



BLUE GOLD PROGRAM

WORKSHOP REPORT

ON

**RABI SEASON PLANNING
FARMER FIELD SCHOOL (FFS) FOR COMMUNITY AGRICULTURAL
WATER MANAGEMENT (CAWM) AREAS
Ava Center, CSS, Khulna
October 20, 2016**

PREPARED BY

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Workshop Report on Rabi Season Planning

Farmer Field School (FFS) for Community Agricultural Water Management (CAWM) Areas

Ava centre, CSS, Khulna, October 20, 2016

Objectives:

- To share the current progress, challenges and lessons learnt during the Aman season in the CAWM areas;
- To discuss the needs, preferences and challenges of CAWM-WMG members for Rabi season cultivation and decide on the cultivation pattern for the Rabi season;
- To discuss the major drainage and other water management problems in the CAWM areas, how they will effect Rabi cultivation and to identify potential solutions;
- To discuss potential marketing challenges (related to inputs, outputs, market linkages) for the selected Rabi crops and to identify possible solutions;
- To discuss the required preparations and planning for the upcoming FFS sessions in the Rabi season.

Participants: SAAOs ,SAE, PFs and COs working in CAWM areas in Khulna(see Annexure)

| Organisation | Designation | Number | Names |
|--------------------------------------|--------------------------------|-----------|---|
| DAE | Trainer SAAO/SAPPO | 7 | ▪ 3 (2 Trained Facilitator + 1 Local SAAO) from Dumuria |
| | Local SAAO | 3 | ▪ 4 (3 Trained Facilitator + 1 Local SAAO) from Botiaghata each ▪ 3 (2 Trained Facilitators + 1 Local SAAO) from Paikgacha |
| BWDB | Chief Water Management SAEs | 1 3 | Chief Water Management inaugurates the workshop Only those working in CAWM areas |
| TA BGP | COs | 3 | Only those working in CAWM areas |
| | PFs | 3 | Only those working in CAWM areas |
| Total | | 20 | |
| DAE | UAO | 3 | Batiaghata, Paikgacha and Dumuria |
| For support& facilitation | | | |
| | Zonal TA staff | 7 | Trainer facilitator, Jahangir Alam AmalenduBiswas; Shusanto (involved in |

| | | | |
|--|----------------|---|---|
| | | | MFS Rice); Tahmina Akhter, Azizur Rahman, Atikur Rahman |
| | Dhaka TA staff | 5 | Abul Kashem; Shorab Hossain; Judith de Bruijne, |

The workshop was inaugurated by Chief Water Management Md. Mahfuz Ahmed, BWDB, Dhaka. He said that Bangladesh Water Development Board works on periphery level. They have no scope to work with farmer directly in the micro level agric-unit. The DAE has large number of manpower specially SAAO's are directly working with the farmers in close supervision. The Community-led Agricultural Water Management (CAWM) pilot is implemented by DAE, BWDB and BlueGold TA team jointly, obviously a nice initiative. This approach has started from Aman season/16. He said that the objective of the CAWM is to increase cropping intensity through proper water utilization. If this initiative is successful then it will be possible to spread out the concept all the polders. Judith told about the objective of CAWM and shared her own country experience how the people cultivate their land through community approach. The Netherlands is a deltaic country. It is formed through the land reclamation from the sea. Netherlands has been reclaiming land from the sea since 1200 century.



Figure: Chief Water Management inaugurated the CAWM-FFS Rabi season planning workshop.

There was water logging. But they saved themselves from the water logging by constructing embankment surrounding the country. At first their land was fragmented. They formed groups by involving small land holders but amazing things is that large land holders took the leadership in

forming the groups. In this way community approach cultivation started in her country. Now Netherland is an intensive production country.

A game is played for icebreaking the participants. All the participants are divided into five groups. Five cards written on five topics are given to each of the group. From each group one speaker is requested to say on the particular subject. From group one SAAO Abdul hai said on 'Extension of CAWM.' He said that Bangladesh is an Agricultural Country. The average cropping intensity is about to 200% .But coastal areas are lag behind. The farmers of the coastal belt are not aware about the improved technologies. But there is a scope for increasing production. For increasing cropping intensity CAWM can be an appropriate mechanism for the coastal belt. The running pilots are implemented by the DAE,BWDB and BlueGold. After some time Blue Gold can leave the project. BWDB does not work with the farmer directly. The DAE is the only organization of whose staffs are working with farmer in close supervision.DAE can take the responsibility for extension of CAWM. In that case policy level discussion is needed

In the icebreaking session, second group leader Uttam Kumer Kundhu delivered his speech on 'Water Management & Marketing'. Proper Water management plays a vital role in implementing CAWM. In the gate operating the involving of WMG is minor. Steps have to be taken by the concern authorities so that WMGs can play their role effectively in water management related activities specially in gate operation & maintenance .Sectioning of land by making dykes, bunds is necessary for carrying water all the plot. Marketing facility is also another factor for crop production. If the farmer does not know how, where and when their product will be sold they would not be inspired. He also said that in polder 22, CAWM is implemented in small areas in comparison with the polder. If it would not be spread all the catchment otherwise water management will be difficult.

Third group leader SAAO Chandan discussed on the 'Water logging and Crop production'. The main causes of water logging is uneven topography of land, idle influence and heavy rainfall during monsoon. In some cases the fishermen lift water through the sluice for cultivating fish in the Gher. At that time they do not consider farmer's interest for crop production either water is required or not. Due to water logging yield is reduced drastically and hampered next crop cultivation. Some physical interventions and farmer, fisherman and LGI's collaboration is needed for overcoming the crises. Forth group leader P,F Rezual spoke about the 'Employment and CAWM'. The CAWM has increased the business of the farmer through incorporating improved technology among them. The farmers that learning from the CAWM-FFS session applying in the field. After harvesting Aman rice they will cultivate Rabi crops. In the CAWM women's session the participant gaining knowledge and applying it in their homestead through vegetable production that will enhance nutrition. Fifth group leader SAAO Billal talked about the 'Role of CAWM in mitigating the demand of child food and nutrition. 'Vegetable and fruits are the main source of nutrition. The BRRI dhan 72 is a zinc content rice variety.By incorporating improved field crop such as sunflower, mungbean ,water melon and in the homestead different

vegetables family food security can be ensured. He also told that in the training there is a provision of learning improved cooking method that also ensured nutritional food.

Shorab Hossain presented a presentation on the progress (variety, time of transplanting, area covered, no. of farmers, CAWM-FFS session.) of Aman season/16 of ten CAWM areas in the workshop. He emphasized on the horizontal learning. It can be done in the three steps (Before harvesting: experience sharing between WMG to WMG within the polder, During harvest: WMG to WMG between the polders and crop cutting feasible in ten locations). For smooth running of the pilots coordination among the stakeholders (farmers, DAE, BWDB, LGIs and BG TA staff) is to be strengthened.

The participants found Challenges and measures from the Aman season through group discussion are listed below:

| Sl.no. | Challenges | Solutions |
|--------|--|---|
| 1 | Timely supply of inputs (fertilizer, seeds). | Inputs is to be ensured in due time. |
| 2 | Use of balance fertilizer | Awareness should be increased through establishment of demonstration plot. |
| 3 | Attendance of the participant in FFS training is not satisfactory. | Arrangement of honorarium and snacks for the participant and meeting with WMG. |
| 4 | Unplanned pesticide use. | Farmer is to be trained up about IPM. |
| 5 | Synchronize crop cultivation | Motivation of farmer through CAWM activities. |
| 6 | Reduce drainage congestion | Excavation/re-excavation of drain, field channel by WMG and land leveling. |
| 7 | Unavailability of training equipment | Provide multimedia, projectile and camera for training facilitation. |
| 8 | Poor gate operating | Coordinated action among WMG, DAE, BWDB, LGIs and BG TA staff is to be ensured. |

The present and potential rabi crops opportunities & risks were found out through group work presentation as listed below.

| Pol der | Present crops | Potential crops | Opportunities | Risks |
|---------|---------------|--|--|---|
| 29 | Fallow | BRRI Dhan 28(demo), Sunflower, Sesame, Mugbean | Adjacent sluice linkage khal in which water can be stored, Scope of pipe installation, market demand | Salinity, draught, Early monsoon, Insect & Pest attack. |

| | | | | |
|---------|------------------------------|--|--|---|
| 22 | Sesame, Water melon, Mugbean | Sunflower, Sesame, Watermelon, Mung bean, Pumpkin | Conservation canal Available but require some intervention | Salinity effect, synchronize cultivation, timely seed sowing. |
| 31 part | Fallow | BR-28(demo), Sunflower, Mung bean, Water melon, Sesame | Perched aquifer, silted up kash canal, less water requirement crops except rice. Marketing facility available. | If silted up canal is re-excavate then fresh water could be stored and drain out. Salinity effect. Drainage problem due to excess rainfall. |

Amalendu Biswas presented a power point presentation relating to internal drainage and water management problems in four CAWM areas in Khulna. He tried to find out the possible interventions for solving drainage problems in four CAWM areas in Khulna. After that all the participants are divided into three groups according to polder.



Fig: The participants are preparing their group presentation through group work.

They worked in groups on water management challenges in CAWM areas and their group leader presented the finding at the workshop as listed below:

| Polder | Identified Problems | Possible solutions | Lead Responsible |
|--------|----------------------|-------------------------|---|
| 29 | Water logging | Drain excavation | WMG/CAWM farmers |
| | | Pipe installation | Pipe will be provided by BG installed by WMG, |
| | Keeping water in the | Making bunds around the | CAWM farmers |

| | | | |
|--------|--------------------------------|---|------------------------|
| | field | plot. | |
| 31part | Kallyn shree Khal silted up | Re-excavation of khal | BG ,UP and WMG |
| | Water logging | Needs to excavate Drainage canal | CAWM-farmer/BG TA part |
| | Uneven topography of land | Sectioning of land through making bunds,ridge and dykes | WMG farmers |
| | Miss management of sluice gate | Controlled management is needed, | BWDB,WMG,BG |
| 22 | Un uniform land pattern | Sectioning of land through making ails,dykes | CAWM farmers |
| | Open mouth culvert | Needs to install fallboard at the mouth of the culvert. | BG TA part/WMG |

BDC Shusanta Roy presented a presentation on business opportunity of different Rabi crops relating to comparison of production cost, income & profit and barriers. Through a plenary discussion the participants gave their opinion relating to problems of Rabi crops inputs and marketing those are listed below.

| Sl.no. | Name of Crops | Input (seed) problem | Marketing problems | Solution |
|--------|---------------|-----------------------|---|---|
| 1 | Sesame | Lack of quality seeds | Low price, market is so far | Collective action is needed |
| 2 | Water melon | Lack of quality seed | Low price farm gater level | Assessment of price in different market. |
| 3 | Pumkin | No problem | No problem | No problem |
| 4 | Sunflower | Lack of quality seeds | It is not sold in local market, low price | If large area covered then big buyer will be attracted. |
| 5 | Mung bean | No problem- | Price is low of BARI Mug-6 | Farmer should be trained up for large covered. |

Atikur Rahman (TC) facilitated the session in preparing Time line for preparation and planning Rabi season through plenary discussion in presence of UAOs as mentioned below.

| Date | Activities | Lead Responsible | Remarks |
|-----------------------|--|--------------------------|---|
| 01-15 Nov | Preparation and Planning <ul style="list-style-type: none"> ▪ Organizing Community Meeting (WMG/WMA) ▪ Potential Rabi crops identification and Planning for Rabi crop cultivation | BG TA & DAE | |
| 15-30 Nov | Technical training on FFS curriculum Rabi Season for field staff (SAAO/XO/CO/PF) | BG TA & DAE/BWDB | |
| 01 Nov 15 December | Implementation of intervention for Water Management Related Problem in CAWM areas <ul style="list-style-type: none"> ▪ Drainage related small structure repairing- Planning, Designing, Preparation Budget ▪ Fund allocation ▪ Implementation | BWDB/UP/TA | |
| 15-30 Nov | Drainage of water from Aman rice field <ul style="list-style-type: none"> ▪ planning ▪ drainage of water | Farmers/WMOs/ BWDB/UP | at least two weeks before Aman harvesting |
| 15-30 Nov | Planning and Budget preparation for Rabi crop cultivation (Seed and other input collection) | Farmers/ WMG | |
| 15 Dec – 15 Jan | Start of Rabi-CAWM FFS Land preparation | Farmers/WMG/DAE | After harvesting of Aman rice |
| 01 – 15 Jan | Seed sowing | Farmers/ WMG | |
| Jan- April | Organizing CAWM-Rabi FFS <ul style="list-style-type: none"> ▪ Intercultural operation of Rabi field ▪ Horizontal learning | Farmers/WMG/DAE | |
| 15 March April | Rabi Crop harvesting (crop harvesting festival) | Farmers/ WMG | |
| April-April | Planning for Aman season | Farmers/WMG/DAE | |

Drainage & Water Management Engineer (CAWM)

Bangladesh Water Development Board

Blue Gold Program, Khulna.

Annexure: Participants list

BLUE GOLD PROGRAM



WORKSHOP ON
RABI SEASON PLANNING FARMER FIELD SCHOOL (FFS)
FOR COMMUNITY AGRICULTURAL WATER MANAGEMENT (CAWM) AREAS
Venue: Ava Center, CSS, Khulna

Attendance Sheet

Date: 20 October '15

| S/A | Name | Designation & Organization | Cell # | Signature |
|-----|--------------------------|----------------------------|---------------|-------------|
| 01 | Mst. Rakshana Khatun | P.F | 01748-580882 | [Signature] |
| 02 | DIBANONDA ROY | S.A.AO | 01718181187 | [Signature] |
| 03 | Komallesh Bala | S.A.AO | 01721438811 | [Signature] |
| 04 | Md. Abdul Hyeem | S.A.O | 01938812268 | [Signature] |
| 05 | Md. Kaiser Khan | Co | 01772681201 | [Signature] |
| 06 | Kazi Hayat Mawed | SAE, BWDB | 01724-229133 | [Signature] |
| 07 | S.M. Mojahan Ali | SAAO | 01714961811 | [Signature] |
| 08 | Uttam Kumar Kundu | SAAO | 01718849011 | [Signature] |
| 09 | Shesanto Roy | BDC | 01717525691 | [Signature] |
| 10 | Amar Faruq | P.F | 01716981598 | [Signature] |
| 11 | Kumaresh Dam | CO | 01774-994193 | [Signature] |
| 12 | Md. Akhul Sobhan Howader | SAE/ BWDB | 01711-452077 | [Signature] |
| 13 | DHRAVBO JOTE SARKAR | SAAO | 01938812257 | [Signature] |
| 14 | Hd. Humayun Kabir | CO- | 01730-938729 | [Signature] |
| 15 | CHANDAN KUMAR BISWAS | SAAO | 01734-9852-21 | [Signature] |
| 16 | Md. Altaf Hossain | SAAO | 01711-194816 | [Signature] |
| 17 | DIPON KUMERHAL DER | SAAO | 01719-505700 | [Signature] |

[Handwritten mark]

Date: 20 October '16

| Sl # | Name | Designation & Organization | Cell # | Signature |
|------|----------------------|--------------------------------------|--------------|----------------|
| 18 | Md. Rezaul Islam | PF | 01748934573 | |
| 19 | Md. Sayedur Rahman | SAE/BWDB | 01711-450035 | |
| 20 | Md. Azizur Rahman | Sr. ACE | 01711-044421 | 20/10/2016 |
| 21 | Zahangir Alam | Agriculturist | 01715-209046 | |
| 22 | Md. Billal Hossain | SAAO | 01722-889787 | |
| 23 | Shamima Akter Khan | Inten | 01717-489532 | |
| 24 | Mahfuz Ahamed | Chief Water Management, BWDB, Dhaka. | 01716496668 | 20/10/16 |
| 25 | Judith de Bruijne | advisor inland polder WM | 01760523697 | |
| 26 | A.H.M. Jahangir Alam | UAO, DAE | 01719-716788 | 20/10/16 |
| 27 | Md. Abul Kashem | TE | 01711733719 | |
| 28 | Rubayet Ara | UAB, Batiaghata | 0171250084 | |
| 29 | Md. Atiqur Rahman | TE | 01717449956 | |
| 30 | Md. Nazrul Islam | UAO, DAE | 01716463463 | |
| 31 | Shaab Hossain | COE, Bq. | 0411-353707 | |
| 32 | Mst. Shamima Nasrin | TE | 01716-281955 | |
| 33 | Md. Abul Kossain | Driver | 01768-764075 | |
| 34 | Amalendu Biswas | Drainage WM Engt. | 01731921246 | |
| 35 | | | | |