(Objective1: Raise awareness about the importance of natural flood plain resources to secure food and income security)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No)  |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 1     | 1     | 1       | 3     | 37.50              |
| Average (2)         | 1     | 2     | 2       | 5     | 62.50              |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 2.50  | 2.33  | 2.33    | 2.38  | 100.00             |

(b) Awareness Level of MACH Staff on MACH Project Objective-2 (TB Site)

(Objective2: Maintain and recover the selected natural floodplain ecosystems and associated fisheries)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No)  |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 2     | 2     | 1       | 5     | 62.50              |
| Average (2)         | 0     | 1     | 1       | 2     | 25.00              |
| Very Little (1)     | 0     | 0     | 1       | 1     | 12.50              |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 3.00  | 2.67  | 2.00    | 2.50  | 100.00             |

(c) Awareness Level of MACH Staff on MACH Project Objective-3 (TB Site)

(Objective3: Identify activities to generate alternative income that result in a reduction of pressure from Fishing and agriculture)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No)  |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 1     | 3     | 3       | 7     | 87.50              |
| Average (2)         | 0     | 0     | 0       | 0     | 0.00               |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 1     | 0     | 0       | 1     | 12.50              |
| Overall Level:      | 1.50  | 3.00  | 3.00    | 2.63  | 100.00             |

(a) Awareness Level of MACH Staff on MACH Project Objective-1(HH Site)

(Objective1: Raise awareness about the importance of natural flood plain resources to secure food and income security)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No)  |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 2     | 1     | 5       | 8     | 66.67              |
| Average (2)         | 0     | 3     | 0       | 3     | 25.00              |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 1     | 0       | 1     | 8.33               |
| Overall Level:      | 3.00  | 1.80  | 3.00    | 2.50  | 100.00             |

(b) Awareness Level of MACH Staff on MACH Project Objective-2 (HH Site)

(Objective2: Maintain and recover the selected natural flood plain ecosystems and associated fisheries)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No)  |                    |
| Very High (4)       | 0     | 0     | 0       | 0     | 0.00               |
| High (3)            | 2     | 4     | 5       | 11    | 91.67              |
| Average (2)         | 0     | 1     | 0       | 1     | 8.33               |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 3.00  | 2.80  | 3.00    | 2.92  | 100.00             |

(c) Awareness Level of MACH Staff on MACH Project Objective-3 (HH Site)

(Objective3: Identify activities to generate alternative income that result in a reduction of pressure from fishing and agriculture)

| Understanding Level | WI    | CNRS  | CARITAS | Total | Parentage on Total |
|---------------------|-------|-------|---------|-------|--------------------|
|                     | (No.) | (No.) | (No.)   | (No)  |                    |
| Very High (4)       | 0     | 0     | 1       | 1     | 8.33               |
| High (3)            | 2     | 3     | 4       | 9     | 75.00              |
| Average (2)         | 0     | 2     | 0       | 2     | 16.67              |
| Very Little (1)     | 0     | 0     | 0       | 0     | 0.00               |
| Not at All (0)      | 0     | 0     | 0       | 0     | 0.00               |
| Overall Level:      | 3.00  | 2.60  | 3.20    | 2.92  | 100.00             |

### Annexure-XIII

Understanding Level of MACH Staff and its Partners about MACH Communication Activities (HH site, KM and TB sites):

Understanding Level) of MACH Staff and Its Partners about MACH Communication Activities KM Site

| Communication Interventions                    | Average Understanding Score |      |         | Average Score |
|--|-----------------------------|------|---------|---------------|
|  | WI                          | CNRS | CARITAS |               |
| 1. Courtyard Meeting                           | 2.00                        | 3.00 | 2.67    | 2.64          |
| 2. Community Level Meeting.                    | 2.00                        | 3.00 | 2.50    | 2.55          |
| 3. MACH Project Introductory Meeting.          | 2.00                        | 1.67 | 2.17    | 2.00          |
| 4. Briefing Session for Different Stakeholders | 0.00                        | 0.67 | 1.00    | 0.73          |
| 5. Important Day Observance                    | 2.50                        | 3.00 | 2.67    | 2.73          |
| 6. Rally                                       | 3.00                        | 2.67 | 2.67    | 2.73          |
| 7. Environment Education in School             | 0.00                        | 1.33 | 1.67    | 1.27          |
| 8. Live Drama                                  | 3.00                        | 3.00 | 2.50    | 2.73          |
| 9. Folk song                                   | 3.00                        | 3.00 | 2.83    | 2.91          |
| 10. Milking                                    | 2.50                        | 3.00 | 2.50    | 2.64          |
| 11. Drawing Competition                        | 0.00                        | 0.00 | 0.83    | 0.45          |
| 12. Quiz Competition                           | 2.00                        | 2.67 | 1.50    | 1.91          |
| 13. Essay Competition                          | 0.00                        | 0.00 | 0.67    | 0.36          |
| 14. TV Programs                                | 0.00                        | 0.00 | 1.00    | 0.55          |
| 15. Video show on Wetland Resources            | 1.50                        | 2.00 | 1.83    | 1.82          |
| 16. Fair / Exhibition                          | 3.00                        | 3.00 | 3.00    | 3.00          |

Understanding Level of MACH Staff and Its Partners about MACH Communication Activities (HH Site)

| Communication Interventions                    | Average Understanding Score of MACH Partners |      |         | Average Score |
|--|--|------|---------|---------------|
|  | WI   | CNRS | CARITAS |               |
| 1. Courtyard Meeting                           | 2.50   | 2.80 | 3.20    | 2.92          |
| 2. Community Level Meeting.                    | 2.00   | 2.80 | 3.00    | 2.75          |
| 3. MACH Project Introductory Meeting.          | 1.50   | 1.00 | 2.60    | 1.75          |
| 4. Briefing Session for Different Stakeholders | 0.50   | 1.40 | 0.80    | 1.00          |
| 5. Important Day Observance                    | 3.00   | 2.40 | 3.00    | 2.75          |
| 6. Rally                                       | 3.00   | 2.60 | 3.00    | 2.83          |
| 7. Environment Education in School             | 1.00   | 2.00 | 2.40    | 2.00          |
| 8. Live Drama                                  | 1.50   | 1.80 | 1.20    | 1.50          |
| 9. Folk song                                   | 1.00   | 1.80 | 1.20    | 1.42          |
| 10. Milking                                    | 3.00   | 2.80 | 2.80    | 2.83          |
| 11. Drawing Competition                        | 1.50   | 1.40 | 0.80    | 1.17          |
| 12. Quiz Competition                           | 1.50   | 1.00 | 1.60    | 1.33          |
| 13. Essay Competition                          | 1.00   | 1.00 | 1.60    | 1.25          |
| 14. TV Programs                                | 1.50   | 1.60 | 2.20    | 1.83          |
| 15. Video show on Wetland Resources            | 3.00   | 1.80 | 3.00    | 2.50          |
| 16. Fair / Exhibition                          | 2.50   | 2.20 | 3.00    | 2.58          |

Understanding Level of MACH Staff and Its Partners about MACH Communication Activities (TB Site)

| Communication Interventions                    | Average Understanding Score of MACH Partners |      |         | Average Score |
|--|--|------|---------|---------------|
|  | WI   | CNRS | CARITAS |               |
| 1. Courtyard Meeting                           | 3.00   | 3.00 | 3.00    | 3.00          |
| 2. Community Level Meeting.                    | 1.50   | 2.00 | 3.00    | 2.25          |
| 3. MACH Project Introductory Meeting.          | 1.00   | 3.00 | 2.00    | 2.13          |
| 4. Briefing Session for Different Stakeholders | 1.00   | 1.67 | 0.33    | 1.00          |
| 5. Important Day Observance                    | 2.00   | 3.00 | 2.67    | 2.63          |
| 6. Rally                                       | 1.50   | 3.00 | 3.00    | 2.63          |
| 7. Environment Education in School             | 0.00   | 1.67 | 1.33    | 1.13          |
| 8. Live Drama                                  | 2.00   | 3.00 | 2.67    | 2.63          |
| 9. Folk song                                   | 0.00   | 0.00 | 0.00    | 0.00          |
| 10. Milking                                    | 1.50   | 3.00 | 3.00    | 2.63          |
| 11. Drawing Competition                        | 0.00   | 0.67 | 0.67    | 0.50          |
| 12. Quiz Competition                           | 0.50   | 1.33 | 1.67    | 1.25          |
| 13. Essay Competition                          | 0.00   | 0.00 | 1.00    | 0.38          |
| 14. TV Programs                                | 0.00   | 0.00 | 0.00    | 0.00          |
| 15. Video show on Wetland Resources            | 0.00   | 1.33 | 0.67    | 0.75          |
| 16. Fair / Exhibition                          | 0.00   | 3.00 | 3.00    | 2.25          |

## Annexure-XIV

### Understanding of MACH Project Awareness Messages by MACH Staff

| Message No. | Awareness Messages   | Turag-Bangshi |        | Kangsha-Malijhee |        | Hail Haor |        | Total |       |
|-------------|--|---------------|--------|------------------|--------|-----------|--------|-------|-------|
|             |  | No.           | %      | No.              | %      | No.       | %      | No.   | %     |
| 1.1         | Wetland are our important resources  | 2             | 25.00  | 5                | 45.45  | 5         | 41.67  | 12    | 38.71 |
| 1.3         | Wetlands are habitat for different species   | 2             | 25.00  | 3                | 27.27  | 5         | 41.67  | 10    | 32.26 |
| 1.2         | Fishes from wetlands are the major source of animal protein and means of livelihood for millions | 1             | 12.50  | 4                | 36.36  | 4         | 33.33  | 9     | 29.03 |
| 1.6         | Aquatic vegetations are used as food   | 0             | 0.00   | 4                | 36.36  | 5         | 41.67  | 9     | 29.03 |
| 1.8         | Wetlands are attractive habitat for migratory birds  | 1             | 12.50  | 3                | 27.27  | 4         | 33.33  | 8     | 25.81 |
| 1.12        | Let us save our wetlands   | 3             | 37.50  | 2                | 18.18  | 1         | 8.33   | 6     | 19.35 |
| 1.4         | Wetland plays important role for biodiversity conservation                                       | 0             | 0.00   | 0                | 0.00   | 1         | 8.33   | 1     | 3.23  |
| 1.7         | Wetlands serve surface water for irrigation  | 0             | 0.00   | 0                | 0.00   | 1         | 8.33   | 1     | 3.23  |
| 1.10        | Wetlands play important role in maintaining environmental balance                                | 0             | 0.00   | 0                | 0.00   | 1         | 8.33   | 1     | 3.23  |
| 1.5         | Wetlands reduce flood through retaining water  | 0             | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 1.9         | Wetlands are major ways of communication   | 0             | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 1.11        | Wetlands are degrading due to various reasons  | 0             | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 2.4         | Shall not catch spawn-rich fish, shall not harm to the country                                   | 8             | 100.00 | 11               | 100.00 | 11        | 91.67  | 30    | 96.77 |
| 2.2         | If spawn-rich fishes are caught, the country will face serious problems                          | 6             | 75.00  | 11               | 100.00 | 12        | 100.00 | 29    | 93.55 |
| 2.13        | Establish sanctuary, ensure fish habitat   | 6             | 75.00  | 11               | 100.00 | 12        | 100.00 | 29    | 93.55 |
| 2.8         | Stop hunting birds, save all varieties   | 5             | 62.50  | 11               | 100.00 | 12        | 100.00 | 28    | 90.32 |
| 2.21        | Stop catching spawn-rich fish  | 7             | 87.50  | 9                | 81.82  | 12        | 100.00 | 28    | 90.32 |
| 2.1         | Catch no fish in Baishakh and Jaishita, a happy life will follow for twelve months               | 5             | 62.50  | 11               | 100.00 | 11        | 91.67  | 27    | 87.10 |
| 2.10        | Save the fish fry  | 7             | 87.50  | 9                | 81.82  | 11        | 91.67  | 27    | 87.10 |
| 2.15        | Stop hunting migratory birds   | 6             | 75.00  | 10               | 90.91  | 11        | 91.67  | 27    | 87.10 |
| 2.3         | Shall not destroy the lineage of fish  | 5             | 62.50  | 10               | 90.91  | 11        | 91.67  | 26    | 83.87 |
| 2.11        | Shall not catch fish fry, shall not catch mother fish  | 7             | 87.50  | 9                | 81.82  | 9         | 75.00  | 25    | 80.65 |
| 2.16        | Plant trees by the side of the house   | 6             | 75.00  | 8                | 72.73  | 11        | 91.67  | 25    | 80.65 |
| 2.9         | Save bio-diversity, stop using current nets  | 3             | 37.50  | 8                | 72.73  | 12        | 100.00 | 23    | 74.19 |
| 2.14        | Construct sanctuary, ensure birds' habitat   | 2             | 25.00  | 10               | 90.91  | 11        | 91.67  | 23    | 74.19 |
| 2.7         | Save the habitat of fish, fill the need of nutrition   | 3             | 37.50  | 6                | 54.55  | 10        | 83.33  | 19    | 61.29 |
| 2.23        | Excavate khals and beels, save the habitat of fish   | 5             | 62.50  | 1                | 9.09   | 7         | 58.33  | 13    | 41.94 |
| 2.6         | Save environment, save the country   | 3             | 37.50  | 5                | 45.45  | 4         | 33.33  | 12    | 38.71 |
| 2.19        | Plant trees by the side of stream (Shhra), let the river remain zigzag                           | 3             | 37.50  | 1                | 9.09   | 7         | 58.33  | 11    | 35.48 |
| 2.18        | Let the hail haor live, let the water flow in the haor   | 0             | 0.00   | 0                | 0.00   | 10        | 83.33  | 10    | 32.26 |
| 2.12        | Shall not drain out water from beels, wells and shallow water bodies, shall not catch all fish   | 2             | 25.00  | 2                | 18.18  | 5         | 41.67  | 9     | 29.03 |
| 2.5         | We all be aware, shall save hail haor  | 0             | 0.00   | 0                | 0.00   | 8         | 66.67  | 8     | 25.81 |
| 2.24        | Come, let us concertedly save the wetland resources  | 4             | 50.00  | 2                | 18.18  | 1         | 8.33   | 7     | 22.58 |
| 2.20        | Open the route of fish movement  | 0             | 0.00   | 2                | 18.18  | 3         | 25.00  | 5     | 16.13 |
| 2.17        | Save the natural resources of hail haor  | 1             | 12.50  | 0                | 0.00   | 3         | 25.00  | 4     | 12.90 |
| 2.22        | Our world is our future, let it live   | 1             | 12.50  | 1                | 9.09   | 0         | 0.00   | 2     | 6.45  |

| Message No. | Awareness Messages   | Turag-Bangshi |        | Kangsha-Malijhee |        | Hail Haor |        | Total |        |
|-------------|--|---------------|--------|------------------|--------|-----------|--------|-------|--------|
|             |  | No.           | %      | No.              | %      | No.       | %      | No.   | %      |
| 3.1         | Establish fish sanctuary, ensure fish habitat  | 8             | 100.00 | 11               | 100.00 | 12        | 100.00 | 31    | 100.00 |
| 3.3         | Stop hunting birds, save all varieties   | 6             | 75.00  | 11               | 100.00 | 12        | 100.00 | 29    | 93.55  |
| 3.2         | Shall not drain out all beels, shall not catch all fish  | 5             | 62.50  | 10               | 90.91  | 12        | 100.00 | 27    | 87.10  |
| 4.3         | Stop Hunting birds, save Biodiversity  | 2             | 25.00  | 5                | 45.45  | 5         | 41.67  | 12    | 38.71  |
| 4.1         | Migratory bird hunting is illegal  | 1             | 12.50  | 5                | 45.45  | 5         | 41.67  | 11    | 35.48  |
| 4.2         | Establish sanctuary for fish habitat   | 2             | 25.00  | 3                | 27.27  | 3         | 25.00  | 8     | 25.81  |
| 4.5         | Fish : Many species of fish and prawns inhabit in the wetlands, which provide us animal protein. Many families subsist on fishing            |               |        |                  |        |           |        |       |        |
|             |  | 2             | 25.00  | 2                | 18.18  | 4         | 33.33  | 8     | 25.81  |
| 4.4         | Let us protect wetland resources   | 3             | 37.50  | 1                | 9.09   | 1         | 8.33   | 5     | 16.13  |
| 4.8         | Vegetation: Wetland plants provide many benefits including food, fodder, fuel and medicine   |               |        |                  |        |           |        |       |        |
|             |  | 1             | 12.50  | 0                | 0.00   | 4         | 33.33  | 5     | 16.13  |
| 4.7         | Navigation: Wetlands are means of transportation in the rural Bangladesh   |               |        |                  |        |           |        |       |        |
|             |  | 0             | 0.00   | 1                | 9.09   | 0         | 0.00   | 1     | 3.23   |
| 4.12        | Let us protect wetlands  | 1             | 12.50  | 0                | 0.00   | 0         | 0.00   | 1     | 3.23   |
| 4.6         | Agriculture Irrigation: Wetlands play major roll in dry season irrigation and reduce soil degradation by washing out pesticides/insecticides |               |        |                  |        |           |        |       |        |
|             |  | 0             | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 4.9         | Daily Use: Wetland is a major source of water for bathing, cooking, livestock rearing and jute retting                                       |               |        |                  |        |           |        |       |        |
|             |  | 0             | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 4.10        | Flood Control: Wetlands reduce flood by storing rain water/flash floodwater  |               |        |                  |        |           |        |       |        |
|             |  | 0             | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 4.11        | Wetlands are degrading due to natural and man made causes  |               |        |                  |        |           |        |       |        |
|             |  | 0             | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 5.1         | Stop hunting   | 1             | 12.50  | 9                | 81.82  | 7         | 58.33  | 17    | 54.84  |
| 5.8         | More Plantation  | 2             | 25.00  | 6                | 54.55  | 7         | 58.33  | 15    | 48.39  |
| 5.3         | Save brood fish  | 2             | 25.00  | 9                | 81.82  | 3         | 25.00  | 14    | 45.16  |
| 5.6         | Follow fish laws   | 0             | 0.00   | 7                | 63.64  | 7         | 58.33  | 14    | 45.16  |
| 5.7         | Establishment sanctuary  | 2             | 25.00  | 6                | 54.55  | 4         | 33.33  | 12    | 38.71  |
| 5.2         | Save threatened species  | 2             | 25.00  | 3                | 27.27  | 5         | 41.67  | 10    | 32.26  |
| 5.4         | Restoration of habitats  | 1             | 12.50  | 0                | 0.00   | 2         | 16.67  | 3     | 9.68   |
| 5.5         | Save biodiversity  | 1             | 12.50  | 0                | 0.00   | 0         | 0.00   | 1     | 3.23   |
| 6.1         | Protect wetland resources  | 6             | 75.00  | 5                | 45.45  | 8         | 66.67  | 19    | 61.29  |
| 6.2         | Save Hail Haor   | 2             | 25.00  | 1                | 9.09   | 8         | 66.67  | 11    | 35.48  |
| 7.1         | Fisheries Norms  | 2             | 25.00  | 0                | 0.00   | 0         | 0.00   | 2     | 6.45   |
| 8.1         | Stop hunting   | 2             | 25.00  | 9                | 81.82  | 4         | 33.33  | 15    | 48.39  |
| 8.7         | Establishment sanctuary  | 3             | 37.50  | 8                | 72.73  | 4         | 33.33  | 15    | 48.39  |
| 8.8         | More Plantation  | 3             | 37.50  | 8                | 72.73  | 4         | 33.33  | 15    | 48.39  |
| 8.3         | Save brood fish  | 2             | 25.00  | 9                | 81.82  | 1         | 8.33   | 12    | 38.71  |
| 8.6         | Follow fish laws   | 1             | 12.50  | 7                | 63.64  | 4         | 33.33  | 12    | 38.71  |
| 8.2         | Save threatened species  | 0             | 0.00   | 5                | 45.45  | 3         | 25.00  | 8     | 25.81  |
| 8.4         | Restoration of habitats  | 0             | 0.00   | 3                | 27.27  | 1         | 8.33   | 4     | 12.90  |
| 8.5         | Save biodiversity  | 0             | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 9.1         | Save threatened fish species Total 54 fish species are threatened in fresh water   | 5             | 62.50  | 9                | 81.82  | 12        | 100.00 | 26    | 83.87  |

**Annexure-XV**

Effectiveness of MACH Communication Materials According to UNO, UFO and UP Chairman

| Sl. No. | MACH Communication Materials   | Average Effectiveness Score |
|---------|--|-----------------------------|
| 1       | Signboards/Wall Painting   | 1.90                        |
| 2       | Posters  | 1.88                        |
| 3       | Festoon, Placards Used in Day Observance, Rally, Workshop Meeting etc. | 1.60                        |
| 4       | Signboards (fish species and trees)                                    | 1.50                        |
| 5       | Sun Cap  | 0.90                        |
| 6       | Baul (folk) Song   | 0.50                        |
| 7       | Quiz Competition   | 0.40                        |
| 8       | MACH Calendar 2001   | 0.20                        |
| 9       | Printed Khatta for Environmental Education                             | 0.20                        |

**Annexure-XVI**

Understanding of UNO, UFO and UP Chairman about Roles/Initiatives Regarding Awareness Messages and Materials of MACH Project

| Sl. No.  | Messages and Material Used   | Responses |       | Average Understanding Score |
|----------|--|-----------|-------|-----------------------------|
|          |  | No.       | %     |                             |
| <b>1</b> | <b>MACH Calendar : 2001</b>  |           |       | <b>0.20</b>                 |
|          | 1.1 Wetland are our important resources  | 1         | 10.00 |                             |
|          | 1.6 Aquatic vegetations are used as food   | 1         | 10.00 |                             |
|          | 1.8 Wetlands are attractive habitat for migratory birds  | 1         | 10.00 |                             |
|          | 1.2 Fishes from wetlands are the major source of animal protein and means of livelihood for millions | 0         | 0.00  |                             |
|          | 1.3 Wetlands are habitat for different species   | 0         | 0.00  |                             |
|          | 1.4 Wetland plays important role for biodiversity conservation                                       | 0         | 0.00  |                             |
|          | 1.5 Wetlands reduce flood through retaining water  | 0         | 0.00  |                             |
|          | 1.7 Wetlands serve surface water for irrigation  | 0         | 0.00  |                             |
|          | 1.9 Wetlands are major ways of communication   | 0         | 0.00  |                             |
|          | 1.10 Wetlands play important role in maintaining environmental balance                               | 0         | 0.00  |                             |
|          | 1.11 Wetlands are degrading due to various reasons   | 0         | 0.00  |                             |
|          | 1.12 Let us save our wetlands  | 0         | 0.00  |                             |
| <b>2</b> | <b>Festoon, Placards Used in Day Observances, Rally, Workshop etc.</b>                               |           |       | <b>1.30</b>                 |
|          | 2.2 If spawn-rich fishes are caught, the country will face serious problems                          | 6         | 60.00 |                             |
|          | 2.10 Save the fish fry   | 5         | 50.00 |                             |
|          | 2.14 Construct sanctuary, ensure birds' habitat  | 4         | 40.00 |                             |
|          | 2.21 Stop catching spawn-rich fish   | 4         | 40.00 |                             |
|          | 2.1 Catch no fish in Baishak and Jaishta, a happy life will follow for twelve months                 | 3         | 30.00 |                             |
|          | 2.3 Shall not destroy the lineage of fish  | 3         | 30.00 |                             |
|          | 2.4 Shall not catch spawn-rich fish, shall not harm to the country                                   | 3         | 30.00 |                             |
|          | 2.8 Stop hunting birds, save all varieties   | 3         | 30.00 |                             |
|          | 2.11 Shall not catch fish fry, shall not catch mother fish   | 3         | 30.00 |                             |
|          | 2.13 Establish sanctuary, ensure fish habitat  | 3         | 30.00 |                             |
|          | 2.15 Stop hunting migratory birds  | 3         | 30.00 |                             |
|          | 2.16 Plant trees by the side of the house  | 3         | 30.00 |                             |

| Sl. No.  | Messages and Material Used   | Responses |       | Average Understanding Score |
|----------|--|-----------|-------|-----------------------------|
|          |  | No.       | %     |                             |
| 2.6      | Save environment, save the country   | 2         | 20.00 |                             |
| 2.7      | Save the habitat of fish, fill the need of nutrition   | 2         | 20.00 |                             |
| 2.9      | Save bio-diversity, stop using current nets  | 2         | 20.00 |                             |
| 2.19     | Plant trees by the side of stream (Shhra), let the river remain zigzag   | 2         | 20.00 |                             |
| 2.24     | Come, let us concertedly save the wetland resources  | 2         | 20.00 |                             |
| 2.12     | Shall not drain out water from beels, wells and shallow water bodies, shall not catch all fish   | 1         | 10.00 |                             |
| 2.17     | Save the natural resources of hail haor  | 1         | 10.00 |                             |
| 2.5      | We all be aware, shall save hail haor  | 0         | 0.00  |                             |
| 2.18     | Let the hail haor live, let the water flow in the haor   | 0         | 0.00  |                             |
| 2.20     | Open the route of fish movement  | 0         | 0.00  |                             |
| 2.22     | Our world is our future, let it live   | 0         | 0.00  |                             |
| 2.23     | Excavate khals and beels, save the habitat of fish   | 0         | 0.00  |                             |
| <b>3</b> | <b>Sign boards, Wall Painting</b>  |           |       | <b>1.40</b>                 |
| 3.1      | Establish fish sanctuary, ensure fish habitat  | 8         | 80.00 |                             |
| 3.3      | Stop hunting birds, save all varieties   | 4         | 40.00 |                             |
| 3.2      | Shall not drain out all beels, shall not catch all fish  | 3         | 30.00 |                             |
| <b>4</b> | <b>Environmental Education Programs through Printed Khatta</b>   |           |       | <b>0.20</b>                 |
| 4.1      | Migratory bird hunting is illegal  | 1         | 10.00 |                             |
| 4.2      | Establish sanctuary for fish habitat   | 1         | 10.00 |                             |
| 4.3      | Stop hunting birds, save bio-diversity   | 1         | 10.00 |                             |
| 4.4      | Let us protect wetland resources   | 0         | 0.00  |                             |
| 4.5      | Fish : Many species of fish and prawns inhabit in the wetlands, which provide us animal protein. Many families subsist on fishing            | 0         | 0.00  |                             |
| 4.6      | Agriculture Irrigation: Wetlands play major roll in dry season irrigation and reduce soil degradation by washing out pesticides/insecticides | 0         | 0.00  |                             |
| 4.7      | Navigation: Wetlands are means of transportation in the rural Bangladesh   | 0         | 0.00  |                             |
| 4.8      | Vegetation: Wetland plants provide many benefits including food, fodder, fuel and medicine   | 0         | 0.00  |                             |
| 4.9      | Daily use: Wetland is a major source of water for bathing, cooking, livestock rearing and juts retting                                       | 0         | 0.00  |                             |
| 4.10     | Flood Control: Wetlands reduce flood by storing rain water/flash floodwater  | 0         | 0.00  |                             |
| 4.11     | Wetlands are degrading due to natural and man made causes  | 0         | 0.00  |                             |
| 4.12     | Let us protect wetlands  | 0         | 0.00  |                             |
| <b>5</b> | <b>Quiz Competition</b>  |           |       | <b>0.50</b>                 |
| 5.6      | Follow fish laws   | 2         | 20.00 |                             |
| 5.7      | Establishment sanctuary  | 2         | 20.00 |                             |
| 5.8      | More Plantation  | 2         | 20.00 |                             |
| 5.1      | Stop hunting   | 1         | 10.00 |                             |
| 5.2      | Save threatened species  | 1         | 10.00 |                             |
| 5.3      | Save brood fish  | 1         | 10.00 |                             |
| 5.4      | Restoration of habitats  | 1         | 10.00 |                             |
| 5.5      | Save biodiversity  | 0         | 0.00  |                             |
| <b>6</b> | <b>Sun Cap</b>   |           |       | <b>1.10</b>                 |
| 6.1      | Protect wetland resources  | 6         | 60.00 |                             |
| 6.2      | Save Hail Haor   | 3         | 30.00 |                             |
| <b>7</b> | <b>Signboard</b>   |           |       | <b>1.40</b>                 |
| 7.1      | Fisheries Norms  | 7         | 70.00 |                             |

| Sl. No. | Messages and Material Used  | Responses |       | Average Understanding Score |
|---------|---|-----------|-------|-----------------------------|
|         |   | No.       | %     |                             |
| 8       | <b>Baul (folk) Song</b>   |           |       | <b>0.50</b>                 |
|         | 8.1 Stop hunting  | 2         | 20.00 |                             |
|         | 8.2 Save threatened species   | 2         | 20.00 |                             |
|         | 8.6 Follow fish laws  | 2         | 20.00 |                             |
|         | 8.7 Establishment sanctuary   | 2         | 20.00 |                             |
|         | 8.8 More Plantation   | 2         | 20.00 |                             |
|         | 8.3 Save brood fish   | 1         | 10.00 |                             |
|         | 8.4 Restoration of habitats   | 0         | 0.00  |                             |
|         | 8.5 Save biodiversity   | 0         | 0.00  |                             |
| 9       | <b>Poster</b>   |           |       | <b>1.50</b>                 |
|         | 9.1 Save threatened fish species<br>Total 54 fish species are threatened in fresh water | 7         | 70.00 |                             |
|         | 9.2 Plant trees and save it   | 6         | 60.00 |                             |

### Annexure-XVII

Understanding of RMO Members about Roles/Initiatives Regarding Awareness MACH Messages and Materials

| Awareness Messages and Material Used   | Awareness under Different Sites |        |                  |        |           |        |       |        |
|--|---------------------------------|--------|------------------|--------|-----------|--------|-------|--------|
|  | Turag-Bongshi                   |        | Kangsha-Malijhee |        | Hail Haor |        | Total |        |
|  | No.                             | %      | No.              | %      | No.       | %      | No.   | %      |
| <b>MACH Calendar : 2001</b>  |                                 |        |                  |        |           |        |       |        |
| 1.1 Wetland are our important resources  | 1                               | 50.00  | 0                | 0.00   | 1         | 50.00  | 2     | 33.33  |
| 1.2 Fishes from wetlands are the major source of animal protein and means of livelihood for millions | 1                               | 50.00  | 0                | 0.00   | 1         | 50.00  | 2     | 33.33  |
| 1.8 Wetlands are attractive habitat for migratory birds  | 2                               | 100.00 | 0                | 0.00   | 0         | 0.00   | 2     | 33.33  |
| 1.12 Let us save our wetlands  | 1                               | 50.00  | 0                | 0.00   | 1         | 50.00  | 2     | 33.33  |
| 1.4 Wetland plays important role for bio-diversity conservation                                      | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67  |
| 1.9 Wetlands are major ways of communication   | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67  |
| 1.3 Wetlands are habitat for different species   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 1.5 Wetlands reduce flood through retaining water  | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 1.6 Aquatic vegetation are used as food  | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 1.7 Wetlands serve surface water for irrigation  | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 1.10 Wetlands play important role in maintaining environmental balance                               | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| 1.11 Wetlands are degrading due to various reasons   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00   |
| <b>Festoon, Placards Used in Day Observance, Rally, Workshop etc.</b>                                |                                 |        |                  |        |           |        |       |        |
| 2.4 Shall not catch spawn-rich fish, shall not harm to the country                                   | 2                               | 100.00 | 2                | 100.00 | 2         | 100.00 | 6     | 100.00 |
| 2.21 Stop catching spawn-rich fish   | 2                               | 100.00 | 2                | 100.00 | 2         | 100.00 | 6     | 100.00 |
| 2.2 If spawn-rich fishes are caught, the country will face serious problems                          | 1                               | 50.00  | 2                | 100.00 | 2         | 100.00 | 5     | 83.33  |
| 2.8 Stop hunting birds, save all varieties   | 2                               | 100.00 | 1                | 50.00  | 2         | 100.00 | 5     | 83.33  |
| 2.9 Save bio-diversity, stop using current nets  | 1                               | 50.00  | 2                | 100.00 | 2         | 100.00 | 5     | 83.33  |
| 2.15 Stop hunting migratory birds  | 2                               | 100.00 | 2                | 100.00 | 1         | 50.00  | 5     | 83.33  |
| 2.10 Save the fish fry   | 1                               | 50.00  | 2                | 100.00 | 1         | 50.00  | 4     | 66.67  |
| 2.13 Establish sanctuary, ensure fish habitat  | 1                               | 50.00  | 2                | 100.00 | 1         | 50.00  | 4     | 66.67  |
| 2.1 Catch no fish in Baishak and Jaishia, a happy life will follow for twelve months                 | 1                               | 50.00  | 2                | 100.00 | 0         | 0.00   | 3     | 50.00  |

| Awareness Messages and Material Used   | Awareness under Different Sites |        |                  |        |           |        |       |       |
|--|---------------------------------|--------|------------------|--------|-----------|--------|-------|-------|
|  | Turag-Bongshi                   |        | Kangsha-Malijhee |        | Hail Haor |        | Total |       |
|  | No.                             | %      | No.              | %      | No.       | %      | No.   | %     |
| 2.6 Save environment, save the country   | 2                               | 100.00 | 0                | 0.00   | 1         | 50.00  | 3     | 50.00 |
| 2.7 Save the habitat of fish, fill the need of nutrition   | 1                               | 50.00  | 1                | 50.00  | 1         | 50.00  | 3     | 50.00 |
| 2.3 Shall not destroy the lineage of fish  | 1                               | 50.00  | 1                | 50.00  | 0         | 0.00   | 2     | 33.33 |
| 2.11 Shall not catch fish fry, shall not catch mother fish   | 1                               | 50.00  | 1                | 50.00  | 0         | 0.00   | 2     | 33.33 |
| 2.14 Construct sanctuary, ensure birds' habitat  | 1                               | 50.00  | 1                | 50.00  | 0         | 0.00   | 2     | 33.33 |
| 2.16 Plant trees by the side of the house  | 1                               | 50.00  | 1                | 50.00  | 0         | 0.00   | 2     | 33.33 |
| 2.17 Save the natural resources of hail haor   | 1                               | 50.00  | 0                | 0.00   | 1         | 50.00  | 2     | 33.33 |
| 2.19 Plant trees by the side of stream (Shhra), let the river remain zigzag  | 1                               | 50.00  | 0                | 0.00   | 1         | 50.00  | 2     | 33.33 |
| 2.23 Excavate khals and beels, save the habitat of fish  | 2                               | 100.00 | 0                | 0.00   | 0         | 0.00   | 2     | 33.33 |
| 2.12 Shall not drain out water from beels, wells and shallow water bodies, shall not catch all fish  | 0                               | 0.00   | 1                | 50.00  | 0         | 0.00   | 1     | 16.67 |
| 2.24 Come, let us concertedly save the wetland resources   | 0                               | 0.00   | 1                | 50.00  | 0         | 0.00   | 1     | 16.67 |
| 2.5 We all be aware, shall save hail haor  | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 2.18 Let the hail haor live, let the water flow in the haor  | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 2.20 Open the route of fish movement   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 2.22 Our world is our future, let it live  | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| <b>Sign boards, Wall Painting</b>  |                                 |        |                  |        |           |        |       |       |
| 3.1 Establish fish sanctuary, ensure fish habitat  | 2                               | 100.00 | 2                | 100.00 | 1         | 50.00  | 5     | 83.33 |
| 3.3 Stop hunting birds, save all varieties   | 2                               | 100.00 | 1                | 50.00  | 2         | 100.00 | 5     | 83.33 |
| 3.2 Shall not drain out all beels, shall not catch all fish  | 2                               | 100.00 | 2                | 100.00 | 0         | 0.00   | 4     | 66.67 |
| <b>Environmental Education Programs through Printed Khatta</b>   |                                 |        |                  |        |           |        |       |       |
| 4.1 Migratory bird hunting is illegal  | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67 |
| 4.2 Stop hunting birds, save bio-diversity   | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67 |
| 4.3 Let us protect wetland resources   | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67 |
| 4.4 Agriculture Irrigation: Wetlands play major roll in dry season irrigation and reduce soil degradation by washing out pesticides/insecticides | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67 |
| 4.5 Navigation: Wetlands are means of transportation in the rural Bangladesh   | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67 |
| 4.6 Vegetation: Wetland plants provide many benefits including food, fodder, fuel and medicine   | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67 |
| 4.7 Let us protect wetlands  | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67 |
| 4.8 Establish sanctuary for fish habitat   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 4.9 Fish : Many species of fish and prawns inhabit in the wetlands, which provide us animal protein. Many families subsist on fishing            | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 4.10 Daily Use: Wetland is a major source of water for bathing, cooking, livestock rearing and juts retting                                      | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 4.11 Flood Control: Wetlands reduce flood by storing rain water/flash floodwater   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 4.12 Wetlands are degrading due to natural and man made causes   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| <b>Quiz Competition</b>  |                                 |        |                  |        |           |        |       |       |
| 5.1 Save threatened species  | 0                               | 0.00   | 0                | 0.00   | 1         | 50.00  | 1     | 16.67 |
| 5.2 Save brood fish  | 0                               | 0.00   | 0                | 0.00   | 1         | 50.00  | 1     | 16.67 |

| Awareness Messages and Material Used   | Awareness under Different Sites |        |                  |        |           |        |       |       |
|--|---------------------------------|--------|------------------|--------|-----------|--------|-------|-------|
|  | Turag-Bongshi                   |        | Kangsha-Malijhee |        | Hail Haor |        | Total |       |
|  | No.                             | %      | No.              | %      | No.       | %      | No.   | %     |
| 5.3 Restoration of habitats  | 0                               | 0.00   | 0                | 0.00   | 1         | 50.00  | 1     | 16.67 |
| 5.4 Establishment sanctuary  | 0                               | 0.00   | 0                | 0.00   | 1         | 50.00  | 1     | 16.67 |
| 5.5 Stop hunting   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 5.6 Save bio-diversity   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 5.7 Follow fish laws   | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| 5.8 More Plantation  | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| <b>Sun Cap</b>   |                                 |        |                  |        |           |        |       |       |
| 6.1 Protect wetland resources  | 2                               | 100.00 | 1                | 50.00  | 1         | 50.00  | 4     | 66.67 |
| 6.2 Save Hail Haor   | 1                               | 50.00  | 0                | 0.00   | 0         | 0.00   | 1     | 16.67 |
| <b>Signboard</b>   |                                 |        |                  |        |           |        |       |       |
| 7.1 Fisheries Norms  | 0                               | 0.00   | 1                | 50.00  | 2         | 100.00 | 3     | 50.00 |
| <b>Baul (folk) Song</b>  |                                 |        |                  |        |           |        |       |       |
| 8.1 Stop hunting   | 1                               | 50.00  | 2                | 100.00 | 2         | 100.00 | 5     | 83.33 |
| 8.8 More Plantation  | 1                               | 50.00  | 1                | 50.00  | 1         | 50.00  | 3     | 50.00 |
| 8.3 Save brood fish  | 1                               | 50.00  | 1                | 50.00  | 0         | 0.00   | 2     | 33.33 |
| 8.5 Save bio-diversity   | 0                               | 0.00   | 0                | 0.00   | 2         | 100.00 | 2     | 33.33 |
| 8.2 Save threatened species  | 0                               | 0.00   | 1                | 50.00  | 0         | 0.00   | 1     | 16.67 |
| 8.6 Follow fish laws   | 0                               | 0.00   | 1                | 50.00  | 0         | 0.00   | 1     | 16.67 |
| 8.7 Establishment sanctuary  | 0                               | 0.00   | 0                | 0.00   | 1         | 50.00  | 1     | 16.67 |
| 8.4 Restoration of habitats  | 0                               | 0.00   | 0                | 0.00   | 0         | 0.00   | 0     | 0.00  |
| <b>Poster</b>  |                                 |        |                  |        |           |        |       |       |
| 9.1 Save threatened fish species Total 54 fish species are threatened in fresh water | 1                               | 50.00  | 2                | 100.00 | 2         | 100.00 | 5     | 83.33 |
| 9.2 Plant trees and save it  | 2                               | 100.00 | 2                | 100.00 | 1         | 50.00  | 5     | 83.33 |

### Annexure-XVIII

Awareness Level on MACH Communication Materials According to RMO Members

| Sl. No. | MACH Communication Materials   | Average Score (Level) under Defferent Sites |                  |           |                   |
|---------|--|---|------------------|-----------|-------------------|
|         |  | Turag-Bongshi                               | Kangsha-Malijhee | Hail Haor | All Average Score |
| 1       | Festoon, Placards Used in Day Observance, Rally, Workshop Meeting etc. | 3.00  | 2.50             | 2.50      | 2.67              |
| 2       | Signboards, Wall Painting  | 3.00  | 2.50             | 2.00      | 2.50              |
| 3       | Poster   | 2.00  | 3.00             | 1.50      | 2.17              |
| 4       | Baul (folk) Song   | 1.50  | 2.00             | 2.00      | 1.83              |
| 5       | Signboards   | 1.50  | 1.00             | 2.00      | 1.50              |
| 6       | Sun Cap  | 2.00  | 0.50             | 1.00      | 1.17              |
| 7       | MACH Calendar 2001   | 2.00  | 0.00             | 0.50      | 0.83              |
| 8       | Printed Khatta for Environmental Education                             | 2.00  | 0.00             | 0.00      | 0.67              |
| 9       | Quiz Competition   | 0.00  | 0.00             | 1.00      | 0.33              |

## Annexure-XIX

Understanding of RUG Members about Roles/Initiatives Regarding Awareness Messages and Materials of MACH Project

| Awareness Messages and Material Used   | Awareness under Different Sites |       |                  |        |           |       |       |       |
|--|---------------------------------|-------|------------------|--------|-----------|-------|-------|-------|
|  | Turag-Bongshi                   |       | Kangsha-Malijhee |        | Hail Haor |       | Total |       |
|  | No.                             | %     | No.              | %      | No.       | %     | No.   | %     |
| <b>MACH Calendar : 2001</b>  |                                 |       |                  |        |           |       |       |       |
| 1.2 Fishes from wetlands are the major source of animal protein and means of livelihood for millions | 1                               | 25.00 | 1                | 10.00  | 0         | 0.00  | 2     | 9.09  |
| 1.5 Wetlands reduce flood through retaining water  | 0                               | 0.00  | 1                | 10.00  | 0         | 0.00  | 1     | 4.55  |
| 1.6 Aquatic vegetation are used as food  | 1                               | 25.00 | 0                | 0.00   | 0         | 0.00  | 1     | 4.55  |
| 1.9 Wetlands are major ways of communication   | 0                               | 0.00  | 1                | 10.00  | 0         | 0.00  | 1     | 4.55  |
| 1.10 Wetlands play important role in maintaining environmental balance                               | 0                               | 0.00  | 1                | 10.00  | 0         | 0.00  | 1     | 4.55  |
| 1.1 Wetland are our important resources  | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |
| 1.3 Wetlands are habitat for different species   | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |
| 1.4 Wetland plays important role for bio-diversity conservation                                      | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |
| 1.7 Wetlands serve surface water for irrigation  | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |
| 1.8 Wetlands are attractive habitat for migratory birds  | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |
| 1.11 Wetlands are degrading due to various reasons   | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |
| 1.12 Let us save our wetlands  | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |
| <b>Festoon, Placards Used in Day Observances, Rally, Workshop etc.</b>                               |                                 |       |                  |        |           |       |       |       |
| 2.4 Shall not catch spawn-rich fish, shall not harm to the country                                   | 3                               | 75.00 | 10               | 100.00 | 6         | 75.00 | 19    | 86.36 |
| 2.21 Stop catching spawn-rich fish   | 1                               | 25.00 | 9                | 90.00  | 6         | 75.00 | 16    | 72.73 |
| 2.2 If spawn-rich fishes are caught, the country will face serious problems                          | 3                               | 75.00 | 7                | 70.00  | 3         | 37.50 | 13    | 59.09 |
| 2.13 Establish sanctuary, ensure fish habitat  | 2                               | 50.00 | 7                | 70.00  | 3         | 37.50 | 12    | 54.55 |
| 2.10 Save the fish fry   | 0                               | 0.00  | 5                | 50.00  | 5         | 62.50 | 10    | 45.45 |
| 2.11 Shall not catch fish fry, shall not catch mother fish   | 1                               | 25.00 | 5                | 50.00  | 3         | 37.50 | 9     | 40.91 |
| 2.8 Stop hunting birds, save all varieties   | 0                               | 0.00  | 4                | 40.00  | 4         | 50.00 | 8     | 36.36 |
| 2.9 Save bio-diversity, stop using current nets  | 1                               | 25.00 | 3                | 30.00  | 3         | 37.50 | 7     | 31.82 |
| 2.15 Stop hunting migratory birds  | 0                               | 0.00  | 4                | 40.00  | 1         | 12.50 | 5     | 22.73 |
| 2.16 Plant trees by the side of the house  | 0                               | 0.00  | 3                | 30.00  | 2         | 25.00 | 5     | 22.73 |
| 2.3 Shall not destroy the lineage of fish  | 0                               | 0.00  | 3                | 30.00  | 0         | 0.00  | 3     | 13.64 |
| 2.17 Save the natural resources of hail haor   | 0                               | 0.00  | 1                | 10.00  | 2         | 25.00 | 3     | 13.64 |
| 2.24 Come, let us concertedly save the wetland resources   | 1                               | 25.00 | 2                | 20.00  | 0         | 0.00  | 3     | 13.64 |
| 2.1 Catch no fish in Baishak and Jaishla, a happy life will follow for twelve months                 | 1                               | 25.00 | 1                | 10.00  | 0         | 0.00  | 2     | 9.09  |
| 2.7 Save the habitat of fish, fill the need of nutrition   | 1                               | 25.00 | 1                | 10.00  | 0         | 0.00  | 2     | 9.09  |
| 2.19 Plant trees by the side of stream (Shhra), let the river remain zigzag                          | 1                               | 25.00 | 0                | 0.00   | 1         | 12.50 | 2     | 9.09  |
| 2.12 Shall not drain out water from beels, wells and shallow water bodies, shall not catch all fish  | 0                               | 0.00  | 1                | 10.00  | 0         | 0.00  | 1     | 4.55  |
| 2.18 Let the hail haor live, let the water flow in the haor  | 0                               | 0.00  | 0                | 0.00   | 1         | 12.50 | 1     | 4.55  |
| 2.23 Excavate khals and beels, save the habitat of fish  | 0                               | 0.00  | 0                | 0.00   | 1         | 12.50 | 1     | 4.55  |
| 2.5 We all be aware, shall save hail haor  | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |
| 2.6 Save environment, save the country   | 0                               | 0     | 0                | 0      | 0         | 0     | 0     | 0     |

| Awareness Messages and Material Used   | Awareness under Different Sites |       |                  |       |           |       |       |       |
|--|---------------------------------|-------|------------------|-------|-----------|-------|-------|-------|
|  | Turag-Bongshi                   |       | Kangsha-Malijhee |       | Hail Haor |       | Total |       |
|  | No.                             | %     | No.              | %     | No.       | %     | No.   | %     |
| 2.14 Construct sanctuary, ensure birds' habitat  | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 2.20 Open the route of fish movement   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 2.22 Our world is our future, let it live  | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| <b>Sign boards, Wall Painting</b>  |                                 |       |                  |       |           |       |       |       |
| 3.1 Establish fish sanctuary, ensure fish habitat  | 2                               | 50.00 | 6                | 60.00 | 3         | 37.50 | 11    | 50.00 |
| 3.2 Shall not drain out all beels, shall not catch all fish  | 3                               | 75.00 | 5                | 50.00 | 1         | 12.50 | 9     | 40.91 |
| 3.3 Stop hunting birds, save all varieties   | 1                               | 25.00 | 4                | 40.00 | 4         | 50.00 | 9     | 40.91 |
| <b>Environmental Education Programs through Printed Khatta</b>   |                                 |       |                  |       |           |       |       |       |
| 4.1 Fish : Many species of fish and prawns inhabit in the wetlands, which provide us animal protein. Many families subsist on fishing            | 0                               | 0.00  | 2                | 20.00 | 0         | 0.00  | 2     | 9.09  |
| 4.2 Let us protect wetland resources   | 0                               | 0.00  | 1                | 10.00 | 0         | 0.00  | 1     | 4.55  |
| 4.3 et us protect wetlands   | 0                               | 0.00  | 1                | 10.00 | 0         | 0.00  | 1     | 4.55  |
| 4.4 Migratory bird hunting is illegal  | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 4.5 Establish sanctuary for fish habitat   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 4.6 Stop hunting birds, save bio-diversity   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 4.7 Agriculture Irrigation: Wetlands play major roll in dry season irrigation and reduce soil degradation by washing out pesticides/insecticides | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 4.8 Navigation: Wetlands are means of transportation in the rural Bangladesh   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 4.9 Vegetation: Wetland plants provide many benefits including food, fodder, fuel and medicine   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 4.10 Daily use: Wetland is a major source of water for bathing, cooking, livestock rearing and juts retting                                      | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 4.11 Flood Control: Wetlands reduce flood by storing rain water/flash floodwater   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 4.12 Wetlands are degrading due to natural and man made causes   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| <b>Quiz Competition</b>  |                                 |       |                  |       |           |       |       |       |
| 5.1 Establishment sanctuary  | 1                               | 25.00 | 0                | 0.00  | 0         | 0.00  | 1     | 4.55  |
| 5.2 More Plantation  | 1                               | 25.00 | 0                | 0.00  | 0         | 0.00  | 1     | 4.55  |
| 5.3 Stop hunting   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 5.4 Save threatened species  | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 5.5 Save brood fish  | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 5.6 Restoration of habitats  | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 5.7 Save bio-diversity   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| 5.8 Follow fish laws   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| <b>Sun Cap</b>   |                                 |       |                  |       |           |       |       |       |
| 6.1 Protect wetland resources  | 1                               | 25.00 | 4                | 40.00 | 2         | 25.00 | 7     | 31.82 |
| 6.2 Save Hail Haor   | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| <b>Signboard</b>   |                                 |       |                  |       |           |       |       |       |
| 7.1 Fisheries Norms  | 3                               | 75.00 | 6                | 60.00 | 5         | 62.50 | 14    | 63.64 |
| <b>Baul (folk) Song</b>  |                                 |       |                  |       |           |       |       |       |
| 8.8 More Plantation  | 1                               | 25.00 | 3                | 30.00 | 1         | 12.50 | 5     | 22.73 |
| 8.1 Stop hunting.  | 1                               | 25.00 | 2                | 20.00 | 0         | 0.00  | 3     | 13.64 |
| 8.2 Save threatened species  | 0                               | 0.00  | 2                | 20.00 | 1         | 12.50 | 3     | 13.64 |
| 8.6 Follow fish laws   | 0                               | 0.00  | 2                | 20.00 | 0         | 0.00  | 2     | 9.09  |
| 8.5 Save bio-diversity   | 0                               | 0.00  | 1                | 10.00 | 0         | 0.00  | 1     | 4.55  |
| 8.7 Establishment sanctuary  | 0                               | 0.00  | 1                | 10.00 | 0         | 0.00  | 1     | 4.55  |
| 8.3 Save brood fish  | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |

| Awareness Messages and Material Used   | Awareness under Different Sites |       |                  |       |           |       |       |       |
|--|---------------------------------|-------|------------------|-------|-----------|-------|-------|-------|
|  | Turag-Bongshi                   |       | Kangsha-Malijhee |       | Hail Haor |       | Total |       |
|  | No.                             | %     | No.              | %     | No.       | %     | No.   | %     |
| 8.4 Restoration of habitats  | 0                               | 0     | 0                | 0     | 0         | 0     | 0     | 0     |
| Poster   |                                 |       |                  |       |           |       |       |       |
| 9.1 Save threatened fish species Total 54 fish species are threatened in fresh water | 0                               | 0.00  | 6                | 60.00 | 5         | 62.50 | 11    | 50.00 |
| 9.2 Plant trees and save it  | 3                               | 75.00 | 7                | 70.00 | 5         | 62.50 | 15    | 68.18 |

### Annexure-XX

Awareness Level on MACH Communication Materials According to RUG Members

| Sl. No. | MACH Communication Materials   | Average Score (Level) under Different Sites |                  |           |                   |
|---------|--|---|------------------|-----------|-------------------|
|         |  | Turag-Bongshi                               | Kangsha-Malijhee | Hail Haor | All Average Score |
| 1       | Festoon, Placards Used in Day Observance, Rally, Workshop Meeting etc. | 1.25  | 1.80             | 1.38      | 1.55              |
| 2       | Signboards, Wall Painting  | 1.50  | 1.20             | 0.88      | 1.14              |
| 3       | Poster   | 0.75  | 0.90             | 1.38      | 1.05              |
| 4       | Signboards   | 1.00  | 0.80             | 0.75      | 0.82              |
| 5       | Baul (folk) Song   | 0.50  | 0.60             | 0.13      | 0.41              |
| 6       | Sun Cap  | 0.50  | 0.40             | 0.25      | 0.36              |
| 7       | MACH Calendar 2001   | 0.25  | 0.10             | 0.00      | 0.09              |
| 8       | Printed Khatta for Environmental Education                             | 0.00  | 0.10             | 0.00      | 0.05              |
| 9       | Quiz Competition   | 0.25  | 0.00             | 0.00      | 0.05              |

### Annexure-XXI

Suggested Recommendations of RMO Members to Overcome the Limitations

| Sl. No. | Suggested Recommendations   | No. of Responses | %     |
|---------|---|------------------|-------|
| 1       | Number of beneficiary groups need to be increased   | 16               | 44.44 |
| 2       | Loan ceiling of the members has to be increased   | 12               | 33.33 |
| 3       | Skill development training for alternative income generation activities has to be increased | 11               | 30.56 |
| 4       | Grassroots level awareness of CNRS workers need to be increased                             | 4                | 11.11 |
| 5       | Field workers of CNRS should increase their field monitoring activities                     | 3                | 8.33  |
| 6       | Publicity for increasing awareness of the people has to be intensified                      | 2                | 5.56  |
| 7       | Loan has to be distrusted in time as per the need of the members                            | 2                | 5.56  |
| 8       | It is necessary to increase awareness at national level                                     | 1                | 2.78  |
| 9       | Interest rate on loan is to be reduced  | 1                | 2.78  |

## Annexure-XXII

### Suggested Recommendations of RUG Members to Overcome the Limitations

| Sl. No. | Suggested Recommendations   | No. of Responses | %     |
|---------|---|------------------|-------|
| 1       | Loan ceiling of the members has to be increased   | 51               | 38.64 |
| 2       | Number of beneficiary groups need to be increased   | 47               | 35.61 |
| 3       | Skill development training for alternative income generation activities has to be increased | 47               | 35.61 |
| 4       | Field workers of CNRS should increase their field monitoring activities                     | 7                | 5.30  |
| 5       | Grassroots level awareness of CNRS workers need to be increased                             | 6                | 4.55  |
| 6       | It is necessary to increase awareness at national level                                     | 4                | 3.03  |
| 7       | It is necessary to increase the publicity to protect wetland resources                      | 4                | 3.03  |
| 8       | Publicity for increasing awareness of the people has to be intensified                      | 4                | 3.03  |
| 9       | Interest rate on loan is to be reduced  | 4                | 3.03  |
| 10      | Loan has to be distrusted in time as per the need of the members                            | 3                | 2.27  |
| 11      | Members have to be informed about their total yearly savings                                | 1                | 0.76  |
| 12      | Seeds/seedling are to be supplied in time   | 1                | 0.76  |

## Annexure-XXIII

### Issues Raised by the MACH Staff

| Sl. No. | Issues  | Organization | No. of Response | %     |
|---------|---|--------------|-----------------|-------|
| 1       | Work field places are far away; motor cycles are few  | CARITAS      | 6               | 19.35 |
| 2       | It is very hard to recover the loan given to the members. It takes long time too.   | CARITAS      | 4               | 12.90 |
| 3       | Field workers efficiency is low   | CARITAS      | 3               | 9.68  |
| 4       | Many staff do not perform their duty properly   | CNRS         | 2               | 6.45  |
| 5       | Industrial wastes are destroying wetland resources  | CNRS         | 2               | 6.45  |
| 6       | Internal conflicts among the villagers hampering project activities   | CNRS         | 2               | 6.45  |
| 7       | Powerful people of the locality have already occupied the khas land of the beels for which it is becoming difficult to get land to establish fish sanctuary | CNRS         | 2               | 6.45  |
| 8       | Frequent transfer and discharge from job are adversely affecting the quality of project activities  | CNRS         | 2               | 6.45  |
| 9       | Training materials are inadequate   | CARITAS      | 2               | 6.45  |
| 10      | As literacy rate is very low written communication through posters, leaflets, etc. are not effective  | CARITAS      | 2               | 6.45  |

| Sl. No. | Issues   | Organization | No. of Response | %    |
|---------|--|--------------|-----------------|------|
| 11      | As there is no training allowance, participation of beneficiaries in training classes is low           | CARITAS      | 2               | 6.45 |
| 12      | Shortage of manpower to implement group activities   | CARITAS      | 2               | 6.45 |
| 13      | Skilled organizers are few   | CNRS         | 1               | 3.23 |
| 14      | As courtyard meeting and miking are not done in time, it is adversely affecting the activities of CNRS | CNRS         | 1               | 3.23 |
| 15      | Communication materials (red flags, sign board, etc.) are not supplied in time                         | CNRS         | 1               | 3.23 |
| 16      | Appropriate vehicle is not available to save wetland resources   | CNRS         | 1               | 3.23 |
| 17      | RMO has not yet been put to stronger position  | CNRS         | 1               | 3.23 |
| 18      | Those who previously used to lease in the beels are now resisting fishery activities of the project    | CNRS         | 1               | 3.23 |
| 19      | Some religious fanatics do not like the involvement of women in the project activities                 | CNRS         | 1               | 3.23 |
| 20      | Works of different partners are not implemented with mutual understanding                              | CNRS         | 1               | 3.23 |
| 21      | As fishermen remain busy in catching fish so they cannot attend their meeting in time                  | CNRS         | 1               | 3.23 |
| 22      | Field workers do not perform their duty as per requirement   | CARITAS      | 1               | 3.23 |
| 23      | Participation in RUG meeting during peak busy days is minimum  | CARITAS      | 1               | 3.23 |
| 24      | Prohibition to catch fish is violated  | CARITAS      | 1               | 3.23 |
| 25      | The beneficiaries of RUG are not getting any benefit   | CARITAS      | 1               | 3.23 |
| 26      | RMO does not organize meetings properly  | CARITAS      | 1               | 3.23 |
| 27      | Inter village feud developed over the right and hold of beels  | CARITAS      | 1               | 3.23 |
| 28      | Exhibitions/Melas are organized mainly in growth centers; women participation are limited              | CARITAS      | 1               | 3.23 |
| 29      | Proficient resource person for training is very limited  | CARITAS      | 1               | 3.23 |
| 30      | The circulars of MACH central office (Dhaka) do not reach the field offices promptly                   | CARITAS      | 1               | 3.23 |

## Annexure-XXIV

### Suggested Recommendations by the MACH Staff to Improve the Situation

| Sl. No. | Suggested Recommendations  | Organization | No. of Responses | %     |
|---------|--|--------------|------------------|-------|
| 1       | In the process of loan disbursement the UP should be involved which is expected to facilitate loan realization   | CARITAS      | 4                | 12.90 |
| 2       | Provision of motor cycle to field officers is expected to expedite field work  | CARITAS      | 4                | 12.90 |
| 3       | Expert trainers have to be involved to raise the quality of training   | CARITAS      | 3                | 9.68  |
| 4       | All circulars of central office should be promptly supplied to all MACH partners   | CARITAS      | 3                | 9.68  |
| 5       | Training is necessary to increase efficiency of the Organizers   | CNRS         | 2                | 6.45  |
| 6       | Work of the field staff has to be supervised so that they perform their responsibilities properly  | CNRS         | 2                | 6.45  |
| 7       | It is necessary to see that the industrial wastes do not fall in khal and beel   | CNRS         | 2                | 6.45  |
| 8       | UP can play a decisive role in recovering the khas land from the influential persons of the locality   | CNRS         | 2                | 6.45  |
| 9       | In order to increase the quality of work frequent transfer of staff should be stopped  | CNRS         | 2                | 6.45  |
| 10      | Training for increasing efficiency is needed   | CARITAS      | 2                | 6.45  |
| 11      | Training materials should be developed and supplied  | CARITAS      | 2                | 6.45  |
| 12      | Manpower should be increased to implement the field activities properly  | CARITAS      | 2                | 6.45  |
| 13      | RUG should be organized with real beneficiaries  | CARITAS      | 2                | 6.45  |
| 14      | Social awareness shall have to be increased to reduce internat feud  | CNRS         | 1                | 3.23  |
| 15      | Regular courtyard meeting and miking should be continued to keep the activities moving   | CNRS         | 1                | 3.23  |
| 16      | Materials for fish sanctuary should be supplied when needed  | CNRS         | 1                | 3.23  |
| 17      | For proper supervision of the wetland activities speed boats or trawlers should be supplied  | CNRS         | 1                | 3.23  |
| 18      | Allowance for RMO members may be considered to make it a stronger institution  | CNRS         | 1                | 3.23  |
| 19      | Social awareness need to be increased to mould the attitude of the rural elites  | CNRS         | 1                | 3.23  |
| 20      | Special awareness programs should be organized to change views and attitude of local elites  | CNRS         | 1                | 3.23  |
| 21      | Partners involved in project implementation should have joint planning and co-ordination for implementing their activities   | CNRS         | 1                | 3.23  |
| 22      | Members awareness should be further increased so that they attend the meetings in time   | CNRS         | 1                | 3.23  |
| 23      | Work of the staff has to be supervised so that they perform their responsibilities properly  | CARITAS      | 1                | 3.23  |
| 24      | Provision of training allowance for the trainees may be considered   | CARITAS      | 1                | 3.23  |
| 25      | Supervision in the beels and sanctuaries have to be intensified to stop catching fish. At the same time people around the beels need to be made more aware of their responsibilities to stop fish catching | CARITAS      | 1                | 3.23  |
| 26      | Literacy rate shall have to be increased   | CARITAS      | 1                | 3.23  |

| Sl. No. | Suggested Recommendations   | Organization | No. of Responses | %    |
|---------|---|--------------|------------------|------|
| 27      | Activities of RUG shall have to be strengthened   | CARITAS      | 1                | 3.23 |
| 28      | Members should be made more aware about attending meetings regularly<br>Field Officers of all levels should organize awareness meeting to this effect | CARITAS      | 1                | 3.23 |
| 29      | Exhibitions or Melas would have more effect if there were held near UP office   | CARITAS      | 1                | 3.23 |
| 30      | Experienced resource persons in training should be recruited for conducting meaningful training   | CARITAS      | 1                | 3.23 |

### Annexure-XXV

#### Issues Raised by UNO, UFO and UP Chairman Regarding MACH Activities and Approaches

| Sl. No. | Issues  | No. of Response | %     |
|---------|---|-----------------|-------|
| 1       | Coordination of activities was deficient and contact with different stakeholders was inadequate   | 3               | 30.00 |
| 2       | The UNO and the UP chairmen needed to spend some money for the work of the project. No allowance was given from the project to meet this expense. | 3               | 30.00 |
| 3       | Khals/Shharas (canals) were silted  | 2               | 20.00 |
| 4       | Lack of transparency in excavation though this issue raised in LGC meeting  | 2               | 20.00 |
|         | Activities were implemented in limited areas  | 1               | 10.00 |
| 5       | Haors are filling up with Dolkalam trees  | 1               | 10.00 |
| 6       | Number of fish sanctuary in the beel was few  | 1               | 10.00 |
| 7       | Concerned persons were not represented in the local union level advisory committee  | 1               | 10.00 |
| 8       | Current nets were used randomly in the fish sanctuaries   | 1               | 10.00 |
| 9       | UPs did have connection with excavation of beel/khal under the project  | 1               | 10.00 |
| 10      | UP Chairmen involvement in the project was minimum  | 1               | 10.00 |
| 11      | RMO's do not have separate office room  | 1               | 10.00 |
| 12      | Enough Field worker was not there to increase the awareness of the people   | 1               | 10.00 |
| 13      | No scope of study tour to project areas   | 1               | 10.00 |
| 14      | Inadequate formal briefing to different stakeholders  | 1               | 10.00 |
| 15      | No briefing kit with detail information of MACH   | 1               | 10.00 |
| 16      | No TA and contingency for office management   | 1               | 10.00 |
| 17      | Inadequate involvement of relevant Ministry   | 1               | 10.00 |
| 18      | Some members of RMO's did not know the rules and obligations of fish sanctuary. No contingency for office management                              | 1               | 10.00 |
| 19      | Loans were provided to some beneficiaries   | 1               | 10.00 |
| 20      | Slow in work  | 1               | 10.00 |
| 21      | Negative impact on excavation among those were effected   | 1               | 10.00 |
| 22      | It is easy to raise awareness but difficult to sustain  | 1               | 10.00 |
| 23      | Information was not provided to UFO from the MACH project in time   | 1               | 10.00 |

**Annexure-XXVI**

Suggested Recommendations of the UNO, UFO and UP Chairman to Improve the Situation

| Sl. No. | Suggested Recommendations   | No. of Responses | %     |
|---------|---|------------------|-------|
| 1       | Number of signboards, poster/leaflets shall have to be increased  | 3                | 30.00 |
| 2       | Wide publicity need to be given about the works of the project and their benefits   | 2                | 20.00 |
| 3       | Re-excavation of shhara (canals) should be undertaken   | 2                | 20.00 |
| 4       | MACH activities should be focused in Radio and TV   | 2                | 20.00 |
| 5       | Awareness activities may be designed in consultation with UNOs  | 2                | 20.00 |
| 6       | Every one should be motivated to know his role and coordination of works need to be done                                  | 1                | 10.00 |
| 7       | Cleaning of Dhokalam tree from the haors need to be arranged  | 1                | 10.00 |
| 8       | Number of fish sanctuary should be increased  | 1                | 10.00 |
| 9       | Present union level advisory committees need to be re-constituted   | 1                | 10.00 |
| 10      | Measures to be taken to stop the use of current net in the fish sanctuary   | 1                | 10.00 |
| 11      | UPs involvement in the excavation of beel/khals under the project would raise the quality of work                         | 1                | 10.00 |
| 12      | Steps need to be taken to increase the involvement of the UP chairmen with the project                                    | 1                | 10.00 |
| 13      | Separate office room need to be arranged for the RMOs   | 1                | 10.00 |
| 14      | Some allowance to the UP chairmen will enable him to meet the expenses incurred for the project                           | 1                | 10.00 |
| 15      | Number of field workers should be increased to raise the awareness of the people  | 1                | 10.00 |
| 16      | Study tours to project areas are to be arranged   | 1                | 10.00 |
| 17      | Briefing sessions have to be arranged for the local leaders, representatives of different organizations and GOB personnel | 1                | 10.00 |
| 18      | More meetings with UP chairmen, community people and police have to be arranged   | 1                | 10.00 |
| 19      | More TV and Radio Programs have to be arranged  | 1                | 10.00 |
| 20      | For better publicity cassette player should be used in hats and bazars  | 1                | 10.00 |
| 21      | Election for EC membership of RMO should be held every year   | 1                | 10.00 |
| 22      | Government rate to collect tool from wetland are to be fixed  | 1                | 10.00 |
| 23      | Community people, local elites, especially the fishermen have to involved in the planning of activities                   | 1                | 10.00 |
| 24      | Transparency in excavation works is essential   | 1                | 10.00 |
| 25      | Involvement of UFO in excavation planning process   | 1                | 10.00 |
| 26      | Information should be provided to UFO from the MACH project in time   | 1                | 10.00 |
| 27      | Mobile court could be introduced for effective execution of fish laws   | 1                | 10.00 |
| 28      | Financial assistance needs to be increased for self-reliance  | 1                | 10.00 |
| 29      | There should be flexibility in implementing laws where necessary  | 1                | 10.00 |

**Study on Assessment of MACH Awareness  
Activities and Overall Community Awareness Regarding  
Wetland Resource and Bio-Diversity Conservation Issue**

(Checklist for FGD with RMO/RUG Members)

100. No. RMO/RUG Members Participated in FGD : .....

100.1 Male : ..... 100.2 Female : .....

100.3 Familiar with MACH Goal and Objectives : Yes  No

200. Present Awareness Level on the Key Issues of Wetland Resources

| Key Issues   | Level of Awareness (Responses) |          |             |                 |                | Total Responses |
|--|--------------------------------|----------|-------------|-----------------|----------------|-----------------|
|  | Very High (4)                  | High (3) | Average (2) | Very Little (1) | Not at all (0) |                 |
| <b>(a) Importance of Wetland Resources :</b>               |                                |          |             |                 |                |                 |
| 200.1 Fish Resources                                       |                                |          |             |                 |                |                 |
| 200.2 Bio-diversity Conservation/ Environmental Balance    |                                |          |             |                 |                |                 |
| 200.3 Flood Pollution/Control                              |                                |          |             |                 |                |                 |
| 200.4 Surface Water Irrigation                             |                                |          |             |                 |                |                 |
| 200.5 Habitat for Migratory Birds                          |                                |          |             |                 |                |                 |
| 200.6 Aquatic Vegetations                                  |                                |          |             |                 |                |                 |
| 200.7 Fish Sanctuaries                                     |                                |          |             |                 |                |                 |
| 200.8 Tree Plantation                                      |                                |          |             |                 |                |                 |
| 200.9 Navigation   |                                |          |             |                 |                |                 |
| 200.10 Restoration of Habitats                             |                                |          |             |                 |                |                 |
| 200.11 Bird/Wildlife Hunting                               |                                |          |             |                 |                |                 |
| <b>(b) Wetland Resource Planning and Management :</b>      |                                |          |             |                 |                |                 |
| 200.12 Participatory Wetland Resource Problem Assessment   |                                |          |             |                 |                |                 |
| 200.13 Integrated Wetland Resource Planning and Management |                                |          |             |                 |                |                 |
| 200.14 Alternative IGAs for Livelihood Development         |                                |          |             |                 |                |                 |

**300. Prioritization of communication activities of MACH Project for wetland resources according to effectiveness in the scale of 1-5 (1 very high – 5 very low):**

| Sl. No. | Communication Activities                    | Priority-wise Ranking |   |   |   |   |
|---------|---|-----------------------|---|---|---|---|
|         |   | 1                     | 2 | 3 | 4 | 5 |
| 300.1   | Courtyard Meeting                           |                       |   |   |   |   |
| 300.2   | Community Level Meeting                     |                       |   |   |   |   |
| 300.3   | MACH Project Introductory Meeting           |                       |   |   |   |   |
| 300.4   | Briefing Session for Different Stakeholders |                       |   |   |   |   |
| 300.5   | Important Day Observance                    |                       |   |   |   |   |
| 300.6   | Rally                                       |                       |   |   |   |   |
| 300.7   | Environment Education in School             |                       |   |   |   |   |
| 300.8   | Live Drama                                  |                       |   |   |   |   |
| 300.9   | Folk Song                                   |                       |   |   |   |   |
| 300.10  | Miking                                      |                       |   |   |   |   |
| 300.11  | Quiz Competition                            |                       |   |   |   |   |
| 300.12  | Drawing Competition                         |                       |   |   |   |   |
| 300.13  | Easy Competition                            |                       |   |   |   |   |
| 300.14  | TV Programs                                 |                       |   |   |   |   |
| 300.15  | Video Show on Wetland Resources             |                       |   |   |   |   |
| 300.16  | Participated in Fair Exhibition             |                       |   |   |   |   |

(\* Scoring will not be applicable for the respondents who are not at all aware about the above communication activities of MACH project)

**400. Mention your understanding and roles/initiatives about the awareness messages and materials used in MACH project along with its effectiveness in the scale of 0 – 4 (0= Not at all, 1= Very Little, 2= Average, 3= High, 4= Very High):**

| Sl. No. | Messages   | Understanding Level and Roles/Initiatives | Materials Used                             | Effectiveness of Materials |
|---------|--|---|--|----------------------------|
| 1       | 1.1 Wetland are our important resources<br>1.2 Fishes from wetlands are the major source of animal protein and means of livelihood for millions<br>1.3 Wetlands are habitat for different species<br>1.4 Wetland plays important role for biodiversity conservation<br>1.5 Wetlands reduce flood through retaining water<br>1.6 Aquatic vegetations are used as food<br>1.7 Wetlands serve surface water for irrigation<br>1.8 Wetlands are attractive habitat for migratory birds<br>1.9 Wetlands are major ways of communication<br>1.10 Wetlands play important role in maintaining environmental balance<br>1.12 Wetlands are degrading due to various reasons |   | MACH Calendar 2001 (Twelve Pages Calendar) |                            |

| Sl. No. | Messages  | Understanding Level and Roles/Initiatives | Materials Used  | Effectiveness of Materials |
|---------|---|---|---|----------------------------|
| 1.13    | Let us save our wetlands  |   |   |                            |
| 2       | <p>2.1 <i>krL-šRto' br aiŋj grQ; mlL Kdŋte erir gm</i></p> <p>2.2 <i>aiŋj ŋŋglqrjr grQ; nte f' tki mebrk</i></p> <p>2.3 <i>grŋQi esk Kie br aŋsm</i></p> <p>2.4 <i>ŋŋglqrjr grQ aie br; f' tki ŋŋZ Kie br</i></p> <p>2.5 <i>Argir merB mŋPZb ne; nrBj nrloŋK iŋŋr Kie</i></p> <p>2.6 <i>criŋek erPril f' k erPril</i></p> <p>2.7 <i>grŋQi Arem iŋŋr Ki; cŋŋi Afre ciY Ki</i></p> <p>2.8 <i>cŋL ŋkKri eŋŋ Ki; me RrZ iŋŋr Ki</i></p> <p>2.9 <i>Rae erPŋ iŋŋr KiKriŋŋ Rŋj eŋŋ Ki;</i></p> <p>2.10 <i>fcribr grQ iŋŋr Ki</i></p> <p>2.11 <i>fib fcribr aie br; gr grQ grie br</i></p> <p>2.12 <i>me reŋ/cŋŋro/Kqr ŋmPe br; me grQ aie br</i></p> <p>2.13 <i>Afq Arkŋ 'Zix Ki; grŋQi Arem ŋbrŋZ Ki</i></p> <p>2.14 <i>Afq Arkŋ 'Zix Ki; cŋL i Arem ŋbrŋZ Ki</i></p> <p>2.15 <i>Azr_ cŋL ŋkKri eŋŋ Ki</i></p> <p>2.16 <i>emoi criŋ Mŋ j ŋŋŋ</i></p> <p>2.17 <i>nrBj nrloŋi cŋKŋZK mŋŋ' iŋŋr Ki</i></p> <p>2.18 <i>nrBj nrloŋK erPrŋZ 'rl; nrloŋo cŋb AmŋZ 'rl</i></p> <p>2.19 <i>Qori cŋŋo Mŋ j ŋŋŋ; b' r ArKri erKri_rKŋZ 'rl</i></p> <p>2.20 <i>grŋQi Pjŋŋj c_ Lŋj 'rl</i></p> <p>2.21 <i>ŋŋglqrjr grQ air eŋŋ irL</i></p> <p>2.22 <i>Argŋf' i cŋ_er, Argŋf' i fŋel' r, -GŋK erPril!</i></p> <p>2.23 <i>Lrj-reŋ Lbb Ki; grŋQi Arem iŋŋr Ki</i></p> <p>2.24 <i>Amb mKŋŋj rŋŋŋ Rjŋŋŋ mŋŋ' iŋŋr Kri</i></p> |   | Festoon, Placards (Used in Day Observance, Rally, Workshop, Meeting, Govt. office etc.) |                            |
| 3       | <p>3.1 <i>Afq Arkŋ 'Zix Kri; grŋQi Arem ŋbrŋZ Kri</i></p> <p>3.2 <i>me reŋ ŋmPe br; me grQ aie br</i></p> <p>3.3 <i>cŋL ŋkKri eŋŋ Kri; me RrZ iŋŋr Kri</i></p>  |   | Signboards, Wall paintings  |                            |
| 4       | <p>4.1 Migratory bird hunting is illegal</p> <p>4.2 Establish sanctuary for fish habitat</p> <p>4.3 Stop Hunting birds<br/>Save Biodiversity</p> <p>4.4 Let us protect wetland resources</p> <p>4.5 Fish : Many species of fish and prawns inhabit in the wetlands, which provide us animal protein. Many families subsist on fishing</p> <p>4.6 Agriculture Irrigation: Wetlands play major roll in dry season irrigation and reduce soil degradation by washing out pesticides/insecticides</p> <p>4.7 Navigation: Wetlands are means of transportation in the rural Bangladesh</p> <p>4.8 Vegetation: Wetland plants provide many benefits including food, fodder, fuel and medicine</p> <p>4.9 Daily use: Wetland is a major source of</p>  |   | Khata (Printed) (Using Environmental Education Program at primary school students)      |                            |

| Sl. No. | Messages   | Understanding Level and Roles/Initiatives | Materials Used             | Effectiveness of Materials |
|---------|--|---|----------------------------|----------------------------|
|         | water for bathing, cooking, livestock rearing and jute rotting<br>4.10 Flood Control: Wetlands reduce flood by storing rain water/flash floodwater<br>4.11 Wetlands are degrading due to natural and man made causes<br>4.12 Let us protect wetlands |   |                            |                            |
| 5       | 5.1 Stop hunting<br>5.2 Save threatened species<br>5.3 Save brood fish<br>5.4 Restoration of habitats<br>5.5 Save biodiversity<br>5.6 Follow fish laws<br>5.7 Establishment sanctuary<br>5.8 More Plantation   |   | Through Quiz               |                            |
| 6       | 6.1 Protect wetland resources<br>6.2 Save Hail Haor  |   | Sun Cap                    |                            |
| 7       | 7.1 Fisheries Norms  |   | Signboards                 |                            |
| 8       | 8.1 Stop hunting<br>8.2 Save threatened species<br>8.3 Save brood fish<br>8.4 Restoration of habitats<br>8.5 Save biodiversity<br>8.6 Follow fish laws<br>8.7 Establishment sanctuary<br>8.8 More Plantation   |   | Boul Song                  |                            |
| 9       | 9.1 Save threatened fish species<br>Total 54 fish species are threatened in fresh water<br>9.2 Plant trees and save it   |   | Poster (Benefits of trees) |                            |

500. Mention the Prioritization of Communication Materials of MACH Project According to Effectiveness

| Sl. No. | Communication Materials               | Priority-wise Ranking |   |   |   |   |
|---------|---------------------------------------|-----------------------|---|---|---|---|
|         |                                       | 1                     | 2 | 3 | 4 | 5 |
| 500.1   | Poster (4 types)                      |                       |   |   |   |   |
| 500.2   | Folders (2 types)                     |                       |   |   |   |   |
| 500.3   | Booklets (1 type)                     |                       |   |   |   |   |
| 500.4   | Sign Board (4 types)                  |                       |   |   |   |   |
| 500.5   | MACH Documentary (Bangla)             |                       |   |   |   |   |
| 500.6   | MACH Cap                              |                       |   |   |   |   |
| 500.7   | MACH T-Shirt                          |                       |   |   |   |   |
| 500.8   | Hand Bills                            |                       |   |   |   |   |
| 500.9   | Wall Painting                         |                       |   |   |   |   |
| 500.10  | Education Materials (Wetland Message) |                       |   |   |   |   |

**600. Ranking of Existing Problems in Wetland Resource and Management of Project Activities:**

- a). .....
- b). .....
- c). .....
- d). .....
- e). .....

**700. Specific suggestions to overcome/minimize the problems:**

- a). .....
- b). .....
- c). .....
- d). .....
- e). .....

**Study on Assessment of MACH Awareness  
Activities and Overall Community Awareness Regarding  
Wetland Resource and Bio-Diversity Conservation Issue**

**(Questionnaire for RMO/RUG Members)**

|            |  |  |  |
|------------|--|--|--|
| Sample No. |  |  |  |
|------------|--|--|--|

**100. Introduction to RMO AND RUG:**

100.1 Name of RMO : .....

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100.2 Year of Establishment of RMO : .....

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|--|--|--|--|

100.3 Number of RMO EC Members (Only for RMO members) : .....

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|--|--|
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|--|--|

100.4 Number of RMO GB Members (Only for RMO members) : .....

|  |  |  |
|--|--|--|
|  |  |  |
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100.5 Number of RUG groups (Only for RMO members) : .....

|  |  |
|--|--|
|  |  |
|--|--|

100.6 Name of RUG (Only for RUG members) : .....

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100.7 Types of RUG (Only for RUG members): Code : 1 = Male, 2 = Female

|  |
|--|
|  |
|--|

100.8 Number of RUG Members (Only for RUG members): .....

100.9 Village : ..... 100.10 Union : .....

|  |  |  |  |
|--|--|--|--|
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100.11 Upazila : ..... 100.12 District : .....

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|--|--|--|--|

Name of Interviewer : ..... Date of Interview : .....

**200. Socio-economic Characteristics of RMO/RUG Member:**

200.1 Name of the Respondent : .....

200.2 Father/Husband's Name : .....

200.3 Sex : Code : 1 = Male, 2 = Female

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200.4 Profession (Main): ..... 200.5 Profession (Secondary): .....

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

Code : 1=Cultivation of own farm, 2=Cultivation of share-cropped, 3=Fishing,  
4=Agricultural labour, 5=Industrial labour, 6=Transport worker, 7=Construction worker,  
8=Traders, 9=Government service, 10=Non-government service,  
11=Self-service (own business without agricultural works), 12=Carpenter, 13=Student,  
14=Unemployed, 15=Others (specify)

**300. Awareness of RMO/RUG Members about MACH Goal and Objectives:**

300.1 Mention your awareness level in the following scale about MACH Project goal for promotion of ecologically sound management of flood plain resources:

- (a) Very high (4)
- (b) High (3)
- (c) Average (2)
- (d) Very little (1)
- (e) Not at all (0)

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300.2 Mention the areas where MACH project is working through its site office.

300.3 Mention the key activities of MACH Project:

- (a) .....
- (b) .....
- (c) .....

300.4 Mentioned your awareness on MACH Project Objectives in the scale of 0 – 4 (0 = Not at all, 1 = Very Little, 2 = Average, 3 = High, 4= Very High):

- (a) **Objective-1** : Raise awareness about the importance of natural flood plain resources to secure food and income security;
- (b) **Objective-2** : Maintain and recover the selected natural flood plain ecosystems and associated fisheries;
- (c) **Objective-3** : Identify activities to generate alternative income that result in a reduction of pressure from fishing and agriculture.

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400. Mention your awareness on MACH approaches specially in the following areas in the scale of 0 – 4 (0 = Not at all, 1 = Very Little, 2 = Average, 3 = High, 4= Very High):

For RMO Members:

- 400.1 Formation of RMO and its Bye Laws
- 400.2 Management of RMO
- 400.3 Roles and Responsibilities of RMO Members
- 400.4 Activities of RUG

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For RUG Members:

- 400.1 Name of RMO
- 400.2 Objectives of RMO Formation
- 400.3 Formation and Management of RUG

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|  |

400.4 Activities of RUG

500. Mention your awareness about communication activities initiated by the MACH project for public awareness on wetland resources and its effectiveness in the scale of 0 – 4 (0 = Not at all, 1 = Very Little, 2 = Average, 3 = High, 4=Very High):

|   | <u>Awareness Level</u> | <u>Effectiveness*</u> |
|---|------------------------|-----------------------|
| 500.1 Courtyard Meeting                           | <input type="text"/>   | <input type="text"/>  |
| 500.2 Community Level Meeting                     | <input type="text"/>   | <input type="text"/>  |
| 500.3 MACH Project Introductory Meeting           | <input type="text"/>   | <input type="text"/>  |
| 500.4 Briefing Session for different Stakeholders | <input type="text"/>   | <input type="text"/>  |
| 500.5 Important Day Observance                    | <input type="text"/>   | <input type="text"/>  |
| 500.6 Rally                                       | <input type="text"/>   | <input type="text"/>  |
| 500.7 Environment Education in School             | <input type="text"/>   | <input type="text"/>  |
| 500.8 Live Drama                                  | <input type="text"/>   | <input type="text"/>  |
| 500.9 Folk Song                                   | <input type="text"/>   | <input type="text"/>  |
| 500.10 Miking                                     | <input type="text"/>   | <input type="text"/>  |
| 500.11 Drawing Competition                        | <input type="text"/>   | <input type="text"/>  |
| 500.12 Quiz Competition                           | <input type="text"/>   | <input type="text"/>  |
| 500.13 Essay Competition                          | <input type="text"/>   | <input type="text"/>  |
| 500.14 TV Programs                                | <input type="text"/>   | <input type="text"/>  |
| 500.15 Video Show on Wetland Resources            | <input type="text"/>   | <input type="text"/>  |
| 500.16 Fair/Exhibition                            | <input type="text"/>   | <input type="text"/>  |

(\* Scoring will not be applicable for the respondents who are not at all aware about the communication activities of MACH project)

600. Mention your awareness about communication materials developed by the MACH project and its effectiveness in the scale of 0 – 4(0 = Not at all, 1 = Very Little, 2 = Average, 3 = High, 4= Very High):

|  | <u>Awareness Level</u> | <u>Effectiveness*</u> |
|--|------------------------|-----------------------|
| 600.1 Posters (4 types)                      | <input type="text"/>   | <input type="text"/>  |
| 600.2 Folders (2 types)                      | <input type="text"/>   | <input type="text"/>  |
| 600.3 Booklet (1 type)                       | <input type="text"/>   | <input type="text"/>  |
| 600.4 Sign Boards (4 types)                  | <input type="text"/>   | <input type="text"/>  |
| 600.5 MACH Documentary (Bangla)              | <input type="text"/>   | <input type="text"/>  |
| 600.6 Hand Bills (3 types)                   | <input type="text"/>   | <input type="text"/>  |
| 600.7 MACH Cap                               | <input type="text"/>   | <input type="text"/>  |
| 600.8 Wall Painting                          | <input type="text"/>   | <input type="text"/>  |
| 600.9 Education Materials (Wetland Messages) | <input type="text"/>   | <input type="text"/>  |

(\* Scoring will not be applicable for the respondents who are not at all aware about the communication materials of MACH project)

700. Please mention some of the key messages of MACH project.

- (a) .....
- (b) .....
- (c) .....
- (d) .....
- (e) .....

800. Mention your knowledge and awareness on MACH Partners activities and their responsibilities in the scale of 0 – 4 (0= Not at all, 1= Very Little, 2= Average, 3= High, 4= Very High):

|       |   | Knowledge and Awareness<br>on MACH Partners Activities | Responsibilities<br>Performed |
|-------|---|--|-------------------------------|
| 800.1 | Bangladesh Centre for Advanced Studies (BCAS) | <input type="text"/>                                   | <input type="text"/>          |
| 800.2 | Center for Natural Resource Studies (CNRS)    | <input type="text"/>                                   | <input type="text"/>          |
| 800.3 | CARITAS Bangladesh                            | <input type="text"/>                                   | <input type="text"/>          |

900. Mention the limitations/problems faced by MACH project partners for public awareness on Wetland Resources

| Sl. No. | Organization       | Limitations/Problems |
|---------|--------------------|----------------------|
| 1.      | BCAS               | 1.1                  |
|         |                    | 1.2                  |
| 2.      | CNRS               | 2.1                  |
|         |                    | 2.2                  |
| 3.      | CARITAS Bangladesh | 3.1                  |
|         |                    | 3.2                  |

1000. Mention the probable ways to overcome the limitations/problems of MACH Partners

| Sl. No | Organization       | Ways to Overcome Limitations/Problems |
|--------|--------------------|---------------------------------------|
| 1.     | BCAS               | 1.1                                   |
|        |                    | 1.2                                   |
| 2.     | CNRS               | 2.1                                   |
|        |                    | 2.2                                   |
| 3.     | CARITAS Bangaldesh | 3.1                                   |
|        |                    | 3.2                                   |

**1100. Mention the existing problems of RMO and RUG and give suggestions to solve the problems**

| <b>Particulars</b> | <b>Problems</b> | <b>Suggested Solutions</b> |
|--------------------|-----------------|----------------------------|
| 1. RMO             | 1.1             | 1.1.1                      |
|                    | 1.2             | 2.1.1                      |
| 2. RUG             | 2.1             | 2.1.1                      |
|                    | 2.2             | 2.2.1                      |
| 3. Others          | 3.1             | 3.1.1                      |
|                    | 3.2             | 3.2.2                      |

**1200. Mention other specific comments (if any):**

- a) .....
- b) .....
- c) .....

**Study on Assessment of MACH Awareness  
Activities and Overall Community Awareness Regarding  
Wetland Resource and Bio-Diversity Conservation Issue**

(Questionnaire for General Villagers)

|            |                      |                      |                      |
|------------|----------------------|----------------------|----------------------|
| Sample No. | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|------------|----------------------|----------------------|----------------------|

**101. General Information:**

100.1 Village : ..... 100.2 Union : .....  
100.3 Upazila : ..... 100.4 District : .....

|                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

Name of Interviewer : ..... Date of Interview : .....

**200. Socio-economic Characteristics of General Villagers:**

200.1 Name of the Respondent : .....  
200.2 Father/Husband's Name : .....  
200.3 Sex : Code : 1=Male, 2=Female

|                      |                      |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |

200.4 Profession (Main) : ..... 200.5 Profession (Secondary): .....  
Code : 1=Cultivation of own farm, 2=Cultivation of share-cropped, 3=Fishing,  
4=Agricultural labour, 5=Industrial labour, 6=Transport worker,  
7=Construction worker, 8=Traders, 9=Government service,  
10=Non-government service, 11=Self-service (own business without  
agricultural works), 12=Carpenter, 13=Student, 14=Unemployed,  
15=Others (specify)

**300. Awareness of General Villagers about MACH Goal and Objectives:**

300.1 Have you heard the name of MACH Project ? Yes = 1, No = 2  
300.2 Have you heard about RMO and RUG ? Yes = 1, No = 2

|                      |                      |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |

400. Mention your awareness about Communication activities initiated by the MACH project for public awareness on wetland resources in the scale of 0 – 4 (0 = Not at all, 1 = Very Little, 2 = Average, 3 = High, 4=Very High):

|   | <u>Awareness Level</u> | <u>Effectiveness *</u> |
|---|------------------------|------------------------|
| 400.1 Courtyard Meeting                           | <input type="text"/>   | <input type="text"/>   |
| 400.2 Community Level Meeting                     | <input type="text"/>   | <input type="text"/>   |
| 400.3 MACH Project Introductory Meeting           | <input type="text"/>   | <input type="text"/>   |
| 400.4 Briefing Session for different Stakeholders | <input type="text"/>   | <input type="text"/>   |
| 400.5 Important Day Observance                    | <input type="text"/>   | <input type="text"/>   |
| 400.6 Rally                                       | <input type="text"/>   | <input type="text"/>   |
| 400.7 Environment Education in School             | <input type="text"/>   | <input type="text"/>   |
| 500.8 Live Drama                                  | <input type="text"/>   | <input type="text"/>   |
| 400.9 Folk Song                                   | <input type="text"/>   | <input type="text"/>   |
| 400.10 Miking                                     | <input type="text"/>   | <input type="text"/>   |
| 400.11 Drawing Competition                        | <input type="text"/>   | <input type="text"/>   |
| 500.12 Quiz Competition                           | <input type="text"/>   | <input type="text"/>   |
| 400.13 Essay Competition                          | <input type="text"/>   | <input type="text"/>   |
| 500.14 TV Programs                                | <input type="text"/>   | <input type="text"/>   |
| 400.15 Video Show on Wetland Resources            | <input type="text"/>   | <input type="text"/>   |
| 400.16 Fair/Exhibition                            | <input type="text"/>   | <input type="text"/>   |

(\* Scoring will not be applicable for the respondents who are not at all aware about the above communication activities of MACH project)

500. Mention your awareness about communication materials developed by the MACH project in the scale of 0 – 4 (0 = Not at all, 1 = Very Little, 2 = Average, 3 = High, 4=Very High):

|  | <u>Awareness Level</u> | <u>Effectiveness *</u> |
|--|------------------------|------------------------|
| 500.1 Posters (4 types)                      | <input type="text"/>   | <input type="text"/>   |
| 500.2 Folders (2 types)                      | <input type="text"/>   | <input type="text"/>   |
| 500.3 Booklets (1 type)                      | <input type="text"/>   | <input type="text"/>   |
| 500.4 Sign Boards (4 types)                  | <input type="text"/>   | <input type="text"/>   |
| 500.5 MACH Documentary (Bangla)              | <input type="text"/>   | <input type="text"/>   |
| 500.6 Hand Bills (3 types)                   | <input type="text"/>   | <input type="text"/>   |
| 500.7 MACH Cap                               | <input type="text"/>   | <input type="text"/>   |
| 500.8 Wall Painting                          | <input type="text"/>   | <input type="text"/>   |
| 500.9 Education Materials (Wetland Messages) | <input type="text"/>   | <input type="text"/>   |

(\* Scoring will not be applicable for the respondents who are not at all aware about the above communication materials of MACH project)

600. Mention your Knowledge and awareness on the following issues :

600.1 Do you know about MACH activities? Yes  No

600.2 Mention some of the activities of MACH project:

- a) .....
- b) .....
- c) .....

600.3 Mention your Knowledge and awareness on Winrock International and MACH Partners activities and their responsibilities in the scale of 0 – 4 (0 = Not at all, 1 = Very Little, 2 = Average, 3 = High, 4= Very High):

|   | <u>Knowledge and Awareness Level</u> | <u>Responsibility Performed</u> |
|---|--------------------------------------|---------------------------------|
| a) Sanctuaries                              | <input type="text"/>                 | <input type="text"/>            |
| b) Issues of fishing and wetland resources  | <input type="text"/>                 | <input type="text"/>            |
| c) Environmental balance                    | <input type="text"/>                 | <input type="text"/>            |
| d) Wetland resource planning and management | <input type="text"/>                 | <input type="text"/>            |
| e) Alternative IGAs                         | <input type="text"/>                 | <input type="text"/>            |

600.4 Are you participated any of the activities of MACH project? If yes, mention the name of the activities:

- a) .....
- b) .....
- c) .....

600.5 Mention some key messages of MACH project (if acquainted with MACH activities):

- a) .....
- b) .....
- c) .....

700. Mention general problems of MACH project/activities (if any):

- a) .....
- b) .....
- c) .....

800. What measures could be undertaken in future to overcome such problems:

- a) .....
- b) .....
- c) .....

900. Mention other specific comments (if any):

- a) .....
- b) .....
- d) .....

**Study on Assessment of MACH Awareness  
Activities and Overall Community Awareness Regarding  
Wetland Resource and Bio-Diversity Conservation Issue**

(Questionnaire for MACH Staff)

|            |  |  |  |
|------------|--|--|--|
| Sample No. |  |  |  |
|------------|--|--|--|

102. **General Information:**

100.1 Name of the Respondent : .....

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|--|--|

100.2 Designation : .....

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100.3 Date/Year of joining in MACH Project : .....

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100.4 Present Work Place : .....

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100.5 Educational Qualification (Last Class Passed) : .....

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**Code : (Educational Qualification)** 10=S.S.C. passed, 11=11<sup>th</sup> Class,  
12=H.S.C passed, 13=13<sup>th</sup> Class, 14=Graduate, 15=15<sup>th</sup> Class/Honours, 16=Post Graduate  
17=Illiterate, 18=Literate (can sign and read)

100.6 Year of Experience : .....

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Name of Interviewer : ..... Date of Interview : .....

200. **Understanding about MACH Project Activities and Interventions**

200.1 Mention your understanding about MACH Project Goal in the following scale:

- (f) Very high (4)
- (g) High (3)
- (h) Average (2)
- (i) Very little (1)
- (j) Not at all (0)

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200.2 Mentioned your awareness on MACH Project Objectives in the scale of 0 -- 4  
(0 = Not at all, 1 = Very Little, 2 = Average, 3 = High, 4= Very High):

- (d) **Objective-1** : Raise awareness about the importance of natural flood plain resources to secure food and income security;
- (e) **Objective-2** : Maintain and recover the selected natural flood plain ecosystems and associated fisheries;
- (f) **Objective-3** : Identify activities to generate alternative income that result in a

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reduction of pressure from fishing and agriculture.

2003 What are the roles of MACH Staff towards different communication activities?  
(Job description related to communication activities)

- (a) .....
- (b) .....
- (c) .....
- (d) .....
- (g) .....

200.4 Mention your understanding and specific role on the following communication activities initiated by the MACH project for public awareness on wetland resources in the scale of 0 – 4 (0= Not at all, 1= Very Little, 2= Average, 3= High, 4= Very High):

|   | <u>Awareness Level</u> | <u>Effectiveness *</u> |
|---|------------------------|------------------------|
| 200.4.1 Courtyard Meeting                           | <input type="text"/>   | <input type="text"/>   |
| 200.4.2 Community Level Meeting                     | <input type="text"/>   | <input type="text"/>   |
| 200.4.3 MACH Project Introductory Meeting           | <input type="text"/>   | <input type="text"/>   |
| 200.4.4 Briefing Session for different Stakeholders | <input type="text"/>   | <input type="text"/>   |
| 200.4.5 Important Day Observance                    | <input type="text"/>   | <input type="text"/>   |
| 200.4.6 Rally                                       | <input type="text"/>   | <input type="text"/>   |
| 200.4.7 Environment Education in School             | <input type="text"/>   | <input type="text"/>   |
| 200.4.8 Live Drama                                  | <input type="text"/>   | <input type="text"/>   |
| 200.4.9 Folk Song                                   | <input type="text"/>   | <input type="text"/>   |
| 200.4.10 Miking                                     | <input type="text"/>   | <input type="text"/>   |
| 200.4.11 Drawing Competition                        | <input type="text"/>   | <input type="text"/>   |
| 200.4.12 Quiz Competition                           | <input type="text"/>   | <input type="text"/>   |
| 200.4.13 Essay Competition                          | <input type="text"/>   | <input type="text"/>   |
| 200.4.14 TV Programs                                | <input type="text"/>   | <input type="text"/>   |
| 200.4.15 Video Show on Wetland Resources            | <input type="text"/>   | <input type="text"/>   |
| 200.4.16 Fair/Exhibition                            | <input type="text"/>   | <input type="text"/>   |

(\* Scoring will not be applicable for the respondents who are not at all aware about the above communication activities of MACH project)

200.5 Mention your understanding and roles/initiatives about the awareness messages and materials used in MACH project along with its effectiveness in the scale of 0 – 4 (0= Not at all, 1= Very Little, 2= Average, 3= High, 4= Very High):

| Sl. No. | Messages  | Understanding Level and Roles/Initiatives | Materials Used  | Effectiveness of Materials |
|---------|---|---|---|----------------------------|
| 1       | <p>1.10 Wetland are our important resources</p> <p>1.11 Fishes from wetlands are the major source of animal protein and means of livelihood for millions</p> <p>1.12 Wetlands are habitat for different species</p> <p>1.13 Wetland plays important role for biodiversity conservation</p> <p>1.14 Wetlands reduce flood through retaining water</p> <p>1.15 Aquatic vegetations are used as food</p> <p>1.16 Wetlands serve surface water for irrigation</p> <p>1.17 Wetlands are attractive habitat for migratory birds</p> <p>1.18 Wetlands are major ways of communication</p> <p>1.10 Wetlands play important role in maintaining environmental balance</p> <p>1.14 Wetlands are degrading due to various reasons</p> <p>1.15 Let us save our wetlands</p>   |   | MACH Calendar 2001 (Twelve Pages Calendar)  |                            |
| 2       | <p>2.1 <i>krL -Rto" br aij grQ; mlL Kute cefir gm</i></p> <p>2.2 <i>aij wglqjv grQ; nfe t' tki mebrk</i></p> <p>2.3 <i>grQi esk Kie br aYsm</i></p> <p>2.4 <i>wglqjv grQ aie br; t' tki qvZ Kie br</i></p> <p>2.5 <i>Argir meB mPZb ne; nBj nrofK i qv Kie</i></p> <p>2.6 <i>crifek ePrI t' k ePrI</i></p> <p>2.7 <i>grQi Arem i qv Ki; cadi Afre ciY Ki</i></p> <p>2.8 <i>cwL ikKri eU Ki; me RvZ i qv Ki</i></p> <p>2.9 <i>Rie ePrI i qv Ki Kri fU Rv eU Ki;</i></p> <p>2.10 <i>tcbr grQ i qv Ki</i></p> <p>2.11 <i>tib tcbr aie br; gr grQ gie br</i></p> <p>2.12 <i>me vej/cwro/Kqr tmPe br; me grQ aie br</i></p> <p>2.13 <i>Afq Avkg 'Zir Ki; grQi Arem tbrOZ Ki</i></p> <p>2.14 <i>Afq Avkg 'Zir Ki; cwLi Arem tbrOZ Ki</i></p> <p>2.15 <i>AzZ_ cwL ikKri eU Ki</i></p> <p>2.16 <i>emoi cefk Mw j mhb</i></p> <p>2.17 <i>nBj nrofoi crKvZK mQu' i qv Ki</i></p> <p>2.18 <i>nBj nrofK ePrvZ 'il; nrofo cwb AmvZ 'rl</i></p> <p>2.19 <i>Qori cfo Mw j mhb; b' ArKv eKv_rKvZ 'rl</i></p> <p>2.20 <i>grQi PjvPj c_ Ltj 'rl</i></p> <p>2.21 <i>wglqjv grQ aie eU inL</i></p> <p>2.22 <i>Argv' i ca_ex. Argv' i fvel'r, -GfK ePrI!</i></p> <p>2.23 <i>Lj-vej Lbb Ki; grQi Arem i qv Ki</i></p> <p>2.24 <i>Amb mKvj vgtj Rjvfv mQu' i qv Ki</i></p> |   | Festoon, Placards (Used in Day Observance, Rally, Workshop, Meeting, Govt. office etc.) |                            |

| Sl. No. | Messages   | Understanding Level and Roles/Initiatives | Materials Used   | Effectiveness of Materials |
|---------|--|---|--|----------------------------|
| 3       | 3.1 Afq Arkq Zix Kri; gñQi Arem ibeZ Kri<br>3.2 me ñej ñmPe br; me gnQ a ie br<br>3.3 cñL ñkKri eÜ Kri; me RñZ iñr Kri   |   | Signboards, Wall paintings   |                            |
| 4       | 4.11 Migratory bird hunting is illegal<br>4.12 Establish sanctuary for fish habitat<br>4.13 Stop Hunting birds<br>Save Biodiversity<br>4.14 Let us protect wetland resources<br><br>4.15 Fish : Many species of fish and prawns inhabit in the wetlands, which provide us animal protein. Many families subsist on fishing<br><br>4.16 Agriculture Irrigation: Wetlands play major roll in dry season irrigation and reduce soil degradation by washing out pesticides/insecticides<br><br>4.17 Navigation: Wetlands are means of transportation in the rural Bangladesh<br><br>4.18 Vegetation: Wetland plants provide many benefits including food, fodder, fuel and medicine<br><br>4.19 Daily use: Wetland is a major source of water for bathing, cooking, livestock rearing and jute rotting<br><br>4.20 Flood Control: Wetlands reduce flood by storing rain water/flash floodwater<br><br>4.11 Wetlands are degrading due to natural and man made causes<br>4.13 Let us protect wetlands |   | Khata (Printed) (Using Environmental Education Program at primary school students) |                            |
| 5       | 5.1 Stop hunting<br>5.9 Save threatened species<br>5.10 Save brood fish<br>5.11 Restoration of habitats<br>5.12 Save biodiversity<br>5.13 Follow fish laws<br>5.14 Establishment sanctuary<br>5.15 More Plantation   |   | Through Quiz   |                            |
| 6       | 6.3 Protect wetland resources<br>Save Hail Haor  |   | Sun Cap  |                            |
| 7       | Fisheries Norms  |   | Signboards   |                            |
| 8       | 8.6 Stop hunting<br>8.7 Save threatened species<br>8.8 Save brood fish<br>8.9 Restoration of habitats<br>8.10 Save biodiversity<br>8.6 Follow fish laws  |   | Baul Song  |                            |

| Sl. No. | Messages   | Understanding Level and Roles/Initiatives | Materials Used             | Effectiveness of Materials |
|---------|--|---|----------------------------|----------------------------|
|         | 8.7 Establishment sanctuary<br>8.8 More Plantation   |   |                            |                            |
| 9       | 9.3 Save threatened fish species<br>Total 54 fish species are threatened in fresh water<br>9.4 Plant trees and save it |   | Poster (Benefits of trees) |                            |

300. Mention your knowledge and awareness on MACH Partners activities and their responsibilities along with its effectiveness in the scale of 0 – 4 (0= Not at all, 1= Very Little, 2= Average, 3 = High, 4= Very High):

|   | Roles of Responsibility Performed in the Field of Communication | Effectiveness Level  |
|---|---|----------------------|
| 300.1 Bangladesh Centre for Advanced Studies (BCAS) | <input type="text"/>  | <input type="text"/> |
| 300.2 Center for Natural Resource Studies (CNRS)    | <input type="text"/>  | <input type="text"/> |
| 300.3 CARITAS Bangladesh                            | <input type="text"/>  | <input type="text"/> |

400. Mention the limitations/problems faced by MACH project partners for public awareness on Wetland Resources

| Sl. No. | Organization       | Limitations/Problems |
|---------|--------------------|----------------------|
| 1.      | BCAS               | 1.1                  |
|         |                    | 1.2                  |
| 2.      | CNRS               | 2.1                  |
|         |                    | 2.2                  |
| 3.      | CARITAS Bangladesh | 3.1                  |
|         |                    | 3.2                  |

500. Mention the probable ways to overcome the limitations/problems of Winrock International and MACH Partners

| Sl. No | Organization       | Ways to Overcome Limitations/Problems |
|--------|--------------------|---------------------------------------|
| 1.     | BCAS               | 1.1                                   |
|        |                    | 1.2                                   |
| 2.     | CNRS               | 2.1                                   |
|        |                    | 2.2                                   |
| 3.     | CARITAS Bangladesh | 3.1                                   |
|        |                    | 3.2                                   |

600. Mention other specific comments (if any):

- a) .....
- b) .....
- c) .....

**Study on Assessment of MACH Awareness  
Activities and Overall Community Awareness Regarding  
Wetland Resource and Bio-Diversity Conservation Issue**

(Questionnaire for UNO, UFO and UP Chairman)

|            |  |  |  |
|------------|--|--|--|
| Sample No. |  |  |  |
|------------|--|--|--|

103. **General Information:**

100.1 Name of the Respondent : .....

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100.6 Designation : .....

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100.7 Work Place : .....

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100.8 Involvement with MACH Project in month/year : .....

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|--|--|
|  |  |
|--|--|

Name of Interviewer : ..... Date of Interview : .....

200. **Opinion on MACH Project Activities**

200.2 Mention your awareness level about MACH Project Goal and Objectives in the following scale:

(k) Very high (4)

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(l) High (3)

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(m) Average (2)

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(n) Very little (1)

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(o) Not at all (0)

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200.2 Mentioned your knowledge/understanding level about Communication activities initiated by the MACH project and its effectiveness in the scale of 0 – 4 (0= Not at all, 1= Very Little, 2= Average, 3= High, 4= Very High):

|          |   | <u>Awareness Level</u> | <u>Effectiveness *</u> |
|----------|---|------------------------|------------------------|
| 200.2.1  | Courtyard Meeting                           | <input type="text"/>   | <input type="text"/>   |
| 200.2.2  | Community Level Meeting                     | <input type="text"/>   | <input type="text"/>   |
| 200.2.3  | MACH Project Introductory Meeting           | <input type="text"/>   | <input type="text"/>   |
| 200.2.4  | Briefing Session for different Stakeholders | <input type="text"/>   | <input type="text"/>   |
| 200.2.5  | Important Day Observance                    | <input type="text"/>   | <input type="text"/>   |
| 200.2.6  | Rally                                       | <input type="text"/>   | <input type="text"/>   |
| 200.2.7  | Environment Education in School             | <input type="text"/>   | <input type="text"/>   |
| 200.2.8  | Live Drama                                  | <input type="text"/>   | <input type="text"/>   |
| 200.2.9  | Folk Song                                   | <input type="text"/>   | <input type="text"/>   |
| 200.2.10 | Miking                                      | <input type="text"/>   | <input type="text"/>   |
| 200.2.11 | Drawing Competition                         | <input type="text"/>   | <input type="text"/>   |
| 200.2.12 | Quiz Competition                            | <input type="text"/>   | <input type="text"/>   |
| 200.2.13 | Essay Competition                           | <input type="text"/>   | <input type="text"/>   |
| 200.2.14 | TV Programs                                 | <input type="text"/>   | <input type="text"/>   |
| 200.2.15 | Video Show on Wetland Resources             | <input type="text"/>   | <input type="text"/>   |
| 200.2.16 | Fair/Exhibition                             | <input type="text"/>   | <input type="text"/>   |

(\* Scoring will not be applicable for the respondents who are not at all aware about the above communication activities of MACH project)

200.3 Mention your understanding and roles/initiatives about the awareness messages and materials used in MACH project along with its effectiveness in the scale of 0 – 4 (0= Not at all, 1= Very Little, 2= Average, 3= High, 4= Very High):

| Sl. No. | Messages  | Understanding Level and Roles/Initiatives | Materials Used                             | Effectiveness of Materials |
|---------|---|---|--|----------------------------|
| 1       | 1.19 Wetland are our important resources<br>1.20 Fishes from wetlands are the major source of animal protein and means of livelihood for millions<br>1.21 Wetlands are habitat for different species<br>1.22 Wetland plays important role for biodiversity conservation<br>1.23 Wetlands reduce flood through retaining water |   | MACH Calendar 2001 (Twelve Pages Calendar) |                            |

| Sl. No. | Messages   | Understanding Level and Roles/Initiatives | Materials Used  | Effectiveness of Materials |
|---------|--|---|---|----------------------------|
|         | 1.24 Aquatic vegetations are used as food<br>1.25 Wetlands serve surface water for irrigation<br>1.26 Wetlands are attractive habitat for migratory birds<br>1.27 Wetlands are major ways of communication<br>1.10 Wetlands play important role in maintaining environmental balance<br>1.16 Wetlands are degrading due to various reasons<br>1.17 Let us save our wetlands  |   |   |                            |
| 2       | 2.1 <i>krL -bRfo br aitj grQ; mfl Krlte erfir gmm</i><br>2.2 <i>aitj wglqjv grQ; nte f' tki mebrk</i><br>2.3 <i>grQi esk Kie br alym</i><br>2.4 <i>wglqjv grQ aie br; f' tki qirZ Kie br</i><br>2.5 <i>Argir merB mPZb ne; nrBj nrlotK i qir Kie</i><br>2.6 <i>crifek erPrI f' k erPrI</i><br>2.7 <i>grQi Arem i qir Ki; cróí Afre ciY Ki</i><br>2.8 <i>crL ikKri eÜ Ki; me RrZ i qir Ki</i><br>2.9 <i>Rte 'erPí i qir Ki Kri; fU Rrj eÜ Ki;</i><br>2.10 <i>fcvbr grQ i qir Ki</i><br>2.11 <i>fib fcvbr aie br; gr grQ grie br</i><br>2.12 <i>me rej/crMro/Kqr fmpPe br; me grQ aie br</i><br>2.13 <i>Afq Arkq 'Zir Ki; grQi Arem rbróZ Ki</i><br>2.14 <i>Afq Arkq 'Zir Ki; crLi Arem rbróZ Ki</i><br>2.15 <i>ArZr_ crL ikKri eÜ Ki</i><br>2.16 <i>eroi crfk Mq j mhb</i><br>2.17 <i>nrBj nrlfoi crKzK mpu' i qir Ki</i><br>2.18 <i>nrBj nrlotK erPrZ 'rl; nrlfo cwb AmfZ 'rl</i><br>2.19 <i>Qori crfo Mq j mhb; b' r ArKr erKr_ rKfZ 'rl</i><br>2.20 <i>grQi PjPj c_ Ltj 'vl</i><br>2.21 <i>wglqjv grQ aie eÜ irL</i><br>2.22 <i>Argit' i cr_er, Argit' i f'iel'r, -GfK erPrI!</i><br>2.23 <i>Lrj-rej Lbb Ki; grQi Arem i qir Ki</i><br>2.24 <i>Amb mKtj rgtj Rjrfag mpu' i qir Kri</i> |   | Festoon, Placards (Used in Day Observance, Rally, Workshop, Meeting, Govt. office etc.) |                            |
| 3       | 3.1 <i>Afq Arkq 'Zir Kri; grQi Arem rbróZ Kri</i><br>3.2 <i>me rej fmpPe br; me grQ aie br</i><br>3.3 <i>crL ikKri eÜ Kri; me RrZ i qir Kri</i>  |   | Signboards, Wall paintings  |                            |
| 4       | 4.21 Migratory bird hunting is illegal<br>4.22 Establish sanctuary for fish habitat<br>4.23 Stop Hunting birds<br>Save Biodiversity<br>4.24 Let us protect wetland resources<br><br>4.25 Fish : Many species of fish and prawns inhabit in the wetlands, which provide us animal protein. Many families subsist on fishing<br><br>4.26 Agriculture Irrigation: Wetlands play major roll in dry season irrigation and reduce  |   | Khata (Printed) (Using Environmental Education Program at primary school students)      |                            |

| Sl. No. | Messages   | Understanding Level and Roles/Initiatives | Materials Used             | Effectiveness of Materials |
|---------|--|---|----------------------------|----------------------------|
|         | soil degradation by washing out pesticides/insecticides<br>4.27 <b>Navigation:</b> Wetlands are means of transportation in the rural Bangladesh<br>4.28 <b>Vegetation:</b> Wetland plants provide many benefits including food, fodder, fuel and medicine<br>4.29 <b>Daily use:</b> Wetland is a major source of water for bathing, cooking, livestock rearing and jute rotting<br>4.30 <b>Flood Control:</b> Wetlands reduce flood by storing rain water/flash floodwater<br>4.11 Wetlands are degrading due to natural and man made causes<br>4.14 Let us protect wetlands |   |                            |                            |
| 5       | 5.1 Stop hunting<br>5.16 Save threatened species<br>5.17 Save brood fish<br>5.18 Restoration of habitats<br>5.19 Save biodiversity<br>5.20 Follow fish laws<br>5.21 Establishment sanctuary<br>5.22 More Plantation  |   | Through Quiz               |                            |
| 6       | 6.4 Protect wetland resources<br>6.5 Save Hail Haor  |   | Sun Cap                    |                            |
| 7       | 7.2 Fisheries Norms  |   | Signboards                 |                            |
| 8       | 8.11 Stop hunting<br>8.12 Save threatened species<br>8.13 Save brood fish<br>8.14 Restoration of habitats<br>8.15 Save biodiversity<br>8.6 Follow fish laws<br>8.7 Establishment sanctuary<br>8.8 More Plantation  |   | Baul Song                  |                            |
| 9       | 9.5 Save threatened fish species<br>Total 54 fish species are threatened in fresh water<br>9.6 Plant trees and save it   |   | Poster (Benefits of trees) |                            |

300. Who shared MACH messages with you and what medias have been used for disseminating the messages.

Messages shared by

Name of the Medias

a) .....

.....

b) .....

.....

c) .....

.....

400. Mention about the specific roles played by the MACH partners along with their effectiveness in the scale of 0 – 4 (0= Not at all, 1= Very Little, 2= Average, 3= High, 4= Very High):

|   | <u>Roles /Responsibilities<br/>Performed in the<br/>Area of Communication</u> | <u>Effectiveness<br/>Level</u> |
|---|---|--------------------------------|
| 400.1 Bangladesh Centre for Advanced Studies (BCAS) | <input type="text"/>  | <input type="text"/>           |
| 400.2 Center for Natural Resource Studies (CNRS)    | <input type="text"/>  | <input type="text"/>           |
| 400.3 CARITAS Bangladesh                            | <input type="text"/>  | <input type="text"/>           |

500. Please mention the problems and weaknesses of MACH project regarding communication media and materials for disseminating messages relating to wetland resources and MACH approaches to the stakeholders and general community

| Sl. No. | Areas of Problems/Weaknesses |
|---------|------------------------------|
| 1.      |                              |
| 2.      |                              |
| 3.      |                              |
| 4.      |                              |
| 5.      |                              |

600. Please mention your suggestions to overcome the problems/we akness

| Sl. No. | Suggested Recommendations |
|---------|---------------------------|
| 1.      |                           |
| 2.      |                           |
| 3.      |                           |
| 4.      |                           |
| 5.      |                           |

700. Please mention other specific comments (if any):

- a) .....
- b) .....
- c) .....

**POLICY RECOMMENDATIONS**

- It was raised that some of the field staff was not efficient enough to respond to the demand of the time nor they were serious about their responsibilities. Training to the MACH staff should be provided to build them up and bring change in knowledge and attitude to perform their job efficiently.
- The Local Government Committees (LGC) was one of the most important committee for MACH project. MACH could use it more gainfully to get hold of 'Khas' beels and wetlands. Reportedly, the Local Government Committee (LGC) meetings were not held regularly. Involvement of local government institution was minimal. In such a situation MACH could not gainfully utilize the LGCs. Necessary measures should be taken so that LGC could be effectively used to settle the problems of leasing in beels and other water bodies for fish rearing and its conservation.
- Appropriate institution plays an important role in creating the proper field of interventions and the change agents find in them the proper field to disseminate communication messages. MACH field staffs were involved in establishing and functioning of RMOs and RUGs. Different respondents pointed out that the number of RMOs and RUGs were not increasing. Coverage of the project activities could be increased and intensified by increasing the number of field staff.
- It is evident that the key to project success mainly depends on the formation and successful operation of RMOs. RMOs were to be constituted with 60 percent members of RUGs. It was pointed out by the RUG members that this had not been happening. Therefore, RUGs were not properly represented in the RMOs. It is necessary to ensure the participation of RUGs in forming RMOs as per rules.
- Management and conservation of wetland resources were the responsibility of the RMOs while using the managed resources was the privilege of another organization (RUG). CARITAS had been engaged to build up Federations of RUGs. All the RUGs were to become members of Federations. The apprehensions expressed by some respondents were that the resource user's Federation might also take over the resource managing functions. Therefore, there may have some scope for conflict among the RMOs, federations and RUGs.
- CNRS and CARITAS had been using the same communication materials and disseminating the same messages to the target population and other villagers. As per terms of reference of the "Results Package Team" they were required to meet frequently to consult and review implementation issues and business". It was found that frequent meetings among the partners were not taking place indicating inadequate coordination of activities of the partners. To strengthen the coordination of activities of the partner organizations meetings could be organized at regular interval.
- It was pointed out that the amount of loan received by the RUG members was not sufficient to make gainful investments. The loan ceiling needs to be increased reasonably for productive investment. RUG members of RUGs stated that they were facing problems in marketing the products of their hand-made goods. A center/showroom in each site may be set-up to provide marketing facilities of their goods produced.
- Communication interventions were made to mould the knowledge, attitude and practice of the rural poor of the wetland and floodplain areas and their neighborhood. From the result of 16 types of interventions,

it appears that only 44 percent were more effective than others. Among the media and materials, not all were equally effective. The communication interventions that were found effective at field level should be emphasized in furthering the interventions. New communication media and materials should also be developed and used for getting results that are more useful.

- It is universally agreed today that during dry season availability of surface water has been decreasing alarmingly. Even the level of ground water has dropped beyond the range of shallow hand pumps. Large scale use of deep tube-wells in dry season, diversion of water flow for upper riparian programs, large scale use of pumps and shallow tube-well for dry season irrigation were responsible for the degraded situation of wetlands of Bangladesh. It is probably the MACH who has realized the importance of wetlands of Bangladesh and has pioneered to solve the problem by promoting ecologically sound management of floodplain resources (fisheries and other wetland products) to ensure supply of protein rich food to the poor. The MACH project has established that the huge wetland of Bangladesh is to be gainfully used for the benefit of the rural poor. With this broad objective the MACH project has developed an approach that has been giving better results with regard to enhancement, protection and conservation of wetland resources to make it a source of food for the poor. The importance of MACH project thus has to be realized and in order to develop this approach as a model of raising, managing and using the resources of water bodies the project activities need to be monitored regularly. Each year similar surveys need to be carried out to identify the weaknesses and take corrective measures. A model developed for the proper utilization of wetland and floodplain resources would be of great importance for the country.