Blue Gold Program



Training of Trainers Course for FFS Organizers Fisheries, Livestock and Value Chain orientation June 1-5, 2014

Venue: CSS Ava, Khulna

Embassy of the Kingdom of the Netherlands, Dhaka, Bangladesh

Bangladesh Water Development Board (BWDB)

Department of Agricultural Extension (DAE)

Dhaka, Bangladesh, July, 2014



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		Huda, Munir			
Final Report					Final Report

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List of Abbreviations

AEC Agricultural Extension Component (Funded DANIDA)

BWDB Bangladesh Water Development Board

DAE Department of Agricultural Extension

DLS Department of Livestock Services

DOF Department of Fisheries
DLO District Livestock Officer

EKN Embassy of the Kingdom of the Netherlands

FFS Farmer Field School FO FFS Organizer

NGO Non Government Organization

RFLDC Regional Fisheries and Livestock Development Component (DANIDA)

TOT Training of Trainers

WMG Water Management Group

1. Introduction

Component-3 is working for improving income and food security of WMG members through increase agricultural production. Farmers field school approach (FFS) is following to achieve the target. Farmers in all agricultural sectors (crops, livestock, aquaculture) will receive support to adapt their farm management and make optimal use of the changing environment and be better prepared for change in the future

The support to WMG farmers involves education through Farmer Field Schools (FFS) on a wide range of topics that are selected based on their relevance for the polder and WMOs. Value chain analysis will identify potential roles for the producers through association and coordination in input supply, processing and marketing. Each group of FFS participants (whether working on homestead level production or involved in more commercial farm activities) will analyze constraints and opportunities for improvement and upgrading in the value chain they relate to. Issues such as availability and quality of farm inputs, opportunities to add value and relationships with buyers of farm produce will be discussed. To mitigate these obstacles generally faced by small-holders and reduce transaction costs, special attention will be given to the opportunities offered by collective action in different forms of association and coordination. Component-4 is working to increase farm household income from agricultural production, to generate business income and expand employment to improve livelihoods and to reduce poverty through market orientation and development

Blue Gold has recruited 22 FFS Organizers (FO) who started working on November 1st 2013. Most of the recruited FOs have already experienced running FFS as "Local Facilitators" or "Farmer Trainers" in other projects such as the Regional Fisheries and Livestock Development Component (RFLDC) and the Agricultural Extension Component (AEC). Their main roles are to organize FFS on fish, livestock and homestead vegetables and fruits .After recruited by Blue Gold Programme, they have attended two ToT courses on Homestead Garden, Poultry, Nutrition, Fisheries and livestock modules. A total of 88 FFS are running at Khulna and Patuakhali. FOs are helping FFS members to improve their productivity through learning by doing. It is essential to train FFS facilitators by giving hands-on-training on different technologies and facilitation skills.

For 2nd cycle FFS, livestock and fisheries modules are not covered fully during last TOT took place in February 2014 due to time constrain. More over FFS members are now involved with homestead production. It is necessary to orient the FO on value chain. To keep those things in mind a week long Training of Trainers (TOT) course was therefore organized on remaining fisheries, and poultry module and value chain orientation.

Objectives of the TOT

- To increase capacity of FFS facilitator following participatory approach
- To provide technical information on fisheries and livestock modules to FOs
- To provide hands-on-training on fisheries and livestock modules
- To orient FOs about activity of component-4 in Blue Gold Program and more particular their business developments work.
- To provide information on value chain in an outer layer.
- · To identify role of FOs in value chain activities.
- To help increase fish and livestock production of FFS members through knowledge dissemination at project areas

This report covers the 5 days schedule of the TOT for FOs which took place at the CSS Ava Center, Khulna, from 1 to 5 June 2014. Early three day swill be focused on fisheries and dairy module and the remaining two days will be focused on value chain analysis.

During the TOT, everyday a planning meeting took place in the evening. All C3 staff and Host Team Leaders (HTL) attended those meetings. HTLs and C3 staffs reviewed the whole day's activities to get feedback from the participants, their views regarding the facilitation, topics discussed, practical sessions and others. They noted down the issues and action taken according to meeting and then discussed the plan for the following day.

2. Day 1

2.1 Inaugural

First all the participants registered their name. Registration format was filled-up by individual participants. Component C3 staffs helped the participants to do it.

After that Munir welcomed every participant for 5 days TOT on fisheries, livestock modules and value chain orientation at CSS AVA centre. Then welcomed Mr. Hein, Component Leader- Component 3 for his introductory speech. In the inaugural session of ToT Mr. Hein Bijlmakers, Component Leader and Muhammad Ashraful Islam, the Deputy Component leader were present. In his speech Mr. Hein welcomed all participants to participate in the ToT. He expressed his happiness and said that "we are now implementing a total of 88 FFS in Patuakhali and Khulna. We have started FFS activities with the different training modules like homestead garden, poultry, nutrition, livestock and fisheries". This ToT will be helpful to the FOs to run the FFS activities on livestock and fisheries.

Mr. Ashraful Islam, Deputy Component Leader requested the participants to be attentive in ToT, as because after participating ToT, FOs will facilitate the same session with the FFS participants. He also requested the participants to ask questions to the ToT facilitators for the clarification of the topics.

After that participants attended a pre-test. A formal questions set was used for pre-test. All participants spend half an hour for the test. The question set was on dairy module as the fish module was covered before.

2.2 Participants Expectation

Facilitator: C3 staffs Methods: Interactive, participatory

Before going to expectation session two different colored VIPP cards were provided to individual participant. There was a guideline for the participants that they should give their attention on fisheries (harvesting and stocking), livestock (dairy cattle rearing) and value chain. For livestock the expectation mainly focused on basic information on dairy cattle rearing, housing, disease management, feed management, etc. For fisheries expectation list focused on sampling, harvesting, stocking, preservation and marketing etc. As the value chain is new for all most all participants the expectation was on what is value chain and how it is helpful for FFS members.

All group works on expectation were put in the training room so that every participant could see their expectation at a glance.

2.3 Overview on course contents

Facilitator: Dr. Munir, Methods: Interactive

Facilitator focused on the course content on livestock, fisheries modules and value chain orientation in brief. He explained to the participant that modules would cover the interactive and practical sessions, farm management analysis (FMA), field practice, live demo etc. It will also review homestead module especially the intercultural operation.

2.4 Importance of Intercultural operation for vegetable cultivation

Facilitator: Shamim Ahmed Yusuf Methods: Interactive

The session was mainly a review session. Facilitator focused on what kind of problems the participants faced during FFS session. Through interactive discussion facilitator learnt to know about the participants views on that. After that four groups worked on it. During group presentation intercultural operation like weeding, thinning, water management, mulching etc. are discussed thoroughly. The reviewed session will help them to conduct this session properly during upcoming FFS session.

2.5. Post stocking and fish disease management

Facilitator: Shamsul Huda, Prafullah Sarker (district fisheries officer) Methods: Interactive, group discussion, power point presentation

Facilitator reviewed participants' understanding on stocking, post stocking and its management. After that through interactive discussion, facilitator discussed on fertilizer application procedures, dozes, technique of quality fingerlings identification and procedure of fingerlings release in pond, necessity of supplementary feed for fish and its application dose, how to calculate feed amount for individual ponds and different feed ratio then FOs practiced how to calculate feed amount and its ratio through group work. Then facilitator discussed importance of sampling of fish (why, how and when), shelter of golda (why, how and when), importance of partial harvesting and restocking of fish (why and when) and marketing. He discussed different diseases of fish like white spot, tail rotten, dropsy diseases etc. What are the main causes, and its symptom, prevention and treatment are also discussed. Facilitator showed some treatment procedure and also explained how to conduct this session with FFS. For example FO may collect some diseases affected fish for better understanding of participants.

District Fisheries Officer, Khulna mainly discussed on disease management, preventative measures for fish culture at pond. He showed symptom of prawn diseases, its cause and remedies by power point presentation.

2.6. Fish harvesting and marketing

Facilitator: Shamsul Huda/Alam, Methods: Interactive

After lunch the session was started with group dynamics. Through interactive discussion facilitators try to review the participants understanding level on fish harvesting and marketing. After that facilitator explained the timing and reason for partial and final harvesting. He explained the total biomass and environmental condition of the pond and proper time of harvesting. Harvesting should be taken special attention in relation with the marketing of fish. It should be done depending on market demand. Before marketing,

proper storage facility need to be ensured. Then facilitators gave a guide to FOs, how they will conduct this session with FFS participants. .And also discussed about different problems in pond for fish culture like radish color of pond water, excess green color, turbidity of pond water and suffocation of fish in pond and its possible remedy.

3. Day 2

3.1 Recap

Facilitator: Host Team Leaders, Methods: Interactive and participatory

Recap started with ice breaking. All participants divided into two groups and reviewed their learning by answering question. It was a competitive session and all participants nicely reviewed their learning.

3.2 Introduction to dairy cattle module and cattle house management

Facilitator: Munir, methods: Interactive and group work

Facilitator explained dairy module content to the participants. He gave an overview on contents details Facilitator explained to the participant that module would cover the interactive and practical sessions of dairy cattle rearing and care / management of milking cow, heifer and calf. There will be field practice and live demo session etc.

3.3. Dairy Cattle housing management

Facilitator : Munir, District Livestock Officer (Khulna) , methods: Interactive and group work, group dynamics

Facilitator reviewed the existing housing system at polder level. Then he focused on what is housing, why housing is important for dairy cattle rearing, characteristic of a good housing, hygienic management of cattle house etc. He explained about the locally available housing materials like bamboo, straw, sacks, coconut leaves and low cost cattle house construction etc.

District livestock Officer (DLO) focused on the hygienic management of cattle house. Importance of hygienic management and its economic benefit.

After the session a group dynamics was executed by facilitator along with all participants. Then facilitator explained how FO will conduct this session with FFS.

The facilitator had divided the participants into four groups for doing production planning on dairy modules. All groups were instructed to make a graph on one litre milk based on market price at respective area or location. Then groups presented the group out put and discussed why increasing and decreasing the milk prices in different location and when farmers will get more prices by selling milk.

3.3. Feeding management for cattle (Concentrate and fodder)

Facilitator: Munir, methods: Interactive, Live demo, practical

A participatory discussion took place on local feeding system of cattle. Then facilitator focused on different types of supplementary food ingredient, their roles on milk production. He focused on the thumb role of

feeding practices for. After that he discussed on some fodder, their characteristics and role on dairy cattle rearing. Concentrated feed ingredients showed to the participants. Four groups prepared one kg ration for dairy cattle. He explained about how to fix the quantity of a concentrated feed for dairy cattle. Facilitator reviewed on how to prepare UMS, its ingredient, preservation, precaution and feeding system. All participants attended a practical session on preparation of balance diet. It is a balance feed protocol for dairy cattle.

3.4 Breeds, breeding and care/management of pregnant Cow

Facilitator: Upazila Livestock Officer, Paikegacha Methods: Interactive and participatory, power point presentation

Facilitator started discussion with locally available dairy breed in Bangladesh with characteristics and economic benefit. Then he started with different kind of improved breed and their importance. He showed the identical criteria for different breed through power point presentation. Facilitator explained the importance of artificial insemination and cross breeding, heat detection and breeding time, symptoms for artificial insemination etc. Through interactive discussion facilitator explained about the selection criteria for milking cow. He explained about care and management of pregnant cow, pre, during and post parturition care and management of cow.

3.5. Farm Management Analysis (FMA)

Facilitator: Munir, Methods: Interactive, group work

Facilitator reviewed on what is FMA (Farm management analysis), basic principle of FMA and its importance. He focused on how to do FMA for dairy cattle rearing at FFS level. Through interactive discussion four groups prepared a FMA format for field practice. The format covered the address of the farmers, pictures, observation areas, present situation and suggestions.

4. Day 3

4.1 Recap

Facilitator: Host Team Leaders, Methods: Interactive and participatory

Recap started with ice breaking. The host team leaders followed the same procedures. It was a competitive session and all participants nicely reviewed their learning. If any reviewed topics had confusion, then facilitators helped them to make clear understanding, on it..

4.2 Care / Management of milking cow, heifer and calf

Facilitator: Munir, Upazila Livestock officer Methods: Interactive and participatory

Upazila Livestock Officer, Batiyaghata facilitated this session. She shared the existing management of newborn calf and its care. Then she discussed on care and management of lactating cow and dry cow. Facilitator mainly focused on colostrums for baby calf and its necessity. She discussed on the better feed management and disease management for newborn calf.

4.3. Field practice of FMA on dairy cattle and fish sampling ,harvesting

Facilitator: Munir, Shamsul Huda , Alom Hossain C3 staffs, Method: Participatory discussion and group work

Visited Place: Vill: Fultola Union: Batiaghata UP: Batiyaghata Dist.: Khulna Visited houses: Farmers name 1. Renuka 2. Tapati Biswas 3. Aroti Boiragi 4. Gobinda After entering into the village four groups visited the four houses to learn about the dairy cattle housing and other management.

They observed the housing and feeding system of dairy cattle, hygienic management. They also learnt how to perform hand milking. Then every group did analysis on their visited house and made suggestion for improving the existing management. Every visited farmer attended the presentation session. Then group leaders presented their FMA in front of the farmers. It was pictorial presentation. They explained about their findings and made suggestion for improvement. Farmers agreed with their suggestion.

A practical session took place in a selected pond. During this session participants being showed netting technique for harvesting of fish and also discussed which net are good or bad for harvesting of fish and what time is suitable for harvesting. Also practically showed FOs of the sampling techniques like measuring of weight and length of species and then discussed with FOs how to calculate total wt. of fish in pond, then also feed amount and its ratio. Also showed the which species are marketable size or not. After that practically prepared the feed amount and its ratio and showed feed supply techniques in pond with basket in different depth of water. Discussed with them at pond side about advantage of feed supply in pond, when and where is better and why & when we avoid the feed supply,

5. Day 4

5.1 Recap

Facilitator: Host Team Leaders, Methods: Interactive and participatory

Recap started with ice breaking. The host team leaders followed the same procedures to review the activities.

5.2. Course Introduction

Facilitator: Tanvir Islam Methods: Interactive and participatory, power point presentation

Facilitator started this session in a formal way. He introduced with participants through power point presentation. He reviewed the training rules, norms and the relationship between facilitators and participants. After that he shared the course content on value chain and the objective for this orientation. Then he learnt to know about the knowledge level of the participants on value chain and their personal experiences on doing any business. All participants shared their experiences and put their expectation.

5.3. Overview of C- 4 in Blue Gold

Facilitator: Abdullah Al-Mamun Methods: Interactive and participatory, power point presentation

Facilitator reviewed different component working with blue gold. It was a participatory discussion. Participants shared their views on different activities at polder level. Then he explained about the component 4, its objectives, activities and output. He explained that the basic premise of the Blue Gold Program is the rehabilitation of infrastructure to facilitate appropriate water resource management and the subsequent increase of agricultural productivity. The Business Development Component supports the farming households, their association and other market actors to capture the full benefit of this increase in polder productivity. This component seeks to enhance the market linkages and systems, to identify opportunities for value adding and to develop enterprises through value chain improvements to the benefit of the polder community. The approaches of this component are to select value chain and analyze value chain and value chain development.

5.4. The concept of value chain

Facilitator: Shusanto Roy Methods: Interactive and participatory, power point presentation

Through interactive discussion facilitator try to learn about the business situation at polder level. It was a group work. Participants listed different business at polder level. They also list down the business activities done by businessman at polder level. After that facilitator gave an example on sweetmeat trader, its activities like input collection to sweetmeat sale. Then it was discussed that is individual farmer is a trader or not? When we can say a farmers is a trader? What is the farming system at community level? Who is

subsistence farmer and who is surplus farmer? How and when a farmer is involved with different business activities? Then facilitator discussed about what is business and business activities. Then he show a normal value chain channel though a big poster and VIPP card.

5.5. The Broader VC lens

Facilitator: Abdullah Al-Mamun Methods: Interactive and participatory, power point presentation

Through interactive discussion facilitator showed what farmers do with his product, how he adds value with his product and sale it to the market. He discussed about the backyard and forward linkages for agricultural production. Through power presentation he showed how a farmer could be motivated for surplus production and can involve with business and improve his livelihood. Facilitator also discussed on short and long run value chain.

5.7. How does a value chain actually work?

Facilitator: Kazi Mozammel Hossain , Tanvir Islam Methods: Interactive and participatory, power point presentation

Facilitator discussed about different market actor and role on value chain . After that through group work four group prepared four value chain and explained different actor roles. Through group discussion it was explained by the facilitator who is direct actor, who is indirect actor, which actor is needed to be considered carefully for value chain.

6. Day 5

6.1 Facilitator: Host Team Leaders, Methods: Interactive and participatory

Recap started with ice breaking. The host team leaders followed the same procedures to review the activities.

6.2 Problems and constraints in VC

Facilitator: Shusanto Roy, Tanvir Islam Methods: Interactive and participatory, power point presentation

Through power point presentation facilitator showed different problems with value chain. What kind of problems need to be address for smooth value chain analysis. Farmers could be faced problems with finance, quality input, distance market, technical know-how and social barrier like less access of female at market and illegal tolls. Need based demand and supply also interrupt the value chain. That may finally impact on production cost and proper marketing. Improper post harvest management of agricultural product also has impact of product marketing.

6.3 The Triangle of Production

Facilitator: Kazi Mozammel Hossen, Tanvir Islam Methods: Interactive and participatory, power point presentation

Facilitator explained the production triangle presentation through power point. He discussed how finance, input and marketing are interlinked with production. If finance, good quality input is not ensured in time that has a bad impact on production. Information regarding different market and market actor also has a role product marketing.

6.4 The Business Development Component approach

Facilitator: Shusanto Roy, Tanvir Islam Methods: Interactive and participatory, power point presentation

Facilitator explained about the component-4 role for business development approach. He said that c-4 will not be involved with any business activities rather encourage farmer for surplus production and add value with their product for more income. C-4 will help farmers for collective action regarding input collection and supply. C-4 will help how to make a bridge between producer and consumer. Facilitator explained how information flow can help value chain and C-4 will do it through FFS and WMG members.

6.5 FO involvement in business development/value chain field

Facilitator: Kazi Muzzamel, Abdullah Al Mamun, Shamim Alom, Tanvir Islam Methods: Interactive and participatory, power point presentation

Through interactive discussion with participants facilitators showed FOs rules in business development/value chain field. FOs scope of activities are; production planning, dissemination of technical know how, providing information regarding input, marketing actors, service providing organization, assembling, grading, storage and marketing of agricultural production, benefit of collective action etc.

6.6 Post test

Facilitator: C3 staffs, Method: Written test

All participants attended a half an hour post test on livestock module.

6.7 Training evaluation, post result sharing and certificate distribution

Facilitator: C3 staffs Method: Fill up an open ended questionnaire

An open ended questionnaire was used for training evaluation. Every participant was evaluated individually.

The questionnaire covered:

- Usefulness of topic discussed with fisheries and livestock modules and value chain orientation
- Facilitator's facilitation technique (usefulness/improvement)
- Scope of participation by participants with different session (usefulness/improvement)
- Methods/input use by the facilitator (usefulness/improvement)
- Logistic support
- · Any others suggestions for next training

Summary of the output from the participants' evaluation;

- · Discussed modules they found are useful.
- · All facilitators' facilitation was nice
- Scope of interaction was good
- · Practical session were most useful in the training
- Methods/input used by the facilitators was relevant
- · Time for these two modules were bit tight
- · Logistic support was good

7.5. Closing

An informal ceremony took place at afternoon. Md. Abdullah Sani presided over the event. Deputy component leader C3 and C4 were also present at that event. Two FOs spoke on that occasion. They gave overall opinion on the training program. They mentioned that the TOT was very useful for them and they will able to start 2nd cycle FFS with fisheries and livestock modules. The FOS are explained about the value chain orientation, its necessity and interlinked it with FFS.

Deputy Component leader C3 thanked C4 expert for their orientation conduction with nice presentation. He said that C3 and C4 are like two brothers. So the two components need to work together. Deputy component leader C4 thanked the participants for their nice participation and mentioned that after this orientation FOs will able to talked with FFS members regarding value chain in a proper manner and help farmer to increase their production and marketing.

After that Abdullah Sani thanked all facilitators specially C4 experts for their nice facilitation with different forms. He also thanked the Ava center staffs, care-taker, dining people for their best support. He thanks all participants for their active participation at training room as well as with practical sessions. Then Munir declared pre-test and post test result among the participants. The result found was very satisfactory. At the end of the event four best performers (three male and one female) was awarded by token gift.

Appendix 1 Daily schedules

Day-1- June 1, Saturday Host team Leader- Rasel and Asma

Date & time	Торіс	Resources person	
08.30-09.00	Objectives of the course Hein/Ashraf		
09.00 -09.30	Pre-evaluation	Sumona/Shamim	
09.30-11.00	Review-Inter-culture operation for vegetable	Shamim/Ashraf	
11.00- 11.15	Tea break/ refreshme	ent	
11.15 – 12.00	Continued		
12.00 -13.00	Post Stocking Management Huda		
13.00-2.00	Lunch & Prayer break		
2.00-2.15	Group Dynamics		
2.15-3.30	Managements of Fish Diseases DFO/Huda		
03.30-04.15	Fish harvesting and marketing Huda and Alam		
4.15-4.30	Tea break/ refreshment		
4.30-5.00	Review of whole day Sumona/Alam		
6.00-07.00	Planning meeting Facilitator and HTL		

Day-2- June 2, Sunday

Host team Leader: Zakir and Rahima

Date & time	Topic	Resources person		
08.30-09.00	Recap	HTL		
09.00 -10.00	Introduction to the Dairy cattle module	Munir		
10.00-11.00	Cattle housing management	DLO Khulna /Munir		
11.00- 11.15	Tea break/ refreshme	nt		
11.15 – 01.00	Feeding management for cattle (Concentrate and fodder)	Munir		
01.00 -02.00	Lunch & Prayer breat	Lunch & Prayer break		
2.00-2.15	Group Dynamics			
02.15-3.30	Breeds, breeding and care/management of pregnant Cow	ULO Paikegachha/Munir		
03.30-04.30	Farm Management Analysis (FMA)	Munir		
4.30-5.00	Tea break/ refreshme	Tea break/ refreshment		
6.00-7.00	Planning meeting	Facilitator and HTL		

Day-3, June 3, Monday Host team Leader- Basar and Jahida

Date & time	Topic	Resources person
08.30-09.00	Recap	HTL
09.00 –11.00	Care / Management of milking cow, heifer and calf	Munir
11.00- 11.15	Tea break/ refreshment	
11.15 – 12.45	Diseases prevention and primary health care	VS,Batiyaghata /Munir
12.45 -02.00	Lunch & Prayer break and preparation for field	
02.00-05.30	Field visit –FMA on dairy farm, Sampling technique, Feed calculation and restocking	All facilitators and Participants
6.00-7.00	Planning meeting	Facilitator and HTL

Day-4, June 4, Monday Host team Leader: Firoz and Nargis

Date & time	Topic	Resources person
08.30-09.00	Recap	HTL
09.00 – 10.00	Course Introduction	Tanvir Islam
10.00-11.00	Overview of C- 4 in Blue Gold	Abdullah Al- Mamun
11.00- 11.15	Tea break/Refreshment	
11.15-12.00	The concept of value chain	Shusanto Roy
12.00-13.00	The Broader VC Lens	Abdullah Al- Mamun
13.00 -02.00	Lunch & Prayer break	
03.00 -04.00	How does a value chain actually work?	Kazi Mozammel Hossen and Tanvir Islam
04.00-04.15.	Tea break/ refreshment	
04.15-04.45	Continue of previous session Long Value Chain and Short Value Chain	
04.45-05.00	Day review and closing	Shamim Alom
6.00-7.00	Planning meeting	All Facilitators and HTL
07.00-08.00	Benchmark Data entry	Munir

Day-05 : June 5, Tuesday

Host team Leader: Firoz and Nargis

Date & time	Topic	Resources person
09.00-09.30	Recap	
09.30-10.45	Problems and constraints in VC	Shusanto Roy
10.45-11.00	Tea break/Refreshment	
11.00-01.00	The Triangle of production	Kazi Mozammel Hossen and Tanvir Islam
13.00 -02.00	Lunch & Prayer break	
02.00 -03.00	The Business Development Component approach	Shusanto Roy
03.00-04.15	FO involvement in business development/value chain field	Tanvir Islam
04.15-04.30	Tea Break	
04.40-05.00	Evaluation of the course and Training closing	All Facilitators

Appendix 2 Participants list

Address	Mobile number
Aklima Akter Vill: Changaon, P.O: Bazra P.S: SonaimuriDist: Noakhali FO: Khulna	01816858827
Aklima Vill+PO: Naluabagi UP: Galachipa Dist: Patuakhali FO: Patuakhali	01749144486
Asma Akter Vill: Shailabunia PO:Badura hat, PS:Galachipa District: Patuakhali FO: Patuakhali	01771483550
Md. Abul Bashar Village: Bejoher, Post: Mahilara, Upazilla: Gournadi, District: Barisal FO: Patuakhali	01724430164
Eusuf Ali Terochor,PO:Muladi, UP: Muladi, Dist: Barisal FO: Patuakhali	01754269920
Feroj Alom Vill- Sarikkhali, Post- Itbaria, Upazila- Patuakhali, Dist- Patuakhali. FO: Patuakhali	01710618697

Address	Mobile number
Hafsa Khanom vill: Dhepsabunia, Post: Balipara,Upz:Zianagar Dist:Pirojpur FO: Khulna	01771041206
Abdul Jabbar Vill: Uttor Badura, P.O: Badura Hat, UZ: Patuakhali, Dist- Patuakhali FO: Patuakhali	01713952322
Md.Jakir Hossain, Vill:Kalkati PO: Bhangoora PS:Bhangoora Dist: Pabna FO: Khulna	01917172749
Mijanur Rahman Vill: Mohshen uddin, P.O:Mohshenuddin UP: Patuakhali,Dist: Patuakhali FO: Patuakhali	01721672201
Moriom Vill: Char Laxmipur, P.O: Char Laxmipur PS+Muladi: Barisal FO: Patuakhali	01762511917
Mst Nargis Begum Vii: Sanur howla, PO:Khachiabunia,PS:Rangabali Dist: Patuakhali FO: Khulna	01782215260
S. Nahar Village- Halodia, P/O- Halodia Bazar, PS: Amtali District: Barguna FO: Patuakhali	01729686149

Address	Mobile number
Nasima Akter Vill:Mather danga,PO:Panzia, PS:Keshobpur, Dist: Jessore FO: Khulna	01723246276
Papi Rani Das Vill: Barun Baria, P.O: marich Baria, PS+Dist: Patuakhali FO: Patuakhali	01747-079802
Rahima Begum Vill: Borun Baria PO: Morich bunia, PS+Dist: Patuakhali FO: Patuakhali	01741411995
Md. Rasel Miah Vill: Fuldhalua,PO: Dhalbanga, Upazila: Barguna Sadar, District: Barguna FO: Khulna	01727465316
Md. Abdus Salam Vill: Nazirpur, P.O: Lohalia Boro Bari Up: Patuakhali Dist: Patuakhali FO: Khulna	01753837720
Md. Shahidul Islam Vill Golbunia, P.O Amragachia, P.S. Mothbaria, District – Pirojpur FO: Khulna	01846407267
Md. Waliullah Vill-Dugrapur, Post- Itbaria, Upazila- Patuakhali Dist- Patuakhali FO: Khulna	01745520455

Address	Mobile number
Jahida Akter Vill: Shankarpara PO:Bashbaria,PS:Pirojpur Dist: Pirojpur FO: Khulna	01735593977
Zainal Abedin Village: Chorokgasia, Post. Chorokgasia, Upazilla & Dist. Barguna FO: Patuakhali	01713958891

Appendix 3 Test results

Address	Pre-test	Post test	Remarks
Aklima Akter FO: Khulna	3	20	80% (Third)
Aklima FO: Patuakhali	3	18	
Asma Akter FO: Patuakhali	5	16	
Md. Abul Bashar FO: Patuakhali	5	18	
Eusuf Ali FO: Patuakhali	3.5	18	
Feroj Alom FO: Patuakhali	3.5	16	

Address	Pre-test	Post test	Remarks
Hafsa Khanom FO: Khulna	1	16	
Abdul Jabbar FO: Patuakhali	2	13	
Md.Jakir Hossain, FO: Khulna	3	15	
Mijanur Rahman FO: Patuakhali	6.3	16	
Moriom FO: Patuakhali	1.5	11	
Mst Nargis Begum FO: Khulna	6	16	
S. Nahar FO: Patuakhali	3.5	15	

Address	Pre-test	Post test	Remarks
Nasima Akter FO: Khulna	4	13	
Papi Rani Das FO: Patuakhali	2	16	
Rahima Begum FO: Patuakhali	7	18	
Md. Rasel Miah FO: Khulna	8	21	84%(Second)
Md. Abdus Salam FO: Khulna	3	17	
Md. Shahidul Islam FO: Khulna	2.5	18	
Md. Waliullah FO: Khulna	5	13	

Address	Pre-test	Post test	Remarks
Jahida Akter FO: Khulna	1	15	
Zainal Abedin FO: Patuakhali	5.5	22	88% (first)

Appendix 4 Facilitator/Guest list

SI	Name and Designation	Organization/Institute
1.	Munir Ahmed, Livestock Expert	Blue Gold
2.	Dr. Shamsul Huda, Fisheries Expert	Blue Gold
3.	Shamim Eusuf , Master Trainer (Homestead Garden)	Blue gold
4.	Alom Hossain, Trainer (Rice-Fish)	Blue Gold
5.	Prafullo Sarker	District Fisheries Officer, Khulna
6.	Dr. Nazim uddin, District Livestock Officer	Khulna
7.	Dr. Shariful Islam , Upazila Livestock Officer	Paikegacha, Khulna
8.	Basana Akhter, Upazila Livestock Officer	Batiaghata, Khulna

Appendix 5 Different sub-committee formed for TOT course implementation

A. Food monitoring

- 1) Anayet
- 2) Sumona
- 3) Sani

B. Training Material

- 1) Huda
- 2) Sumona
- 3) Munir
- 4) Shusanto
- 5) Zahangir

C. Transportation / pre-post evaluation/ Field visit

- 1) Sani
- 2) Zahangir
- 3) Sumona
- 4) OM, Khulna

D. Training Report/documentation/registration

- 1) Zahangir
- 2) Alam
- 3) Shamim
- 4) Sumona
- 5) Huda
- 6) Munir

E. Resource persons Contact and overall management of the course

- 1) Huda
- 2) Munir

F. Advisory Committee

- 1) Hein
- 2) Karel
- 3) Ashraf
- 4) Tanvir

Appendix 6 Some Photos



Pic-1: Training Banner



Pic-2: Inaugural speech by Mr. Hein component leader-3



Pic-3: Participants appeared pre-test



Pic-4: Fisheries session facilitated by Huda



Pic-5: Group work



Pic-6: Fisheries session facilitated by District fisheries officer-Khulna



Pic-7: Livestock session conducted by Munir



Pic-9: Practical session on dairy FMA



Pic-11: Practical session on fish sampling



Pic-8: Livestock session facilitated by District Livestock Officer-Khulna



Pic-10: Group presentation on prodn. planning



Pic-12: Practical session on fish sampling





Pic-13: Value chain session facilitated by Tanvir Islam

Pic-14: Value



Pic-15: Group work on value chain



Pic-16: Group presentation on value chain



Pic-17: Closing session



Pic-18: Planning meeting