Pilot Program on Increasing the Availability of Quality Fodder for Dairy Production in Bangladesh

Funded by: DANIDA

Annual Report

Period Covered:
September 2005 to September 2006

Submited by:
International Maize and Wheat Improvement Center (CIMMYT)

November 2006

CIMMYT

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Pilot Program on Increasing the Availability of Quality Fodder for Dairy Production in Bangladesh

Annual Progress Report

Reporting Period: September 2005 to September 2006

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Table of Contents

Abbreviations and Acronyms i

Executive Summary 1

Background on Fodders and Feed 1

Pilot Project September 2005 – June 2006 1

Summary of Progress September 2005 to September 2006 2

I. Progress in Relation to Project Objective 5

II. Development in Assumptions and Risk Factors 8

III. Progress for the Reporting Period (September 2005 to September 2006) 10

a. Pre-Planning and Inception Workshops 10

b. Program Area Finalization 11

c. Training of Trainers 12

d. Whole Family Training 13

e. Produce and Distribute Triticale and Maize Seed Among Selected Growers in Research and Training Localities 14

f. Fodder and Grain Production from Triticale and Maize Demonstrations 16

g. Prepare "Whole Family Training" Materials to Use in Future Empowerment of Grower Groups 17

h. Seed Production 18

i. Fodder Triticale Demonstration in Aman-Boro Rice Systems 18

j. Conduct Participatory Action Research on How Best to Grow and Process Triticale and Other Planted Forages with Each Farmer Group, Compiling Results 19

k. Straw-Fodder Chopper Development 20

l. Pre and Post Training Survey 21

m. Other Accomplishments 21

n. Lessons Learnt and Management Plan Finalization Workshop 22

o. Procurements 22

IV. Status of Outstanding Problems 26

V. Status of Project Implementation 26

VI. Overall Budget Comparison Statement 27

VII. Work Plan for the Period October to December 2006 28

List of Tables:

Table 1: Describe Progress in Relation to Component Objective 7

Table 2: Development in Assumptions and Risk Factors 9

Table 3.1: Distribution of Triticale and Maize Growers by Upazila, 2005-06. 12

Table 3.2: Schedule of the Trainers Training 13

Table 3.3: List of the Farm Families that undertook Whole Family Training in Triticale Production and Utilization, the Training Venue and Date of Training 13

Table 3.4:	List of the Farm Families that undertook Whole Family Training in Maize Production and Utilization, the Training Venue and Date of Training	14
Table 4:	Project Progress for the Period September 2005 to September 2006	23
Table 5:	Issues	26
Table 6:	Status of Project Implementation for the Period September 2005 to September 2006	26
Table 7:	Overall Budget Comparison Statement	28
Table 8:	Work Plan for the Period October to December 2006	29
Map 1:	Dual-purpose triticale promotion program locations in 2005-06.	11
Annexure 1:	List of farm families, input distribution, area planted with triticale, planting date, methods and plot location	30
Annexure 2:	List of the farm families, inputs distribution, fodder-feed-food maize planted	40
Annexure 3:	Baseline survey proforma	50
Annexure 4:	Triticale Programs (3 programs) Five Times Telecasted by BTV (VCD copy)	55
Annexure 5:	Docu Drama: Triticale Production and Utilization	56

Abbreviations and Acronyms

Aman	Monsoon rice
BARI	Bangladesh Agricultural Research Institute
BLRI	Bangladesh Livestock Research Institute
Boro	Winter irrigated rice
BRAC	Bangladesh Rural Advancement Committee
BTV	Bangladesh Television
CDM	Center for Development Management
CGIAR	Consultative Group on International Agricultural Research
CIMMYT	International Maize and Wheat Improvement Center
DANIDA	Danish International Development Assistance
DKK	Danish Kroner
DLO	District Livestock Officer
DLS	Department of Livestock Services - Bangladesh
GOB	Government of Bangladesh
Ha	hectare
Kg	kilogram
MP	Muriate of Potash
PBD-BARI	Plant Breeding Division of BARI
PCC	Project Coordination Committee
RARS	Regional Agricultural Research Station
RDE	Royal Danish Embassy
T	Metric tonne(s)
T.*Aman*	Transplanted *Aman* rice
Tk.	Taka
ToT	Training of Trainers
TSP	Triple Super Phosphate
WRC	Wheat Research Center
WRF	Wheat Research Forage

Executive Summary

Background on Fodders and Feed

Dairying is a preferred option for many small-scale farm households in Bangladesh to increase their income and to accumulate assets. Fodder and feed scarcity, which is marked in the lean season, is a major factor limiting milk production on small-scale dairy farms in this country. Finding fodder technologies that complement current cropping patterns, practices and needs for feed with acceptable changes in inputs and risks are keys to satisfying the aspirations of many resource-poor Bangladeshis.

Triticale is a human-made cross between rye and durum wheat that has the ability to produce quality green fodder, and then re-grow after first and second cutting to produce grain. It can be grown during the cool Rabi season in existing rice-based cropping systems and has the ability to produce 10 to 12 t fresh weight biomass per ha from two cuts in a season. Its fodder is rich in lysine and tryptophan; essential amino acids for the growth and development of livestock. Considering these benefits, CIMMYT, the Wheat Research Center of Bangladesh Agricultural Research Institute (BARI) and the Department of Livestock Services (DLS) have conducted field evaluations in several districts in the existing farming systems that dominate Bangladesh agriculture. The results suggest that farmers can easily harvest good amounts of fresh fodder and some grain produced with low amounts of inputs, including fertilizer and water. Feeding trials conducted by Bangladesh Livestock Research Institute (BLRI) and CIMMYT also indicated that cattle performance (as measured by live weight gain) increased significantly and contributed to higher dairy production. Maize is another multi-purpose fodder and feed for the lean season that is more flexible in planting time throughout Bangladesh and is rapidly gaining popularity. Many countries have been using maize as a multiple purpose fodder and feed crop.

Pilot Project September 2005 - June 2006

Dual-purpose grain + fodder triticale and maize have the potential to significantly reduce fodder and feed scarcity, thereby increasing milk and meat production from farmers' livestock. To obtain and spread these benefits, DANIDA funded the project called "Pilot program on increasing the availability of quality fodder for dairy production in Bangladesh". It is targeted to producers and users of fodder from areas that are ecologically suitable for fodder cultivation and that have a high demand for fodder for dairy cattle and grain for poultry feed. During the 2005-06 Rabi and Kharif-1 seasons, the program worked in four selected districts with 54 farm families in each district. The rural poor, including women, are targeted beneficiaries of the program.

The broad development objective of the program is to 'Increase income of small-scale farmers and livestock producers'. This objective complies with the Sector Programme objective of DANIDA and supports the priorities of the Government of Bangladesh as described in the Poverty Reduction Strategy Paper (PRSP). To contribute to the development objective, the program planned to achieve the following immediate objective: "Small-scale cattle farming households produce and use triticale or other planted fodders during the lean season". CIMMYT, BLRI, Wheat Research Center of BARI and DLS lead the project.

Implementation of the pilot program started in September 2005 and has been running extremely satisfactorily with activities carried out as given in the approved implementation plan/workplan and budget, and described in a 6-month progress report submitted in April 2006. Triticale training events and demonstrations were conducted with 180 farm families during November 2005 to March 2006. Multi-purpose maize fodder and feed training events and demonstrations were conducted with 180 farmers during March to June 2006.

Progress with the key activities described in the pilot proposal, including farmer selection, training for the trainers, whole-family training, input distribution, training material preparation, conduct of demonstrations and research is generally as planned, and in several cases it has exceeded expectations. All stakeholders and beneficiaries are very excited about progress with this pilot project in terms of achievement of targeted activities and outputs, and expected benefits, and have high expectations for the future.

At the request of the project, DANIDA agreed in July 2006 to an extension proposal that is allowing a continuation and expansion of the work into the 2006-07 Rabi season.

Summary of Progress September 2005 to September 2006:

Progress of the project during September 2005 to September 2006 is summarized below:

- A pre-planning meeting that brought together the main implementing organizations was held on 6 September 2005 at the CIMMYT Office in Bangladesh, Dhaka.

- The Project Inception Workshop was held 11-12 October at BRAC Rajendrapur. Twenty-seven participants from all stakeholder organizations participated to finalize the implementation plan, training materials and methodology on triticale production and utilization.

- 141 farm families completed a pre-training survey questionnaire on cattle herds, fodder demand and supply, knowledge on fodder production, milk production, milk marketing, etc. during October and November 2005.

- Four training of trainer workshops were completed during September and October 2005 on the project theme, activities and methodology, in Joypurhat, Rangpur, Pabna and Shirajgonj districts.

- Forty-two Officers and Field Organizers from the Department of Livestock Services, Bangladesh Rural Advancement Committee and Milk Vita participated in the training.

- The whole-family training program on 'Triticale Production and Utilization' was completed during October and November 2005. 168 farm families (with four members from each family) participated in the training.

- Prepared and updated "Whole Family Training" materials on triticale and maize to use in future empowerment of grower groups and produced six thousand copies for use in the training and for wider distribution.

- 180 farm-families were given seed, fertilizers and signboards to grow 14 ha of dual-purpose triticale. All except two farmers grew the triticale.

- All participating families cut triticale from the demonstrations for fodder and fed it to their cows from December 2005 to February 2006.

- Triticale fodder yields of up to 28 t/ha fresh mass; grain yields up to 4.1 t/ha and straw yields up to 7.1 t/ha were measured on farm.

- Many farmers reported 30 - 100% increased milk yields during December 2005, January and February 2006 while feeding triticale fodder.

- Five ha of triticale was grown for seed production in collaboration with Wheat Research Centre and Bangladesh Livestock Research Institute during the report period.

- Produced and stored 5.0 t of triticale and 1.0 t of dual-purpose maize seed for the 2006-07 program.

- Organized and conducted three Field Days, which exposed about 500 additional farmers to triticale production and utilization.

- The 6th International Triticale Symposium accepted abstracts of three research papers on project work. Four scientists presented project results at the symposium, which was held in South Africa in September 2006. Proceedings of the Symposium are due in November 2006.

- Video footage of triticale production and utilization was shot and Bangladesh Television (BTV) telecasted the different triticale project activities five times nationally.

- Additional video shooting on triticale production and utilization using actors was completed and developed into a high quality 31 minute "Docu Drama".

- Twelve forage demonstrations were planted in farmers' fields in Joypurhat and Rangpur districts to evaluate how triticale could fit in between *Aman* rice and *Boro* rice.

- Eleven experiments were established at the Wheat Research Center and Bangladesh Livestock Research Institute to evaluate how best to grow and feed triticale and maize. These results are being used to improve the production training recommendations and documents.

- The whole-family training program on maize for fodder, feed and food production and utilization was completed during March and April 2006. 180 farm families (four members from each family) participated in the training.

- Prepared "Whole Family Training" materials on 'Fodder, feed and food purpose maize production and utilization' to use in future training of grower groups.

- 180 farm-families were given seed and fertilizers to apply their training knowledge practically in the field to grow and utilize 'Fodder, feed and food maize'. All the farmers grew maize in the *Kharif-1* season.

- Most participating families harvested maize fodder and fed it to their cattle during April to June 2006 according to the training provided. Maize fodder yields of up to 23.9 t/ha and grain yields of up to 4.6 t/ha were measured after fodder harvest.

- During April to June 2006, successfully developed a prototype diesel-engine-operated low-cost and mobile straw chopper. The chopper is now manufactured and sold by the Modern Engineering Workshop, Saidpur.

- Conducted five meetings (Four at Dhaka and one at Bogra) of the Project Coordination Committee. All meetings went well.

- During June 2006, developed and submitted to DANIDA a project extension proposal for July to December 2006. This was accepted and funded.

- Organized a Lessons Learnt and Project Planning Workshop for 4-6 October 2006. This meeting was very successful.

- Project outcomes and results are being hosted on the webpage http://www.cimmyt.org/bangladesh/Programs/triticale.htm

- A total of Tk. 22.53 million (DKK 2.06 million) was received from DANIDA including the extension budget of Tk. 10.09 million (DKK 0.923 million). From September 2005 through September 2006, Tk. 11.49 million (DKK 1.05 million) were used and the remaining funds will be spent through December 2006 for the 2006-07 Rabi season.

I. Progress in Relation to Project Objective

The development objective of the project is ***Income of small-scale farmers and livestock producers increased.*** To achieve this objective the following immediate objective was listed in the project description:

Small-scale cattle farming households produce and use triticale or other planted fodders during the lean season.

Four outputs were identified against these objectives; two that are producer-based and two management-based. These outputs are:

a) Producer Based

Output 1: Action-research-supported recommendations for production of fodder crops, grain and seed production, and fodder management practices (including utilization) are available for extension.

Output 2: Farmer groups are skilled in the production and feeding of triticale and other planted fodder technologies (e.g. maize) for increasing the availability and use of fodder for dairy production.

b) Management Orientated

Output 3: A shared plan (involving two CGIAR centers, two Government of Bangladesh institutes, and multiple dissemination partners) to implement and monitor this pilot project.

Output 4: The Pilot project outcome is documented, analyzed and disseminated among interested circles in Bangladesh and abroad.

Several activities were listed in the Workplan against each of the four outputs. From September 2005 to September 2006, the project worked on all the activities given in the workplan. Progress of the project has been very satisfactory and the project is generally on target in relation to outputs, objectives and key indicators. Our major activities (i.e. training of trainers, whole-family training, demonstration establishment, training materials preparation, seed production, establishment of new experiments, and conduct of field days) are about 100% complete, and in some cases, we have completed additional work. The project will achieve or exceed its targets in all activities during the project life as given in the workplan. A summary of our progress is given in Table 1.

The major thrust of the project in 2005-06 was to provide training to 348 farm families in dual-purpose triticale and maize fodder production and utilization.

The project also planned to:

1. Conduct participatory action research on how best to grow and process triticale and other planted forages with each farmer group, compiling results,

2. Prepare a 'package of practices' for management of triticale and other planted forages for fodder or feed production and utilization,

3. Prepare "whole family training" materials to use in future empowerment of grower groups,

4. Produce and distribute triticale or maize seed among selected growers in research and training localities,

5. Develop a detailed management plan for the pilot project and plan the follow up program,

6. Design and conduct participatory monitoring of the project activities,

7. Undertake bi-monthly liaison/coordination meetings with the national stakeholders,

8. Organize lessons learnt workshops at the end of the pilot project,

9. Host project results in the website, and

10. Prepare and give scientific presentations at national, regional and international events.

Table 1: Describe Progress in Relation to Component Objective

Immediate Objectives	Indicators	Annual Target	Results	Describe Status of Achievement in Relation to Development Indicators
Small-scale cattle farming households produce and use triticale or other planted fodders during the lean season	• Triticale or other planted fodders grown in the cropping systems at the pilot sites • Dairy producers state that fodder availability increased through use of triticale or other planted fodders • Milk production is increased • Triticale seed stored for next year of cultivation.	70% of the targeted grower communities produce triticale or maize for own demand and sales during the lean season.	• 99.4% of the targeted growers produced triticale for their own use and sale during the 2005-06 *Rabi* season. 100% of the growers grew fodder maize during the 2006 *Kharif-I* season. • Twelve demonstrations were set in the T.*Aman* – Fallow – *Boro* rice cropping area and we found triticale can fit well in this system. • All farmers said that during winter only triticale fodder could grow well and this provides available green fodder for their cattle. • Farmers reported that during *Kharif-I* season muli-purpose maize fitted well for fodder, feed and food. • Triticale fodder yields of up to 28 t/ha; grain up to 4.1 t/ha and straw up to 7.1 t/ha were measured on farm. • Maize fodder yields of up to 23.9 t/ha and grain yields of up to 4.6 t/ha were measured after fodder harvest. • Milk production increased by 30 to 100% after feeding triticale fodder. • Milk production increased by from 10 to 30% after feeding maize fodder. • Almost all farmers were very enthusiastic to continue to grow triticale and maize, and they preserved seed for cultivation next year (2006-07). • Many neighbouring farmers expressed interest to grow triticale and maize and have arranged to buy triticale and maize seed from participating farmers.	All triticale and maize growers indicated that their milk production had increased by 30 to 100% due to triticale feeding and by 10 to 30% due to feeding maize fodder. Most of the farmers have sold extra milk. A few growers have sold triticale fodder to their neighbouring dairy farmers. During the periods when fresh fodder, straw and grain were available for feeding, farmers reduced their use of concentrate feed for milking cow rations. This saved up to 60% of the high cost of feeding concentrates. Milk consumption by triticale-growing dairy farmer families appears to have not increased much. Farmers saved seed to plant or sell for re-planting. PLDP showed interest to grow triticale within project target group. APEX interested to include triticale in their Char Livelihoods Development Project.

II. Development in Assumptions and Risk Factors

The project listed four major assumptions for its successful implementation. Developments concerning the specific assumptions and risk factors for the project are given in Table 2.

During the field visits, monitoring and survey activities it was clear that after the Triticale and Maize Whole Family Training, the trained dairy farm families were applying all methods they had learned to get the full benefit from growing triticale and maize. It also appears that fodder availability has increased during the lean season, farmer milk production has increased and dairy animals generally look healthy. Some farmers report less disease compared with the year before the project began due to better management practices among the trained dairy farm families.

An excellent cooperation network has developed among the all stakeholders, including the dairy farm families, the Department of Livestock Services, Bangladesh Livestock Research Institute, Wheat Research Centre, International Maize and Wheat Improvement Centre, International Livestock Research Institute, Milk Vita and Bangladesh Rural Advancement Committee. Due to this project activity, strong linkages have developed among researchers from two Government Ministries (Ministry of Agriculture, Ministry of Livestock and Fisheries) – extensionists – and the farmers. All stakeholders participated regularly in the project workshops, meetings, farmers' field days and seminars during the project period.

During the 2004-05 triticale-growing season, the implementing agency and WRC produced sufficient seed for the pilot phase of the project. Before the 2005-06 planting season, the triticale seed was tested for its viability and a poor germination percentage was found for one batch. Because of the resulting shortfall of triticale seed, partners decided at the pre-planning meeting to select 42 families instead of 54 farm-families (planned in the proposal) per location; in four locations. The project also provided sufficient seed and fertilizers to twelve dairy farm families as demonstrations to assess how well triticale can fit in between monsoon *Aman* rice and winter *Boro* rice. Additionally, the project provided 640 kg of WRF-7 triticale seed to grow during the 2005-06 Rabi season to produce sufficient seed for the next phase of our program. We expect the seed production during 2005-06 and the seed saved by participating farmers to meet all estimated seed needs by the project for 2006-07.

Dual-purpose triticale has to be planted at an optimum time during a narrow 4-week window (November 10 to December 7) to be able to harvest the best amounts of green fodder yield and grain yield. 72% of dairy farm families planted their triticale within the optimum time; 15% were late; and only 13% percent were extremely late. The late and extremely late plantings occurred due to late harvest of the previous (usually monsoon rice) crop and excessive soil moisture during the planting season, which forced a delay in planting. We believe having almost three out of four farmers plant their triticale within the optimum planting window was very acceptable for the initial season of work.

Foot and mouth-disease (or other epidemic diseases) were not found in the project target areas during this period. Therefore, the demands for fodder and milk production were not reduced.

Table 2: Development in Assumptions and Risk Factors

Critical Assumptions and Risks	Assessment	Comments Concerning the Project on the Timely Implementation of the Project. Suggest Remedial Action
1. The project assumes that viable seed for triticale cultivation is available in sufficient quantities to begin the project.	There was a modest shortage of seed for planting in November 2005, because one batch of seed had poor germination. This meant the number of demonstrations had to be reduced from 54 to 42 farm families for each of the four districts.	Seed shortage will not be a problem onwards in the project. The WRC provided 2800 kg of triticale seed for conducting the project activities in 2005-06. WRC and BLRI planted about 5.0 ha of triticale to meet the projected seed demand during the next phase program. This seed, plus that saved by farmers from their demonstrations, is expected to be more than adequate to meet project seed requirements for the 2006-07 season.
2. Delayed planting or poor plant growth reduces seed yields thereby restricting the area that can be planted in the next season.	72% of farm families planted triticale on time, and reasonable amounts of fresh green fodder have been harvested. Most of the late-planted triticale crops were unable to be cut a second time for green fodder. Most farmers harvested reasonable grain yields (usually between 1 and 3 t/ha). However, not all this seed is available to plant next season since some farmers have fed grain to animals, used some for own consumption as chapatti and some have sold grain to neighbouring farmers.	All concerned stakeholders learned a lot about the benefit of timely planting, proper management and feeding practices of triticale. From this, we expect an even higher percentage of farmers will plant the triticale on time during the second phase of the project. We had no indication of serious climatic, disease or soil constraints that will reduce future productivity of triticale. With other farmers now getting access to triticale seed, we anticipate further spread of the seed this season.
3. Animal production will be free from foot and mouth-disease outbreaks (or other epidemic diseases) causing significantly reduced demand for fodder and for milk.	No reports of foot and mouth-disease outbreaks. Some farmers reported that their cattle health looked better and that less disease occurred compared to the previous year.	
4. All partners collaborate with expected resources.	The project has made remarkable progress to develop a network among the researchers, development agencies, and farmers. Project staff organized several awareness creation field days, workshops, meetings, and BTV programs on the work.	This excellent collaboration has allowed for timely implementation of the project. We plan more exchange visits, and a Lessons Learnt Workshop to explore ways to enhance the network. Some recent staff changes in Government organizations are resulting in slight delays with implementation of parts of the project late in 2006.

Critical Assumptions and Risks	Assessment	Comments Concerning the Project on the Timely Implementation of the Project. Suggest Remedial Action
5. Heavy rainfall and cyclone may occur during the *Kharif-I* season ultimately affected fodder maize growing in lowland fields.	About 50% of the maize fields were damaged due to flash floods and waterlogging by heavy rainfall. The damaged fields were used for fodder collection but were not able to produce grain.	The risk to maize production from waterlogging during the Kharif-1 season is high. The project and staff learned that to grow maize successfully in the *Kharif-I* season, the land should be of high or medium-high elevation. Project staff will need to work more closely with farmers in future to ensure maize is planted on higher land or perhaps on soil beds.
6. Cut worms affect maize field in early stages, due to using compost/manure.	All farmers used compost/manure in the maize field before seed sowing. Cutworms damaged about 10-15% of the maize seedlings.	In future, we will advise farmers to apply Furadan during land preparation for maize sowing.
7. Birds and jackals may damage maize.	Most farmers reported that after grain filling stage their maize fields were highly affected by birds and jackals.	

III. Progress for the Reporting Period (September 2005 to September 2006)

The agreement between the Embassy of Denmark, Dhaka and the CIMMYT Office in Bangladesh was signed on 08 September 2005 to begin the project to increase the availability of quality fodder for dairy production in Bangladesh. This project has made remarkable progress according to the project implementation plan. Major achievements over the first year of the project are described in the following sections.

a. Pre-Planning and Inception Workshops

The implementation of the pilot program started in August 2005 (shortly before signing the contract). A Pre-Planning Meeting of major stakeholders that would later constitute the Project Coordination Committee was held at the CIMMYT office in Dhaka on 6 September 2005. The meeting agreed on project management, activities, farmer selection criteria, target areas and lead partners. One major initial activity included in the Implementation Plan (under the caption 'Management Outputs') was to organize an Inception

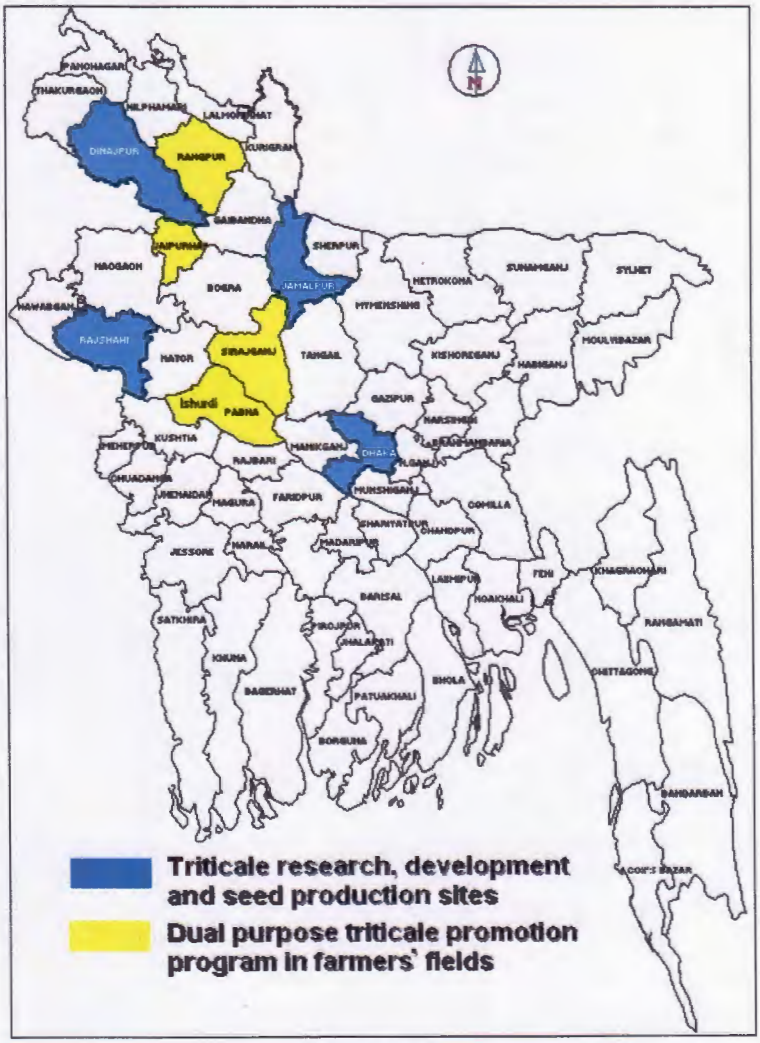
Picture 1: The technical session on triticale production practices at the Project Inception Workshop, Rajendrapur.

Workshop with the key stakeholders. The objective of this workshop was to finalize the implementation plan, the training materials and methodology. The Inception Workshop was held on 11 and 12 October 2005 at the BRAC Centre for Development Management (CDM), Rajendrapur, Gazipur. CIMMYT, Wheat Research Centre of BARI and Bangladesh Livestock Research Institute jointly organized the workshop. Thirty-three participants were invited, with representatives from Bangladesh Agricultural Research Council (1), Bangladesh Agricultural Research Institute (2), Bangladesh Livestock Research Institute (5), Bangladesh Rural Advancement Committee (3), Department of Agricultural Extension (1), Department of Livestock Services (6), International Livestock Research Institute-India (1), Milk Vita (5), Royal Danish Embassy (3), Wheat Research Centre (3) and the International Maize and Wheat Improvement Centre (CIMMYT) (3). There were 27 participants present at the actual workshop and they strongly contributed to finalize the implementation plan, training materials and methodology (Picture 1). Subsequently, the Inception Workshop Proceedings were finalized in November 2005 and distributed widely to the participating stakeholders. The report was uploaded onto our webpage and is at:

http://www.cimmyt.org/bangladesh/Programs/triticale.htm

b. Program Area Finalization

As decided at the Project Inception Workshop, project activities have been conducted in 10 Upazilas of four districts; Rangpur, Shirajgonj, Joypurhat and Pabna (Map 1). In this program, a total 180 farm-families were selected for support with triticale fodder in collaboration with all the stakeholders. Due to the unavailability of sufficient quality triticale seed, the partners decided to select 42 families instead of 54 farm-families (planned in the proposal) per location, in four locations.



Map 1: Dual-purpose triticale and fodder maize promotion program locations in 2005-06.

Out of the total 320 farm families, 168 were given formal training for triticale production and utilization, 180 received training on fodder maize production and utilization and the rest were given informal training outside of the whole family training program. Necessary demonstration kits for triticale or maize were provided to each family. The distribution of the farm-families is given in Table 3.1.

Table 3.1: Distribution of Triticale and Maize Growers by Upazila, 2005-06.

Name of Upazila	No. of Selected Triticale Growers	No. of Selected Maize Growers	Lead Organization for Farmer's Selection
Sadar, Joypurhat	18	16	DLS and BRAC
Pachbibi, Joypurhat	30	32	DLS and BRAC
Atghoria, Pabna	14	14	DLS
Ishurdi, Pabna	14	14	DLS
Sadar, Pabna	14	14	DLS
Sathia, Pabna	21	22	Milk Vita and BLRI
Badargonj, Rangpur	16	16	DLS and Milk Vita
Mithapukur, Rangpur	16	16	DLS and Milk Vita
Sadar, Rangpur	16	16	DLS and Milk Vita
Shahjadpur, Shirajgonj	21	20	Milk Vita and BLRI
Total:	180	180	

c. Training of Trainers

Four trainers-training sessions were conducted by scientists of Wheat Research Center, Dinajpur, RARS Ishurdi; Bangladesh Livestock Research Institute, Savar and Shirajgonj; and International Maize and Wheat Improvement Center (CIMMYT) (Picture 2). Training covered the concept of Whole Family Training, and aspects of triticale and maize production and utilization. Each training session was for one day, from 09:00h until 17:00h. Officers and Field Organizers from the Department of Livestock Services, Bangladesh Rural Advancement Committee and Milk Vita participated in the training sessions. Table 3.2 details the trainers training.

Picture 2: A trainers training session at Pabna.

Table 3.2: Schedule of the Trainers Training

Venue	Date of Training	No. of Participants Attended	Subject of the Training Courses
District Livestock Office, Rangpur	24 October, 2005	13 Persons	• Overview of the Project • Concept of the Whole Family Training • Methodology of the Training • Triticale Cultivation • Maize Cultivation • Triticale Utilization • Maize Utilization • Pre-Training Survey
District Livestock Office, Joypurhat	23 October, 2005	8 Persons	
District Livestock Office, Pabna	27 October, 2005	11 Persons	
Milk Vita, Baghabari, Shirajgonj	26 October, 2005	10 Persons	
Total:		42 Persons	

d. Whole Family Training

Twenty-four Whole Family Training (WFT) sessions were organized in Rangpur, Pabna, Joypurhat and Shirajgonj districts. 168 farm-families (653 persons involved in farming) were trained in dual-purpose triticale production and utilization during October and November 2005 (Picture 3). Out of the total 653 persons, 56% were males and 44% females.

Picture 3: A whole family training session on triticale production, Shirajgonj.

An additional 24 WFT sessions were organized on maize fodder, feed, and food production and utilization during April 2006. 180 farm families (659 farmers) were trained on the maize topics. Out of the total participants, 53% were male and the rest 47% were female. Details of the training of farm-families are given below in Tables 3.3 and 3.4. The full list of the farmers that received whole-family training on triticale production and utilization is attached in Annexure 1 and Annexure 2.

Table 3.3: List of the Farm Families that undertook Whole Family Training in Triticale Production and Utilization, the Training Venue and Date of Training

Name of Upazila and District	Date of Training	No. of Families	No. of Male Farmers	No. of Female Farmers	Total No. of Farmers
Sadar, Joypurhat	Nov 12 Nov 12	7 7	31	24	55
Pachbibi, Joypurhat	Nov 10 Nov 12 Nov 13	14 7 7	59	53	112
Sub-total: Joypurhat		*42*	*90*	*77*	*167*

Name of Upazila and District	Date of Training	No. of Families	No. of Male Farmers	No. of Female Farmers	Total No. of Farmers
Atghoria, Pabna	Nov 17	14	26	29	55
Ishurdi, Pabna	Nov 16	14	32	21	53
Sadar, Pabna	Nov 15	7	29	27	56
Sathia, Pabna	Nov 12 Nov 13	14 14	53	27	80
Sub-total: Pabna		*63*	*140*	*104*	*244*
Badargonj, Rangpur	Nov 15	14	28	28	56
Mithapukur, Rangpur	Nov 09	14	29	26	55
Sadar, Rangpur	Nov 14	14	30	20	50
Sub-total: Rangpur		*42*	*87*	*74*	*161*
Shahjadpur, Shirajgonj	Nov 12 Nov 14	7 14	48	33	81
Sub-total: Shirajgonj		*21*	*48*	*33*	*81*
Grand Total:		168	365	288	653

Table 3.4: List of the Farm Families that undertook Whole Family Training in Maize Production and Utilization, the Training Venue and Date of Training

Name of Upazila and District	Date of Training	No. of Families	No. of Male Farmers	No. of Female Farmers	Total No. of Farmers
Sadar, Joypurhat	April 8, 06 April 9, 06	16	29	24	53
Pachbibi, Joypurhat	April 8, 06 April 9, 06 April 10, 06	32	63	58	121
Sub-total: Joypurhat		*48*	*92*	*82*	*174*
Atghoria, Pabna	April 4, 06	14	28	28	56
Ishurdi, Pabna	April 6, 06	14	25	23	48
Sadar, Pabna	April 4, 06 April 5, 06	14	28	28	56
Sathia, Pabna	April 2, 06 April 3, 06	22	44	43	87
Sub-total: Pabna		*64*	*125*	*122*	*247*
Badargonj, Rangpur	April 17, 06	16	33	25	58
Mithapukur, Rangpur	April 18, 06	16	29	24	53
Sadar, Rangpur	April 16, 06	16	32	15	47
Sub-total: Rangpur		*48*	*94*	*64*	*158*
Shahjadpur, Shirajgonj	April 2, 06 April 4, 06	20	40	40	80
Sub-total: Shirajgonj		*20*	*40*	*40*	*80*
Grand Total:		180	351	308	659

e. Produce and Distribute Triticale and Maize Seed Among Selected Growers in Research and Training Localities

To set up the triticale production demonstration with the 168 farm-families, 2,802 kg of triticale seed of variety WRF 7 was obtained from Wheat Research Center, Dinajpur and used for triticale production demonstrations and to multiply seed for the next program year. Additionally, the Plant Breeding Division of BARI contributed 400 kg of seed of fodder, feed and food type maize varieties (Mohar, BARI Maize 3 and BARI Maize 6).

Wheat Research Center (WRC) and CIMMYT agreed that WRC will contribute the seed to the project free of cost and the project would repair one old microbus of WRC, because that would help WRC scientists to monitor the triticale project. WRC provided the seed and our project repaired the vehicle for Taka 125,000 in November 2005. The cold seed storage facility at WRC Joydebpur was also repaired with project funds and used for storing triticale seed.

At the end of the whole-family training sessions, each farm family was given all inputs to grow 20 decimal (810 m^2) of triticale (Picture 4) or 20 decimal of maize. The full list of farmers that received inputs for growing triticale and maize is attached in Annexure 1 and Annexure 2.

Picture 4: Trained dairy farm families receiving necessary inputs for growing dual-purpose triticale at Joypurhat, November 2005.

The following inputs were given per family:

Triticale demonstration	Maize demonstration
12 kg Triticale (WRF 7) seed	2.0 kg maize seed (Mohar/BM5/BM6)
Urea, 25.5 kg (12 kg for basal, 1st top dress 6 kg; 2nd top dress 4.0 kg; 3rd top dress 3.5 kg)	Urea, 24 kg (16 kg for basal, 1st top dress 8 kg, 2nd top dress 8 kg)
Triple super phosphate 10.5 kg (basal)	Triple super phosphate 15 kg (basal)
Muriate of Potash 6.0 kg (basal)	Muriate of Potash 11 kg (basal)
Gypsum 9.0 kg (basal)	Gypsum 10 kg (basal)
	Zinc 1 kg (basal
	Boron 0.5 kg (basal)
1 signboard	1 signboard
1 production and utilization manual	1 production and utilization manual
1 invitation card	1 invitation card
1 certificate	1 certificate

f. Fodder and Grain Production from Triticale and Maize Demonstrations

In the 2005-06 dual-purpose triticale and fodder maize demonstrations, 13.96 ha was planted to triticale and 14.49 ha to maize. Every family utilized triticale green forage for feeding directly and some prepared hay. Straw and grain was also fed to their cattle. A portion of grain was used for family consumption and seed preservation. After harvesting triticale grain, most of the same families grew maize for fodder and feed production.

In the on-farm demonstrations with WRF-7 triticale during 2005-06, the green fodder yield ranged from 5.0 to 20.0 t/ha fresh mass (0.85 to 3.4 t/ha dry mass) from one cut at 35 DAS and 7.0 to 28.0 t/ha fresh mass from two cuts at 35 and 50 DAS (Figure 1, Picture 5). Overall, 58 % of farmers reported getting more than 10 t/ha of fresh fodder (Figure 1). Although grain yield and grain-size decreased with increased frequency and latter timing of grass cutting, high grain yields (up to 3.20 t/ha) were obtained from WRF-7 after two cuts on-farm compared with 2.60 t/ha from BAT-1 (Figure 2). Thirty percent of farmers reported grain yields of 2-3 t/ha, while 64 % obtained 1-2 t/ha (Figure 2). Straw yields ranged from 0.84 to 7.14 t/ha dry mass (Figure 3). These fodder yields with WRF-7 were 76 % larger than those measured in previous triticale demonstrations in Bangladesh during 2001-02, although grain yields were almost identical in both years. We believe the improved yield of high quality green fodder for farmers in 2005-06 was because farmers managed their crops better after receiving training.

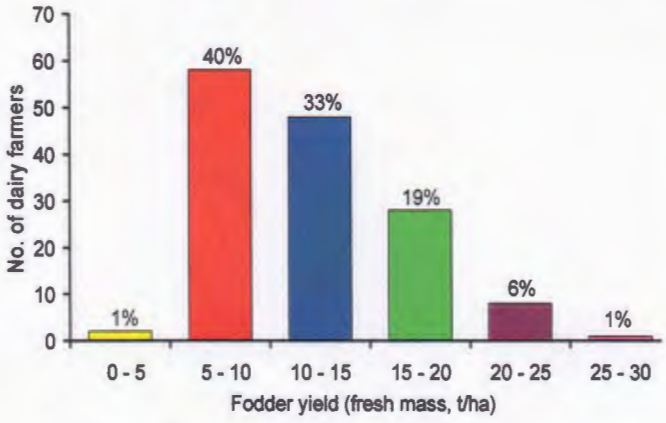


Figure 1. Distribution of fodder yield (fresh mass, t/ha) of WRF-7 triticale in 145 demonstrations, Bangladesh, 2005-06.

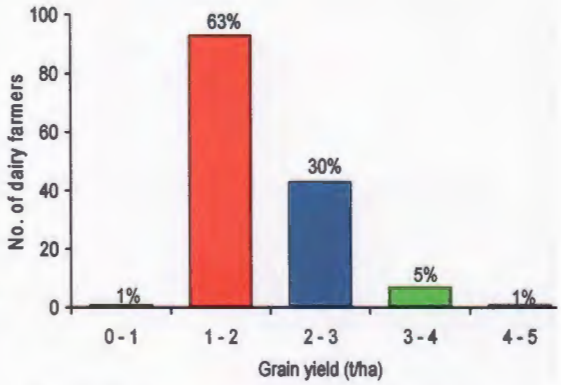


Figure 2. Distribution of grain yield (t/ha) of WRF-7 triticale in 145 demonstrations, Bangladesh, 2005-06.

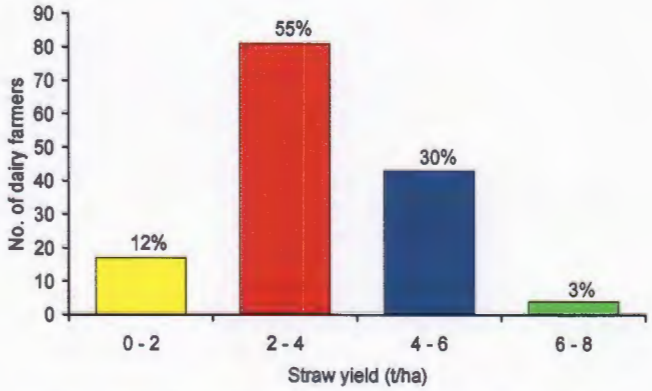


Figure 3. Distribution of straw yield (t/ha) of WRF-7 triticale in 145 demonstrations, Bangladesh, 2005-06.

Picture 5: Triticale fodder being harvested by a female farmer, January 2006

100% of the trained farm families grew maize just after triticale grain harvest for fodder and grain production. Seeds of three BARI composite varieties, BARI Maize 3, BARI Maize 6 and Mohor were distributed to the farmers. No significant differences were observed in fodder and grain yields with these varieties. The average fodder yield of maize was 17.92 t per ha and the grain yield was 3.86 t per ha (Pictures 6 and 7). Maize fodder yields of up to 23.9 t/ha and grain yields of up to 4.63 t/ha were measured after fodder harvest.

Picture 6: Maize plants stripped of lower leaves for fodder, April 2006

Picture 7: Cows feeding on maize leaves

g. Prepare "Whole Family Training" Materials to Use in Future Empowerment of Grower Groups

To conduct the trainers training and whole family training, the following training materials were developed and used for the program:

Manual: Triticale Production and Utilization. One company was hired in June 2005 to produce pictorial maize and triticale fodder production and utilization manuals. Project scientists and professional personnel from the company modified the manuals several times and finalized the manuals at the end of the report period. 3,250 copies of the

triticale manual and a similar number of maize manuals were purchased from the same company for the Trainers and Family Training.

Posters: Triticale Production and Utilization. We printed two sets of eight posters.

Invitation Card: Printed and distributed 320 cards to the farmers.

Certificates: Printed and distributed 320 copies to farmers.

Video Script: (Docudrama) on Triticale Production and Utilization was finalized in November 2005. Desh Productions was hired for video production. Video shooting was undertaken at critical stages of triticale production and utilization during November to March at several venues. The Docudrama was edited and is available on CD (see Annex 3).

h. Seed Production

Targeting the 2006-07 Rabi season and 2007 Kharif-1 season, the project supported the Bangladesh Livestock Research Institute, Wheat Research Centre and Plant Breeding Division of Bangladesh Agricultural Research Institute to grow sufficient triticale and maize seed. All inputs and logistics were provided to BLRI, WRC and PBD-BARI to grow 5.0 ha of triticale and 1.0 ha of maize seed. Seed increases of WRF-7 were planted at BLRI HQ, Savar (2.75 ha), BARI RARS Jamalpur (1.0 ha), BARI RARS Ishurdi (0.25 ha) and WRC WRSS (1.0 ha) (Picture 8) for use by the project in 2006-07. In addition, one t of maize seed (Mohor variety) produced by the PBD-BARI at RARS Barisal.

Picture 8: Triticale seed production block at Wheat Research Sub Station, Dinajpur, late February, 2006.

I. Fodder Triticale Demonstration in *Aman-Boro* Rice Systems

In the northern part of Bangladesh, farmers face an especially serious scarcity of green forage during the winter season. During this period about 1.8 million ha of land remains fallow for 60 to 70 days in between the *Aman* (monsoon) rice harvest and transplantation of *Boro* (winter) rice seedlings. If triticale could fit between *Aman* rice and *Boro* rice seeding then farmers will get the extra benefit of growing green forage for their cattle. Twelve forage demonstrations were set in farmers' fields in Joypurhat and Rangpur districts. Most of the demonstration plots were

Picture 9: Triticale harvested once at 60 days for silage preparation on farm

harvested and a few farmers are keeping triticale seed to grow next year. On average these demonstrations have yielded 50 t/ha fresh biomass (Picture 9). After harvesting triticale, farmers were able to plant *Boro* rice in their fields. Farmers said this fodder system will fit within their cropping pattern without difficulty.

j. Conduct Participatory Action Research on How Best to Grow and Process Triticale and Other Planted Forages with Each Farmer Group, Compiling Results

Farmer Feedbacks from Demonstrations

Based on their experiences, farmers gave a wide range of feedbacks on how to improve the production of triticale and maize. We will use these ideas to modify the training materials and improve the training. Farmer preferences/suggestions include:

1. Stagger fodder cuts on parts of demonstration to provide a continuous supply of green fodder for several weeks.
2. Produce seed in a separate small plot with a lower seed rate and proper management (line sowing, weeding, irrigations, fertilizing, etc.) to harvest good seed.
3. Grow triticale fodder in large plots with a high seed rate, but fewer inputs.
4. Start the first cutting after 30 days and continue cuts up to 65 days with 10-day intervals between cuts.
5. Many farmers prefer to make hay instead of silage.
6. Farmers like fitting fodder maize in between *Aman* – Fallow – Boro rice and *Boro* – Fallow – *Aman* rice systems.

To develop better variety and management practices, the project has also funded 11 triticale experiments and one maize experiment on research stations. The Wheat Research Center and Bangladesh Livestock Research Institute conducted these as follows:

i.a. Experiments/trials of Wheat Research Centre, Dinajpur (Picture 10)

1. Triticale yield trial (2 sets, 18 lines)
2. International Triticale Screening Nursery (99 line, 1set)
3. Evaluation of new germplasm: 29 triticale germplasm entries were received from CIMMYT HQ in Mexico and grown at the WRC. These materials were selected for excellent fodder biomass, good rationing or tillering ability and good grain yield from the ratoons.

Picture 10: Triticale experiments at Wheat Research Sub Station, Dinajpur, 2005-06.

4. On station demonstration on promising triticale lines

5. Timing and frequency of cutting triticale

6. Seed rate and spacing of triticale

7. Study on fodder collection technology of maize.

i.b. Experiments/trials at Bangladesh Livestock Research Institute, Savar, Dhaka

1. Effect of triticale hay supplementation with rice straw-base diet on the production performance of lactating cows

2. Effect of triticale straw supplementation with rice straw-base diet on the production performance of lactating cows

3. Development of preservation technique for triticale forage (Picture 11)

4. Study on the biomass and grain yield of triticale under different cutting intervals

5. Development of power-tiller operated chopper for triticale and maize straw chopping.

Picture 11: Demonstration of low cost triticale bale silage developed by BLRI.

Detailed technical reports on most of this work are available in the Internal Review Workshop Reports of Wheat Research Center and Bangladesh Livestock Research Institute 2006.

k. Straw-Fodder Chopper Development

During April to June 2006, we successfully developed a prototype diesel-engine-operated low-cost and mobile straw chopper (Picture 12). This machine will greatly improve the ability to provide palatable fodder from green maize and other fodder plants. The chopper is now manufactured and sold by the Modern Engineering Workshop, Saidpur, Nilphamari. Five units will be paid for by the project fund and provided to BLRI (two units), DLO Office-Rangpur (one unit), DLO Office-Joypurhat (one unit), and DLO Office-Pabna (one unit) for training and demonstrations.

Picture 12: Mechanized straw chopper being tested at BLRI, Savar, July 2006

l. Pre and Post Training Survey

A survey of target farm families was conducted through a structured questionnaire to collect baseline information. This included feed resource availability, dairy cattle production, household information, livestock related information, milk production, economics of dairying, milk marketing, family milk consumption, fodder problems, management of dairy cows, fodder cultivation, farmer knowledge on modern animal husbandry practices, waste disposal, animal diseases, and other issues (Annexure 3). The Field Organizers of DLS, BRAC and Milk Vita were trained by BARI and BLRI social scientists on data collection during the trainers training session. Out of 168 farm families, data were collected from 141 farm families. These were used to prepare various reports, including parts of three symposium papers presented at the 6th International Triticale Symposium.

m. Other Accomplishments

The project organized five meetings of the Project Coordination Committee on December 14, 2005; February 9, 2006; March 15, 2006; August 17, 2006 and September 13, 2006. Members of the Project Coordination Committee were present in the meetings and discussed various issues related to project implementation. A Traveling Seminar was held late February and early March 2006 during the last part of the triticale growing season.

As given in the implementation plan, the project proposed to present selected project results internationally. Three full papers were prepared and presented at the "6th International Triticale Symposium" which was held in Stellenbosch, South Africa 3-7 September 2006. The paper titles were:

1. Triticale is a quality fodder, feed and food for small-scale farmers in Bangladesh
2. Triticale fodder and grain production by small-scale dairy farmers in North West Bangladesh
3. Triticale fodder and grain utilization by dairy cattle and poultry in Bangladesh.

Abstracts were published in September and full papers are expected to be published in the conference proceedings due in November 2006.

Several news features on project activities were printed in local daily newspapers. Bangladesh Television (BTV) also telecasted the different triticale project activities five times nationally during the triticale growing season (Annexure 4 with CD copy). We also produced a high quality Video (Docudrama) on Triticale Production and Utilization. These programs have created much awareness and interest among the dairy farm families on triticale production and utilization.

To create even further awareness, the project organized five field days in Rangpur (Picture 13), Dinajpur, Joypurhat and Savar-Dhaka, districts during January and February 2006. These field days exposed about 500 officials from various organizations and farmers to triticale production, green fodder preservation and utilization.

Picture 13: A field day at Mitapukur, Rangpur, 11 February 2006.

n. Lessons Learnt and Management Plan Finalization Workshop

As given in the implementation plan, a Lessons Learnt and Management Plan Finalization Workshop was held at Jamuna Resort, Tangail from 4 to 6 October 2006. Around seventy participants from all stakeholder groups, including farmers, participated and presented their experiences, benefit, problems, solutions, and suggestions for the next phase of the project in the workshop. Several senior officials (including the DG of BARI) from stakeholder organizations were present. Project management and implementation plans were also presented, discussed and finalized. The proceedings of the Lessons Learnt Workshop will be published and circulated by February 2007.

o. Procurements

Various items of equipment listed in the project proposal, including digital cameras, a megaphone, mobile phones, motorcycle, project microbus, computer and printer were procured using DANIDA/Crown Agents procedures during the report period and passed to stakeholder organizations for their use.

The progress of work by the project during the report period, according to targets and implementation plan, is given in Table 4.

Table 4: Project Progress for the Period September 2005 to September 2006

Ref.	Description	Indicator (Only at Output Level)	Target	Result	Problems Faced	Recommendation
1.	**Output 1:** Action research supported recommendations for cropping of fodder, grain yields and seed production and fodder management (including utilization) practices are available for extension.					
1.1	**Activity 1:** Identify 54 farm-families per year in four localities interested in dairy and/or fodder production.	A list of 4 localities with names of 9 farm-families for each group will be available.	4 district locations 216 farm families	i) *Triticale*: 4 district locations 180 farm families identified (Annexure 1) ii) *Maize*: 4 district locations 180 families (Annexure 2)	Shortage of triticale seed reduced number of farm families involved. Poor triticale seed germination. Heavy early rainfall and bird damage during *Kharif I* season for fodder maize cultivation.	Seed will need to be harvested and stored properly for next phase. High and medium high elevation land should be used for *Kharif-I* fodder maize cultivation .Birds should be driven away where possible.
1.2	**Activity 2:** Conduct participatory action research on triticale and other planted forages with each farmer group, compiling results.	Documented results are available.	180 farm families grow triticale	178 farm families successfully grew triticale and 180 farm families grew fodder maize and provided feedback on performance and how it can be improved.	Two farmers did not grow triticale due to their family problems. Some of the maize that was planted on low fields could not be grown to maturity for grain.	Compile feedbacks and use in upgrading training materials.
1.3	**Activity 3:** Prepare 'package of practices' for management of triticale and other planted forages for fodder/feed production and utilization.	Package of practices is ready for use.	New variety, management/ feeding practices	Initial drafts of practices for triticale and for maize developed and being upgraded.		New dual-purpose triticale lines identified and utilization practices available and should be used in next phase.

Ref.	Description	Indicator (Only at Output Level)	Target	Result	Problems Faced	Recommendation
1.4	Activity 4: Prepare "Whole Family Training" materials to use in future empowerment of grower groups	Modules are available	Manual, booklets, video, etc.	Triticale production and utilization manual finalized and used for family and ToT training; high quality video (docu drama) produced with renowned actors.		Use updated triticale and maize production and utilization information for next year's program.
2.	**Output 2:** Farmer groups are skilled in the production and feeding of triticale and other planted fodder technologies (e.g. maize) for increasing the availability and use of fodder for dairy production.					
2.1	**Activity 1:** Conduct Whole Family Training among the 54 farm-families in four locations (nine families per localities)	All farmers have received training	180 farm families in 10 Upazila for triticale and 180 for maize	Triticale and fodder maize training was enthusiastically received by 320 farm families in 10 Upazila	Dairy farm families requested to maximize more number of beneficiaries. DLS suggested to extend this program to up to 64 districts.	In the extension to the pilot program and in the 2nd phase, more districts and additional farm families will be targeted. A request will be made to DANIDA (donor) to allow expansion of the project.
2.2	**Activity 2:** Produce and distribute triticale/maize seed and inputs among the grower group localities.	All farmers received the required seeds and inputs.	180 farm families in 10 Upazila	320 farm families received seed, fertilizers, signboard, manuals for triticale and fodder maize production and utilization.	Uncertainty on amounts of triticale seed that will be available from farmers since some plan to sell triticale seed to neighbours.	Monitor use/spread of triticale seed and planting to those farmers in 2006. Many farmers report neighbouring farmers are interested to buy seed from them. DLS requested to have 200 triticale and fodder maize production and utilization manuals in each upazila for free distribution to interested triticale and fodder maize growers. During the 4th PCC meeting it was decided to produce extra manuals and distributed through DLS.

Ref.	Description	Indicator (Only at Output Level)	Target	Result	Problems Faced	Recommendation
3.	**Output 3:** A shared plan (two CGIAR centers, 2 GOB institutes, and multiple dissemination partners) to implement and monitor this pilot project					
3.1	**Activity 1:** Develop a detailed Management Plan.	A Management Plan is available.	Management plan	Management Plan was developed during Inception Workshop		
3.2	**Activity 2:** Conduct participatory monitoring of the project activities	Shared monitoring reports of the stakeholders are available.	Various monitoring reports	Some monitoring reports are available in the 1st PCC meeting minutes		Plans for further monitoring and impact assessments is developed during the Lessons Learned Workshop.
3.3	**Activity 3:** Undertake bi-monthly liaison/coordination meetings with the national stakeholders.	Minutes of the bi-monthly meetings are available.	Five meetings	Minutes of five meetings are available		
3.4	**Activity 4:** Organize lessons learnt at the end of the pilot project.	Workshop proceedings available.	One workshop in May 06	Held in October 2006		The proceedings of the lessons learnt workshop will be published and circulated by February 2007.
4.	**Output 4:** Project outcome is documented, analyzed and disseminated among interested circles in Bangladesh and abroad.					
4.1	**Activity 1:** Hosting project results in the website	The website is visible	Download result	Inception Workshop Report, PCC Meeting Minutes, various events are available in the webpage		
4.2	**Activity 2:** Prepare and present scientific presentation and presented to national, regional and international forum.	Scientific papers on the experience from the project are published or presented or part of proceedings.	Scientific paper/(s)	Three papers prepared and presented in the 6th International Triticale Symposium.		Full papers to be published in the symposium proceedings, expected November 2006.

IV. Status of Outstanding Problems

There were no major outstanding problems encountered during the report period. However, the project identified one issue to be considered by CIMMYT and the Royal Danish Embassy for the continuity of project activities as described Table 5.

Table 5: Issues

Issue	Agreed Solution/ Follow-up/Timing	Responsible Agency	Status	Any new Actions Required?
2nd Phase of the project not yet signed. There is need to accelerate the signing process for continuation of activities into the second half of the 2006-07 Rabi season and beyond. The original proposal for Phase 2 (submitted in August 2005) may need to be revised (if allowable) according to lessons learned in the Pilot Phase and the recommendations of all stakeholders during lessons learnt workshop.	None December 2006	RDE and CIMMYT should agree on the proposal	If it is agreed by RDE and CIMMYT then the proposal could be revised.	YES

V. Status of Project Implementation

This pilot project has run extremely satisfactorily with the activities carried out as given in the approved implementation plan/work plan and budget, and in some cases, it has exceeded expectations. The physical progress of the project component on key activities (e.g. farmer selection, training for the trainers, family training, inputs distribution, etc.) is about 100% completed. Table 6 shows the status of the remaining activities during the reporting period.

Table 6: Status of Project Implementation for the Period September 2005 to September 2006

Activities	Status (On Time/Delayed)	Reasons for Delays	Proposed Actions
Project Inception Workshop and Report Preparation	On time		
Select farm families and location	On time		
Conduct training of trainers	On time		
Conduct family training	On time		
Procure and distribute inputs	On time		

Activities	Status (On Time/Delayed)	Reasons for Delays	Proposed Actions
Prepare and distribute training aids	On time with draft version (partially on going, i.e. final version of manuals)	Extra time taken to finalize versions that incorporate some lessons from the ongoing fieldwork.	
Video script and shooting	On time		
Set up various research trials in BLRI Savar and WRC	On time		
Develop a detailed Management Plan	On time		
Conduct participatory monitoring of the project activities	Partially on time	Some questionnaires are not returned back	Remind the respective DLO
Undertake bi-monthly liaison/coordination meetings with the national stakeholders	1st meeting was delayed by one month. Other most of them are on time.	All stakeholders were busy for project activities and requested to hold it in December 2005. Due to political unrest, delayed some time.	Meeting organized in December 2005
Organize lessons learnt at the end of the pilot project.	Held in early October 2006	Delayed some time because several key stakeholders were busy for project activities and some political unrest.	
Hosting project results in the website	On time		
Prepare and present scientific papers to national, regional and international forum.	Presented internationally in September 2006.		
Inception reporting	On time		
Partners facilities enhancement	On time		
Technical and support staff recruiting	On time		
Financial reporting	On time		

VI. Overall Budget Comparison Statement

All went well with the budget during the reporting period. A total of Tk. 22.53 million (DKK 2.06 million) was received from DANIDA including an extension budget of Tk. 10.09 million (DKK 9.23 million). During September 2005 through September 2006 Tk. 11.49 million (DKK 1.05 million) was spent (51 % of the total budget) and the remaining budget will be spent mostly by December 2006. Large expenditures are expected in October-December 2006 for the field programme to be conducted during the 2006-07 cool dry Rabi season. Table 7 shows the total budget and expenditure in major categories/items.

Table 7: Overall Budget Comparison Statement

Amount in DKK

Major Line Items	Budget			Expenses	Expense as % of
	Original (Sep05-Jun06)	Extension (Jul06-Dec06)	Total		
A. Technical Assistance	225,240	177,659	402,899	253,552	63%
B. Training, Meeting, Workshop & Monitoring	258,200	398,172	656,372	310,578	47%
C. Partners Facilities Enhancement	135,700	114,894	250,594	171,488	68%
D. Travel	88,000	25,759	113,759	58,062	51%
E. Operational Costs	192,905	13,175	206,080	183,720	89%
F. Overhead Cost on Management (15%)	135,007	109,449	244,456	74,017	30%
Sub-total:	1,035,052	839,108	1,874,160	1,051,417	56%
G. Contingencies (10% of A-E)	103,505	83,911	187,416	-	0%
Total:	1,138,557	923,019	2,061,576	1,051,417	51%

VII. Work Plan for the Period October to December 2006

Project outputs are listed and numbered according to the logical framework matrix in the Project Description (Project Document). The extension period of the pilot project will end in December 2006. But the triticale demonstrations planted in November and December 2006 will continue in farmer's fields up to April 2007. Therefore, here in Table 8 where appropriate we give an extended work plan and the estimated budget for each of the activities.

Table 8: Work Plan for the Period October to December 2006.

	Output-wise Activities	Target	Estimated Budget (DKK)	Comments
1.0	**Output 1:** Action research supported recommendations for cropping of fodder, grain yields and seed production and fodder management (including utilization) practices are available for extension.	√		Identified farmers growing triticale
1.1	**Activity 1:** Identify 54 new farm-families in each of six localities interested in fodder production for dairying.	Done in October	15,000	
1.2	**Activity 2:** Conduct participatory on farm research on triticale production and utilization with each farmer group, compiling results. Conduct follow up station research on triticale and maize.	Ongoing	20,000	
1.3	**Activity 3:** Conduct studies on i) Livestock Contribution to Small Scale Dairy Farmers Livelihoods ii) Assessment of Fodder Availability, with project and non project farmers, and iii) Fodder Technology Assessment/New Study.	Dec 2006-March 2007	100,000	
1.4	**Activity 4:** Revise 'package of practices' for management of triticale and maize for fodder/feed production and utilisation.	On going	20,000	
1.5	**Activity 5:** Prepare and update "Whole Family Training" materials to use in future empowerment of grower groups.	By December 2006	80,000	
2.0	**Output 2:** Farmer groups are skilled in the production and feeding of triticale and other planted fodder technologies (e.g. maize) for increasing the availability and use of fodder for dairy production.			
2.1	**Activity 1:** Conduct Whole Family Training among the 54 farm-families in six locations/districts.	Oct – Nov 06	40,000	
2.2	**Activity 2:** Produce and distribute triticale/maize seed and inputs among the growers and for next season.	Oct 06 – Apr 07	30,000	
2.3	**Activity 3:** Conduct demonstrations of triticale production and use with farmers in six districts.	Oct 06 – Apr 07	50,000	
3.0	**Output 3:** A shared plan (two CGIAR centres, 2 GOB institutes, and multiple dissemination partners) to implement and monitor this pilot project.			
3.1	**Activity 1:** Revise detailed Management Plan through a Lessons Learnt and Planning Workshop.	Done	110,000	
3.2	**Activity 2:** Conduct participatory monitoring of the project activities.	Ongoing	40,000	
3.3	**Activity 3:** Undertake bi-monthly liaison/coordination meetings with the national stakeholders.	Nov. 06 and Jan. 07	30,000	
4.0	**Output 4:** Project outcome is documented, analysed and disseminated among interested circles in Bangladesh and abroad.			
4.1	**Activity 1:** i) Project Benefit Monitoring, ii) Fodder Technology Assessment/New Study.	Ongoing	100,000	
4.2	**Activity 2:** Host project results in the website.	Ongoing		
4.3	**Activity 3:** Prepare and present research results at national and international events (including the International Triticale Symposium).	Sept 2006		
5.0	**Management Output**			
5.1	Lessons Learnt Workshop Proceedings.	Jan 07		
5.2	Financial Reporting.	Nov 06		
5.3	Progress Reporting.	Nov 06		

Annexure 1: List of the farm families, inputs distribution, triticale planted area, planting date, methods and plot location

Household number	Training Venue	Trainers name	Trainers Organization	Date of training	Name of household head	Father's name of the household head	Village
1	2	3	4	5	6	7	8
1	Jaigirhat	Md. Chowdhuri	DLS	9-Nov-05	Md. Motlobur Rahman	Late Moulovi Elahi Box Mondal	Batagon Durgapur
2	Jaigirhat	Md. Chowdhuri	DLS	9-Nov-05	Md. Amzad Hossain	Late Noor Mohammad Mondal	Batagon Durgapur
3	Jaigirhat	Md. Chowdhuri	DLS	9-Nov-05	Md. Rawshan Ali	Late Akkas Ali Mondal	Batagon Durgapur
4	Jaigirhat	Md. Chowdhuri	DLS	9-Nov-05	Md. Mahabubur Rahman	Late Kabir Uddin	Nichintapur
5	Jaigirhat	Md. Chowdhuri	DLS	9-Nov-05	Md. Habibur Rahman	Late Afaz Uddin	Nayapara
6	Jaigirhat	Md. Chowdhuri	DLS	9-Nov-05	Md. Khalilur Rahman	Late Khelaruddin Mondal	Paikan
7	Jaigirhat	Md. Chowdhuri	DLS	9-Nov-05	Md. Atikur Rahman	Md. Mahabur Rahman	Nichintapur
8					Mohammad Ali Jinnah		Molong hat
9	Shothibari Boys School	Md. Motaleb Mia	DLS	9-Nov-05	Biswanath Barman	Late Rambabu	Kathali Moddhapara
10	Shothibari Boys School	Md. Motaleb Mia	DLS	9-Nov-05	Md. Manik Mia	Late Rais Uddin	Sothibari Horipur
11	Shothibari Boys School	Md. Motaleb Mia	DLS	9-Nov-05	Rotneswar Barman	Late Nalini Kanti	Hasoner para
12	Shothibari Boys School	Md. Motaleb Mia	DLS	9-Nov-05	Ms. Amena Begum	Md. Samsul Islam	Rotia
13	Shothibari Boys School	Md. Motaleb Mia	DLS	9-Nov-05	Md. Momdel Hossain/Md	Late Somser Uddin	B. Da. Para/Serudanga
14	Shothibari Boys School	Md. Motaleb Mia	DLS	9-Nov-05	Md. Emdadul Haque	Md. Gofor Sarker	Sothibari Sarkerpara
15	Shothibari Boys School	Md. Motaleb Mia	DLS	9-Nov-05	Md. Emdadul Haque	Md. Gofor Sarker	Sothibari Sarkerpara
16	Shothibari Boys School	Md. Motaleb Mia	DLS	9-Nov-05	Md. Ashraful/Saidul Islam	Md. Abdul Rashid Sarker	Sothibari Sarkerpara/Ta
17					Md. Rabiul		Girai
18	Ramnathpur UP Complex	Md. Mominur Islam	Milk Vita	15-Nov-05	Al Mahmud Hossain	Late Mahfil Uddin Pramanik	Ramkrishnapur
19	Ramnathpur UP Complex	Md. Mominur Islam	Milk Vita	15-Nov-05	Al Mahmud Hossain	Late Mahfil Uddin Pramanik	Ramkrishnapur
20	Ramnathpur UP Complex	Md. Mominur Islam	Milk Vita	15-Nov-05	Md. Abdul Mannan Sarker	Late Mofizuddin Sarker	Mirapara
21	Ramnathpur UP Complex	Md. Mominur Islam	Milk Vita	15-Nov-05	Md. Abdul Baten	Late Abdul Kuddus	Sitlakkhanpar
22	Ramnathpur UP Complex	Md. Mominur Islam	Milk Vita	15-Nov-05	Md. Abdul Jalil	Late Abu Taleb	Fire Service Para
23	Ramnathpur UP Complex	Md. Mominur Islam	Milk Vita	15-Nov-05	Abdul Mazid Sarker	Late Abdul Karim	Mirapara
24	Ramnathpur UP Complex	Md. Mominur Islam	Milk Vita	15-Nov-05	Md. Omar Ali	Late Nazir Mamud	Mirapara
25	Ramnathpur UP Complex	Md. Mominur Islam	Milk Vita	15-Nov-05	Md. Noor Alam	Md. Answar Ali	Mirapara
26					Nur Alam		Ramkrishnapur
27	Madhupur Al Amin School	Md. Abdur Rahman	DLS	15-Nov-05	Md. Morshed Ali	Md. Yeakub Ali	Shekherhat
28	Madhupur Al Amin School	Md. Abdur Rahman	DLS	15-Nov-05	Md. Amirul Islam	Late Shafiuddin	Baniapara
29	Madhupur Al Amin School	Md. Abdur Rahman	DLS	15-Nov-05	Md. Rauz Mia	Late Kafiluddin	Uttar Bawchand
30	Madhupur Al Amin School	Md. Abdur Rahman	DLS	15-Nov-05	Md. Jahingir Alam Shah	Late Abdul Mannan Shah	Munshipara
31	Madhupur Al Amin School	Md. Abdur Rahman	DLS	15-Nov-05	Md. Mozammel Haque	Late Kalu Pramanik	Uttar Bawchand
32	Madhupur Al Amin School	Md. Abdur Rahman	DLS	15-Nov-05	Md. Mohsin Ali	Md. Mobarak Hossain	Masterpara
33	Madhupur Al Amin School	Md. Abdur Rahman	DLS	15-Nov-05	Debashish Chakrabarti	Late Nirmal Chakrabarti	Baluabhati
34	Mahiganj Shatmatha	Md. Shafiqul Islam	DLS	14-Nov-05	Alhaj Md. Fazlul Haque	Late Samiruddin	Baharkasna
35	Mahiganj Shatmatha	Md. Shafiqul Islam	DLS	14-Nov-05	Dr. Md. Mahfuzur Rahman	Late Hafizur Rahman	Khashbag
36	Mahiganj Shatmatha	Md. Shafiqul Islam	DLS	14-Nov-05	Md. Answar Ali	Late Yeakub Ali	Nasnia
37	Mahiganj Shatmatha	Md. Shafiqul Islam	DLS	14-Nov-05	Md. Shafiqul Islam	Late Naharuddin	Taluk Pawa

Household number	Training Venue	Trainers name	Trainers Organization	Date of training	Name of household head	Father's name of the household head	Village
1	2	3	4	5	6	7	8
38	Mahiganj Shatmatha	Md. Shafiqul Islam	DLS	14-Nov-05	Md. Jalal Mia	Late Nawab Ali	Birbhadra
39	Mahiganj Shatmatha	Md. Shafiqul Islam	DLS	14-Nov-05	Md. Abdul Razzaque (Dul	Late Abul Hossain	Burirhat
40	Mahiganj Shatmatha	Md. Shafiqul Islam	DLS	14-Nov-05	Md. Tazul Islam	Late Akarat Ali	Shatmatha
41					Md. Mohammed Ali		Bakatari
42	Roghubazar	Md. Ziaul Karim	DLS	14-Nov-05	Md. Noor Mohammad	Late Shafiullah Khan	Arazishon Samar
43	Roghubazar	Md. Ziaul Karim	DLS	14-Nov-05	Md. Abdul Rashid	Mohammad Ali Sarker	Ashratpur Biniapara
44	Roghubazar	Md. Ziaul Karim	DLS	14-Nov-05	Md. Abdul Latif	Md. Abbas Ali	Razu Kha
45	Roghubazar	Md. Ziaul Karim	DLS	14-Nov-05	Md. Motiar Rahman	Late Yeasin Ali	Razu Kha
46	Roghubazar	Md. Ziaul Karim	DLS	14-Nov-05	Md. Fazlul Haque	Late Abul Hossain	Dakkhin Bokchi
47	Roghubazar	Md. Ziaul Karim	DLS	14-Nov-05	Md. Osman Goni	Late Monsur Ali	Dakkhin Bokchi
48	Roghubazar	Md. Ziaul Karim	DLS	14-Nov-05	Md. Abdul Razzaque	Late Abdul Rahim	Azizullah
49					Badsha Miah	Late Yeakub Ali	Telipara
50					Mr. Ferdous Alam (Mukul)	Late Siddik Hossain	Ashratpur
51	Motraz Unnayan Club	Md. Alam	BRAC	10-Nov-05	Sochin Kumar	Horilal Chandra	Pachgachi
52	Motraz Unnayan Club	Md. Alam	BRAC	10-Nov-05	Fazlul Haque	Khok Mondal	Pachgachi
53	Motraz Unnayan Club	Md. Alam	BRAC	10-Nov-05	Shanja Barman	Ridoy Barman	Pachgachi
54	Motraz Unnayan Club	Md. Alam	BRAC	10-Nov-05	Somsher Ali	Late Toimuddin	Sonapara
55	Motraz Unnayan Club	Md. Alam	BRAC	10-Nov-05	Abdul Sattar	Late Ohiruddin	Sonapara
56	Motraz Unnayan Club	Md. Alam	BRAC	10-Nov-05	Shovaram	Late Horidash	Pachgachi
57	Motraz Unnayan Club	Md. Alam	BRAC	10-Nov-05	Nazibor Rahman	Late Akamuddin Mondal	Sonapara
58	Sorail Adil	Md. Afaz Uddin Mondal	DLS	10-Nov-05	Md. Jomrud Hasan	Late Altab Hossain	Berakhail
59	Sorail Adil	Md. Afaz Uddin Mondal	DLS	10-Nov-05	Md. Mofazzal Hossain	Late Soimuddin	Mohammadpur
60	Sorail Adil	Md. Afaz Uddin Mondal	DLS	10-Nov-05	Md. Monsur Rahman	Md. Mozibur Rahman	Mohammadpur
61	Sorail Adil	Md. Afaz Uddin Mondal	DLS	10-Nov-05	Md. Abu Bakar Siddique	Late Mahatabuddin	Ghorail
62	Sorail Adil	Md. Afaz Uddin Mondal	DLS	10-Nov-05	Md. Samsuddin	Md. Sayed Ali	Mohammadpur
63	Sorail Adil	Md. Afaz Uddin Mondal	DLS	10-Nov-05	Md. Saiful Islam	Md. Somir Uddin	Kewta
64	Sorail Adil	Md. Afaz Uddin Mondal	DLS	10-Nov-05	Md. Daraz Uddin	Late Shafitullah	Nandail
65					Polash		Runihali
66					Polash		Runihali
67	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Wahedul	Esar Uddin	Pachgachi
68	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Noor Hossain (Tutul)	Alhaj Noor Mohammad	Pachgachi
69	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Md. Zaber Ali	Late Basir Uddin	Pachgachi
70	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Md. Sobhan	Md. Sayem Uddin	Pachim Bali Khata
71	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Md. Yusuf Ali	Md. Kaiser Rahman	Arzi Patabuka
72	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Mr. Kenedi	Yusuf Ali	Maloncha
73	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Mr. Kenedi	Yusuf Ali	Maloncha
74	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Md. Razu Ahmed	Md. Alauddin	Khash Baguri
75	Pachbibi BRAC office	H.M. Alim Hossain	BRAC	12-Nov-05	Md. Razu Ahmed	Md. Alauddin	Khash Baguri
76					Md. Toslimuddin		Debkhonda
77					Mizanur Rahman	Afsar Ali	Paschim Baligatha

Household number	Training Venue	Trainers name	Trainers Organization	Date of training	Name of household head	Father's name of the household head	Village
1	2	3	4	5	6	7	8
78	Shalaipur	Md. Abdul Rouf Sarker	DLS	13-Nov-05	Md. Asad Ali	Md. Mokleser Ali	Shalaipur
79	Shalaipur	Md. Abdul Rouf Sarker	DLS	13-Nov-05	Md. Tozammel Haque	Late Mofizuddin	Shalaipur
80	Shalaipur	Md. Abdul Rouf Sarker	DLS	13-Nov-05	Md. Abdul Baten	Late Adam Ali	Shalaipur
81	Shalaipur	Md. Abdul Rouf Sarker	DLS	13-Nov-05	Md. Lokman Hossain	Late Shukur Ali	Runihali
82	Shalaipur	Md. Abdul Rouf Sarker	DLS	13-Nov-05	Md. Abdus Salam	Late Tairuddin	Runihali
83	Shalaipur	Md. Abdul Rouf Sarker	DLS	13-Nov-05	Nirmal Chandra Mondal	Late Norendra Nath Mondal	Runihali
84	Shalaipur	Md. Abdul Rouf Sarker	DLS	13-Nov-05	Md. Rustam Ali/A. Rouf M	Alhaj Md. Salam Ali	Kuwarpur
85					Abdus Salam		Runihali
86	Joypurhat Upazila Parishad Auditorium	Md. Akteruzzaman	DLS	12-Nov-05	Molla Samsul Alam	Alhaj Abdus Salam	Komargram
87	Joypurhat Upazila Parishad Auditorium	Md. Akteruzzaman	DLS	12-Nov-05	Md. Ruhul Amin Sarkar	Md. Abdul Motaleb Sarker	Parbatta
88	Joypurhat Upazila Parishad Auditorium	Md. Akteruzzaman	DLS	12-Nov-05	Md. Rabbi	Abdul Kuddus Mondal	Khanjanpur
89	Joypurhat Upazila Parishad Auditorium	Md. Akteruzzaman	DLS	12-Nov-05	Delwar Hossain Bablu	Late Poran Uddin Ahmed	Aramnagar
90	Joypurhat Upazila Parishad Auditorium	Md. Akteruzzaman	DLS	12-Nov-05	Ms. Lutfun Bewa	Late Bachhu Mia Mondal	Paschim Payalia
91	Joypurhat Upazila Parishad Auditorium	Md. Akteruzzaman	DLS	12-Nov-05	Md. Biplob Biswas	Fazlul Haque Biswas	Harail Babupara
92	Joypurhat Upazila Parishad Auditorium	Md. Akteruzzaman	DLS	12-Nov-05	Md. Ziaul Haque Zia	Late Abdul Hakim	Baniapara
93					Md. Samsul Alam		Sobujnagar Mondal para
94					Amanullah		Hizri Bazar
95	Bhatkowta Primary School	Md. Shahidul Kamal	DLS	13-Nov-05	Harun Ur Rashid	Naya Mia Mondal	Dholahar
96	Bhatkowta Primary School	Md. Shahidul Kamal	DLS	13-Nov-05	Md. Khaza Golam Mawla	Md. Khaza Golam Mostafa	Chadpur
97	Bhatkowta Primary School	Md. Shahidul Kamal	DLS	13-Nov-05	Nasiruddin	Late Shahiruddin	Madhinagar
98	Bhatkowta Primary School	Md. Shahidul Kamal	DLS	13-Nov-05	Md. Badiuzzaman	Md. Mozaffar Rahman	Paschim Chipur
99	Bhatkowta Primary School	Md. Shahidul Kamal	DLS	13-Nov-05	Md. Rustam Ali	Md. Mofizuddin	Uttar Shekhpur
100	Bhatkowta Primary School	Md. Shahidul Kamal	DLS	13-Nov-05	Md. Masudur Rahman	Md. Habibur Rahman	Modhupur
101	Bhatkowta Primary School	Md. Shahidul Kamal	DLS	13-Nov-05	Md. Fazlur Rahman	Haresuddin	Atthowka
102	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	14-Nov-05	Md. Abdullah Al Mamun	Late Joynal Abedin Munshi	Khamar Shanila
103	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	14-Nov-05	Md. Abdullah Al Mamun	Late Joynal Abedin Munshi	Khamar Shanila
104	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	14-Nov-05	Md. Jalal Uddin Pramanik	Late Kashem Pramanik	Khamar Shanila
105	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	14-Nov-05	Md. Kiamuddin Sarker	Late Abdur Rahman Sarker	Khamar Shanila
106	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	14-Nov-05	Md. Afzal Hossain	Md. Mozibor Pramanik	Khamar Shanila
107	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	14-Nov-05	Md. Altab Hossain	Md. Sokir Uddin Munshi	Khamar Shanila
108	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	14-Nov-05	Md. Azmat Ali	Late Inu Fakir	Khamar Shanila
109	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	14-Nov-05	Md, Abu Ayub	Md. Wahed Ali Pramanik	Chhoto Binnadair
110	Mudla	Md. Amir Hossain	Milk Vita	14-Nov-05	Md. Aminul Hossain	Late Hazi Mozibor Master	Nokoli
111	Mudla	Md. Amir Hossain	Milk Vita	14-Nov-05	Md. Fazlu Khan	Late Hazi Samsul Alam	Nokoli
112	Mudla	Md. Amir Hossain	Milk Vita	14-Nov-05	Md. Alimuddin Fakir	Haji Abul Kashem	Madla
113	Mudla	Md. Amir Hossain	Milk Vita	14-Nov-05	Md. Mokter Sarder	Md. Mohez Sarder	Madla
114	Mudla	Md. Amir Hossain	Milk Vita	14-Nov-05	Md. Yeasin Molla	Late Abu Taher Mollah	Madla
115	Mudla	Md. Amir Hossain	Milk Vita	14-Nov-05	Md. Rahmat Ali	Late Kadir Sarder	Madla
116	Mudla	Md. Amir Hossain	Milk Vita	14-Nov-05	Md. Baktear Sarder	Md. Harun Rashid	Madla
117	Nukali Pra. S: Office	Md. Jahangir Alam	Milk Vita	12-Nov-05	Md. Zahirul Islam	Md. Nakir Uddin	Nokoli

Household number	Training Venue	Trainers name	Trainers Organization	Date of training	Name of household head	Father's name of the household head	Village
1	2	3	4	5	6	7	8
118	Nukali Pra. S. Office	Md. Jahangir Alam	Milk Vita	12-Nov-05	Md. Amod Ali	Md. A. Wahab	Nokoli
119	Nukali Pra. S. Office	Md. Jahangir Alam	Milk Vita	12-Nov-05	Md. Abdul Kuddus Khan	Late Haji A. Rahman Khan	
120	Nukali Pra. S. Office	Md. Jahangir Alam	Milk Vita	12-Nov-05	Md. Abdul Alim	Late Osin Sarker	Nokoli
121	Nukali Pra. S. Office	Md. Jahangir Alam	Milk Vita	12-Nov-05	Md. Abu Sama	Late Jabbar	Nokoli
122	Nukali Pra. S. Office	Md. Jahangir Alam	Milk Vita	12-Nov-05	Md. Abdul Wahab Pramar	Late Kaser Ali	Nokoli
123	Nukali Pra. S. Office	Md. Jahangir Alam	Milk Vita	12-Nov-05	Md. Sirajul Islam	Haji Md. Korban Ali	Nokoli
124	Patgari Pra. Ma. Office	Md. Mukul Hossain	Milk Vita	13-Nov-05	Md. Jakir Hossain	Alhaj Md. Riazuddin Fakir	Patgari
125	Patgari Pra. Ma. Office	Md. Mukul Hossain	Milk Vita	13-Nov-05	Md. Mizanur Rahman (So	Md. Mohsin Molla	Patgari
126	Patgari Pra. Ma. Office	Md. Mukul Hossain	Milk Vita	13-Nov-05	Md. Abdul Razzaque Moll	Late Intaz Molla	Patgari
127	Patgari Pra. Ma. Office	Md. Mukul Hossain	Milk Vita	13-Nov-05	Md. Abdus Salam	Md. Azizul	Patgari
128	Patgari Pra. Ma. Office	Md. Mukul Hossain	Milk Vita	13-Nov-05	Md. Akter Molla	Late Sobed Ali Molla	Patgari
129	Patgari Pra. Ma. Office	Md. Mukul Hossain	Milk Vita	13-Nov-05	Md. Answar Ali	Md. Shuklal Sarder	Patgari
130	Patgari Pra. Ma. Office	Md. Mukul Hossain	Milk Vita	13-Nov-05	Md. Abdul Karim	Late Rustam Ali	Patgari
131	Melonda Pra. S. Office	Md. Aminul Islam	Milk Vita	13-Nov-05	Alhaj Akbar Ali Sarder	Late Abdul Karim	Melonda
132	Melonda Pra. S. Office	Md. Aminul Islam	Milk Vita	13-Nov-05	Md. Shawkat Hossain	Md. Hanif Sarder	Melonda
133	Melonda Pra. S. Office	Md. Aminul Islam	Milk Vita	13-Nov-05	Md. Abul Kalam Azad	Late Manik Sarder	Melonda
134	Melonda Pra. S. Office	Md. Aminul Islam	Milk Vita	13-Nov-05	Md. Abdus Sabur	Late Osman Gani	Melonda
135	Melonda Pra. S. Office	Md. Aminul Islam	Milk Vita	13-Nov-05	Md. Altab Hossain	Md. Kobak Sarder	Melonda
136	Melonda Pra. S. Office	Md. Aminul Islam	Milk Vita	13-Nov-05	Md. Answar Ali Sarder	Late Mati Sarder	Melonda
137	Melonda Pra. S. Office	Md. Aminul Islam	Milk Vita	13-Nov-05	Md. Nazim Uddin	Late Leraz Sarder	Melonda
138	Melonda Pra. S. Office	Md. Aminul Islam	Milk Vita	13-Nov-05	Md. Nazim Uddin	Late Leraz Sarder	Melonda
139	Boro Narinda Pra. S. Office	Md. Marufur Rahman	Milk Vita	12-Nov-05	Md. Anwar Hossain	Late Monser Pramanik	Khidirgram
140	Boro Narinda Pra. S. Office	Md. Marufur Rahman	Milk Vita	12-Nov-05	Md. Yunus Ali	Late Hasim Sarder	Atia Para
141	Boro Narinda Pra. S. Office	Md. Marufur Rahman	Milk Vita	12-Nov-05	Md. Abul Kalam Mondal	Late Abdur Rahman Mondal	Khidirgram
142	Boro Narinda Pra. S. Office	Md. Marufur Rahman	Milk Vita	12-Nov-05	Md. Atwar Molla	Late Taizal Molla	Khidirgram
143	Boro Narinda Pra. S. Office	Md. Marufur Rahman	Milk Vita	12-Nov-05	Md. Iqbal Hossain	Md. Akram Hossain	Khidirgram
144	Boro Narinda Pra. S. Office	Md. Marufur Rahman	Milk Vita	12-Nov-05	Md. Saidul Islam	Late Alhaj Abu Taher Pramanik	Khidirgram
145	Boro Narinda Pra. S. Office	Md. Marufur Rahman	Milk Vita	12-Nov-05	Md. Azizur Rahman	Late Bholauddin Sarker	Khidirgram
146	Atghoria Upazila Livestock Office	Md. Nawshar Ali	DLS	17-Nov-05	Md. Abdul Latif	Md. Harun Ur Rashid Sun	Srikantapur
147	Atghoria Upazila Livestock Office	Md. Nawshar Ali	DLS	17-Nov-05	Md. Abdul Waheb	Late Abu Taher Ali	Srikantapur
148	Atghoria Upazila Livestock Office	Md. Nawshar Ali	DLS	17-Nov-05	Md. Motahar Hossain	Md. Mozibur Rahman	Srikantapur
149	Atghoria Upazila Livestock Office	Md. Nawshar Ali	DLS	17-Nov-05	Md. Fakrul Islam	Late Yeasin Ali Khan	Srikantapur
150	Atghoria Upazila Livestock Office	Md. Nawshar Ali	DLS	17-Nov-05	Md. Atiar Rahman	Md. Mozibor Rahman	Radhakantapur
151	Atghoria Upazila Livestock Office	Md. Nawshar Ali	DLS	17-Nov-05	Ms. Farida Begum	Late Sobhan Ali	Natadaha
152	Atghoria Upazila Livestock Office	Md. Nawshar Ali	DLS	17-Nov-05	Md. Kutubuddin	Md. Goni Joarder	Hapania
153	Gopalpur Primary School	Md. Asaduzzaman	DLS	17-Nov-05	Md. Azizur Rahman	Late Abdus Sattar	Gopalpur
154	Gopalpur Primary School	Md. Asaduzzaman	DLS	17-Nov-05	Md. Riaz Molla	Md. Iman Molla	Chak Gopalpur
155	Gopalpur Primary School	Md. Asaduzzaman	DLS	17-Nov-05	Md. Motin Sarder	Late Foyz Sarder	Chak Gopalpur
156	Gopalpur Primary School	Md. Asaduzzaman	DLS	17-Nov-05	Md. Habibur Mondal	Md. Montin Mondal	Chawkibari
157	Gopalpur Primary School	Md. Asaduzzaman	DLS	17-Nov-05	Md. Shahidul Islam	Late Solaiman Biswas	Chawkibari

Household number	Training Venue	Trainers name	Trainers Organization	Date of training	Name of household head	Father's name of the household head	Village
1	2	3	4	5	6	7	8
158	Gopalpur Primary School	Md. Asaduzzaman	DLS	17-Nov-05	Md. Abdus Sobhan Molla	Late Foyz Uddin Molla	Gopalpur
159	Gopalpur Primary School	Md. Asaduzzaman	DLS	17-Nov-05	Md. Baki Billah	Late Taizuddin Molla	Gopalpur
160	Ishurdi Upazila Agril. Nursery	Md. Sharifuddin	DLS	16-Nov-05	Md. Amzad Dewan	Md. Amser Dewan	Dawria
161	Ishurdi Upazila Agril. Nursery	Md. Sharifuddin	DLS	16-Nov-05	Md. Abdul Jabbar	Late Samsuddin	Bash Hasna
162	Ishurdi Upazila Agril. Nursery	Md. Sharifuddin	DLS	16-Nov-05	Md. Jasimuddin	Late Hasan Ali	Arkandi
163	Ishurdi Upazila Agril. Nursery	Md. Sharifuddin	DLS	16-Nov-05	Md. Mizanur Rahman	Alhaj Rawshan Ali Khan	Dawria
164	Ishurdi Upazila Agril. Nursery	Md. Sharifuddin	DLS	16-Nov-05	Md. Golam Mostafa	Late Hasem Ali	Muladuli Moddhapara
165	Ishurdi Upazila Agril. Nursery	Md. Sharifuddin	DLS	16-Nov-05	Md. Amirul Islam	Late Sabiruddin Pramanik	Barampur
166	Ishurdi Upazila Agril. Nursery	Md. Sharifuddin	DLS	16-Nov-05	Md. Abul Bashar Siddik	Alhaj Alimuddin	Dawria Bazar
167	Ishurdi Upazila Agril. Nursery	Md. Motiar Rahman	DLS	16-Nov-05	Md. Sohrabuddin	Late Toziruddin Pramanik	Mowriapara
168	Ishurdi Upazila Agril. Nursery	Md. Motiar Rahman	DLS	16-Nov-05	Md. Sanwar Hossain	Naharuddin	Gopalpur
169	Ishurdi Upazila Agril. Nursery	Md. Motiar Rahman	DLS	16-Nov-05	Md. Mamunur Rashid	Joynul Abedin	Airport
170	Ishurdi Upazila Agril. Nursery	Md. Motiar Rahman	DLS	16-Nov-05	Md. Ismail Hossain	Late Samsuddin Pramanik	Naricha
171	Ishurdi Upazila Agril. Nursery	Md. Motiar Rahman	DLS	16-Nov-05	Md. Ataul Haque	Late Waser Ali	Baghail Uttar Para
172	Ishurdi Upazila Agril. Nursery	Md. Motiar Rahman	DLS	16-Nov-05	Md. Abdul Mannan	Late Moyen Uddin Pramanik	Gokulnagar
173	Ishurdi Upazila Agril. Nursery	Md. Motiar Rahman	DLS	16-Nov-05	Md. Noor Ali	Late Kheru Pramanik	Gokulnagar
174	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	15-Nov-05	Md. Fazlul Haque	Late Zafar Ali Seikh	Goyeshpur
175	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	15-Nov-05	Md. Idris Ali	Late Bosharat Ali	Rahimpur
176	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	15-Nov-05	Md. Lokman Hossain	Late Zobed Ali Molla	Commillee
177	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	15-Nov-05	Md. Shahidullah	Late Goyher Ali Pramanik	Goyeshpur
178	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	15-Nov-05	Md. Ziaunnobi	Dr. Shafiunnobi	Commillee
179	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	15-Nov-05	Md. Motiar Rahman	Late Md. Rahmat Ullah Seikh	Rahimpur
180	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	15-Nov-05	Md. Abdur Razzaque	Md. Ezemuddin	Gowri Dulalpur
181	Pabna Dist. Livestock Office	Mozammel Hossain	DLS	15-Nov-05	Md. Anwar Hossain	Late Sikender Ali Sarder	Satiani
182	Pabna Dist. Livestock Office	Mozammel Hossain	DLS	15-Nov-05	Abdul Awal	Late Haji Abu Taher	Charabot Tol
183	Pabna Dist. Livestock Office	Mozammel Hossain	DLS	15-Nov-05	Md. Wazuddin	Late Abdul Jabbar	Satiani
184	Pabna Dist. Livestock Office	Mozammel Hossain	DLS	15-Nov-05	Md. Salim Reza	Late Haji Rozab Ali	Patkiabari
185	Pabna Dist. Livestock Office	Mozammel Hossain	DLS	15-Nov-05	Md. Ronju	Late Haji Rajob Ali	Patkiabari
186	Pabna Dist. Livestock Office	Mozammel Hossain	DLS	15-Nov-05	Abdul Gofur Khan (Goni E	Late Izahan Ali Khan	Akha
187	Pabna Dist. Livestock Office	Mozammel Hossain	DLS	15-Nov-05	Md. Sorwar Hossain	Late Noor Baksh	Krishnapur

Household number	Post Office	Upazila	District	# of participants		Materials distributed			Planting date	Area (dec) planted	Method of seeding	Plot Location	
				Male	Female	Manual	Seed (kg)	Fertilizer (kg)				Longitudes	Latitudes
1	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Jaigirhat	Mithapukur	Rangpur	1	3	1	12	51	6-Dec-05	30	Line	25.37448	89.15678
2	Jaigirhat	Mithapukur	Rangpur	2	2	1	12	51	15-Dec-05	25	Line	25.38117	89.16876
3	Jaigirhat	Mithapukur	Rangpur	3	1	1	12	51	6-Dec-05	30	Broadcast	25.37248	89.15522
4	Jaigirhat	Mithapukur	Rangpur	2	2	1	12	51	22-Nov-05	20	Line	25.36819	89.16181
5	Boldipukur	Mithapukur	Rangpur	3	1	1	12	51	22-Nov-05	22	Line	25.37177	89.14768
6	Jaigirhat	Mithapukur	Rangpur	3	1	1	12	51	28-Nov-05	12	Line	25.37029	89.14692
7	Jaigirhat	Mithapukur	Rangpur	2	2	1	12	51	24-Jan-06	20	Line		
8		Mithapukur	Rangpur				12	51	4-Dec-05	25	Line	25.37554	89.14345
9	Sothibari	Mithapukur	Rangpur	2	2	1	12	51	29-Nov-05	30	Broadcast	25.31491	89.17661
10	Sothibari	Mithapukur	Rangpur	1	3	1	12	51	30-Nov-05	20	Line	25.32539	89.16078
11	Nankor Bazar	Mithapukur	Rangpur	2	2	1	12	51	11-Nov-05	7	Line	25.31002	89.21948
12	Boiratihat	Mithapukur	Rangpur	2	2	1	12	51	3-Dec-05	20	Broadcast	25.3003	89.21943
13	Mithapukur	Mithapukur	Rangpur	2	1	1	12	51	10-Dec-05	10	Broadcast	25.33732	89.20569
14	Sothibari	Mithapukur	Rangpur	2	2	1	12	51	3-Dec-05	7	Line	25.32449	89.16799
15	Sothibari	Mithapukur	Rangpur						3-Dec-05	13	Broadcast	25.32472	89.16645
16	Sothibari	Mithapukur	Rangpur	2	2	1	12	51	27-Nov-05	20	Broadcast	25.33854	89.14841
17		Mithapukur	Rangpur						27-Nov-05	20	Broadcast	25.34471	89.18915
18	Rahmatpur	Badarganj	Rangpur	2	2	1	12	51	25-Nov-05	25	Line	25.3986	89.01371
19	Rahmatpur	Badarganj	Rangpur						23-Nov-05	20	Broadcast	25.39865	89.01413
20	Rahmatpur	Badarganj	Rangpur	2	2	1	12	51	23-Nov-05	20	Line	25.40101	89.0168
21	Taxerhat	Badarganj	Rangpur	2	2	1	12	51	24-Nov-05	20	Broadcast	25.40892	89.00126
22	Badarganj	Badarganj	Rangpur	2	2	1	12	51	20-Nov-05	20	Line	25.40149	89.02315
23	Rahmatpur	Badarganj	Rangpur	2	2	1	12	51	21-Nov-05	20	Line	25.40892	89.00126
24	Rahmatpur	Badarganj	Rangpur	2	2	1	12	51	18-Nov-05	20	Line	25.40142	89.02195
25	Rahmatpur	Badarganj	Rangpur	2	2	1	12	51	20-Nov-05	20	Line	25.40142	89.01735
26	Rahmatpur	Badarganj	Rangpur						25-Nov-05	40	Broadcast	25.39868	89.0143
27	Shekherhat	Badarganj	Rangpur	2	2	1	12	51	22-Nov-05	22	Broadcast	25.43126	89.03855
28	Mominpur	Badarganj	Rangpur	2	2	1	12	51	27-Nov-05	20	Broadcast	25.44086	89.06945
29	Kazirhat	Badarganj	Rangpur	2	2	1	12	51	24-Nov-05	20	Line	25.40533	89.05005
30	Badarganj	Badarganj	Rangpur	2	2	1	12	51	27-Nov-05	25	Line	25.40093	89.04103
31	Kazirhat	Badarganj	Rangpur	2	2	1	12	51	25-Nov-05	20	Line	25.40624	89.05152
32	Kazirhat	Badarganj	Rangpur	2	2	1	12	51	3-Dec-05	20	Broadcast	25.41164	89.0456
33	Badarganj	Badarganj	Rangpur	2	2	1	12	51	23-Nov-05	30	Line	25.40044	89.03753
34	New Sahebganj	Rangpur Sadar	Rangpur	3	1	1	12	51	22-Nov-05	30	Line	25.46223	89.16685
35	Mahiganj	Rangpur Sadar	Rangpur	2	2	1	12	51	18-Nov-05	50	Line	25.44314	89.17123
36	Mahiganj	Rangpur Sadar	Rangpur	2	2	1	12	51	12-Jan-06	20	Line		
37	Mahiganj	Rangpur Sadar	Rangpur	2	2	1	12	51	28-Nov-05	23	Broadcast	25.44265	89.19072

Household number	Post Office	Upazila	District	# of participants		Materials distributed			Planting date	Area (dec) planted	Method of seeding	Plot Location	
				Male	Female	Manual	Seed (kg)	Fertilizer (kg)				Longitudes	Latitudes
1	9	10	11	12	13	14	15	16	17	18	19	20	21
38	Mahiganj	Rangpur Sadar	Rangpur	2	2	1	12	51	28-Nov-05	12	Line	25.44276	89.17401
39	Burirhat	Rangpur Sadar	Rangpur	1		1	12	51	23-Nov-05	20	Line	25.49168	89.14199
40	Mahiganj	Rangpur Sadar	Rangpur	2	2	1	12	51	5-Dec-05	18	Line	25.44028	89.17784
41		Rangpur Sadar	Rangpur						5-Dec-05	37	Broadcast	25.44426	89.17331
42	Azizullah	Rangpur Sadar	Rangpur	2	2	1	12	51	5-Dec-05	14	Broadcast	25.42441	89.17903
43	Cadet College	Rangpur Sadar	Rangpur	2		1	12	51	15-Nov-05	24	Broadcast	25.42936	89.16288
44	Azizullah	Rangpur Sadar	Rangpur	2	2	1	12	51	6-Dec-05	20	Broadcast	25.41299	89.17903
45	Azizullah	Rangpur Sadar	Rangpur	3	1	1	12	51	4-Dec-05	18	Line	25.41316	89.18011
46	Azizullah	Rangpur Sadar	Rangpur	2	2	1	12	51	12-Dec-05	20	Broadcast	25.41486	89.18418
47	Azizullah	Rangpur Sadar	Rangpur	2	2	1	12	51	10-Dec-05	22	Line	25.41405	89.18218
48	Azizullah	Rangpur Sadar	Rangpur	3		1	12	51	9-Dec-05	25	Broadcast	25.41943	89.1758
49	Azizullah	Rangpur Sadar	Rangpur						6-Jan-06	10	Broadcast	25.41528	89.1749
50	Cadet College More	Rangpur Sadar	Rangpur						11-Dec-05	18	Line	25.42705	89.15665
51	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	22-Nov-05	12	Bed planting	25.14205	89.08379
52	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	22-Nov-05	5	Bed planting	25.14198	89.08654
53	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	22-Nov-05	15	Bed planting	25.1418	89.0818
54	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	18-Nov-05	10	Bed planting	25.13753	89.08289
55	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	14-Nov-05	20	Bed planting	25.13775	89.08293
56	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	18-Nov-05	15	Bed planting	25.14217	89.08524
57	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51					
58	Norail	Pachbibi	Joypurhat	2	2	1	12	51	23-Nov-05	12	Bed planting	25.13101	89.06307
59	Ghorail	Pachbibi	Joypurhat	2	2	1	12	51	7-Dec-05	15	Bed planting	25.13545	89.06274
60	Ghorail	Pachbibi	Joypurhat	2	2	1	12	51	9-Dec-05	20	Bed planting	25.13637	89.0678
61	Ghorail	Pachbibi	Joypurhat	2	2	1	12	51	25-Dec-05	35	Broadcast	25.1389	89.06944
62	Ghorail	Pachbibi	Joypurhat	3	1	1	12	51	8-Dec-05	15	Broadcast	25.13587	89.06253
63	Ghorail	Pachbibi	Joypurhat	2	2	1	12	51	22-Nov-05	20	Bed planting	25.14772	89.08717
64	Ghorail	Pachbibi	Joypurhat	2	2	1	12	51	30-Dec-05	20	Bed planting	25.13801	89.06018
65		Pachbibi	Joypurhat						20-Dec-05	5	Bed planting	25.11339	89.06527
66		Pachbibi	Joypurhat						20-Dec-05	6	Bed planting	25.11253	89.0647
67	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	4-Dec-05	15	Bed planting	25.14018	89.08393
68	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	25-Nov-05	13	Broadcast	25.14215	89.08667
69	Bindhara	Pachbibi	Joypurhat	2	2	1	12	51	19-Nov-05	20	Bed planting	25.14306	89.08804
70	Pachbibi	Pachbibi	Joypurhat	2	2	1	12	51					
71	Pachbibi	Pachbibi	Joypurhat	2	2	1	12	51	24-Dec-05	20	Bed planting	25.1064	89.01344
72	Pachbibi	Pachbibi	Joypurhat	2	2	1	12	51	11-Nov-05	20	Line	25.11054	89.00614
73	Pachbibi	Pachbibi	Joypurhat				12	51	4-Dec-05	25	Line	25.11054	89.00614
74	Pachbibi	Pachbibi	Joypurhat	2	2	1	12	51	10-Dec-05	23	Broadcast	25.09777	89.01317
75	Pachbibi	Pachbibi	Joypurhat						4-Dec-05	18	Line	25.10248	89.01222
76		Pachbibi	Joypurhat						9-Dec-05	40	Broadcast	25.1094	89.03767
77		Pachbibi	Joypurhat						18-Dec-05	25	Line	25.10271	89.01498

Household number	Post Office	Upazila	District	# of participants		Materials distributed			Planting date	Area (dec) planted	Method of seeding	Plot Location	
				Male	Female	Manual	Seed (kg)	Fertilizer (kg)				Longitudes	Latitudes
1	9	10	11	12	13	14	15	16	17	18	19	20	21
78	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	18-Dec-05	20	Line		
79	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	25-Dec-05	20	Broadcast	25.1087	89.07461
80	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	8-Dec-05	20	Line & Broadcast	25.10869	89.07246
81	Shalaipur	Pachbibi	Joypurhat	3	1	1	12	51	28-Dec-06	20	Bed planting		
82	Shalaipur	Pachbibi	Joypurhat	3	1	1	12	51	5-Dec-05	20	Broadcast	25.11198	89.06844
83	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	9-Dec-05	20	Broadcast	25.11077	89.0657
84	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	25-Nov-05	20	Bed planting		
85		Pachbibi	Joypurhat						25-Nov-05	20	Bed planting	25.10958	89.06653
86	Baniapara	Joypurhat Sadar	Joypurhat	2	2	1	12	51	24-Nov-05	20	Line	25.05468	89.04886
87	Puronopoil	Joypurhat Sadar	Joypurhat	2	2	1	12	51	17-Nov-05	20	Line	25.09226	89.01805
88	Khanjanpur	Joypurhat Sadar	Joypurhat	2	2	1	12	51	24-Jan-06	20	Broadcast	25.06183	89.5976
89	Joypurhat	Joypurhat Sadar	Joypurhat	3		1	12	51	15-Jan-06	20	Broadcast	25.09929	89.0329
90	Belamola	Joypurhat Sadar	Joypurhat	2	2	1	12	51	25-Nov-05	20	Line	25.07521	89.01425
91	Janail	Joypurhat Sadar	Joypurhat	2	2	1	12	51	15-Jan-06	10	Line	25.05774	89.0275
92	Baniapara	Joypurhat Sadar	Joypurhat	4		1	12	51	29-Nov-05	25	Broadcast	25.08869	89.02568
93	a	Joypurhat Sadar	Joypurhat						1-Dec-05	20	Line	25.05958	89.02363
94		Joypurhat Sadar	Joypurhat						20-Nov-05	28	Broadcast	25.05413	89.04027
95	Dholahar	Joypurhat Sadar	Joypurhat	2	2	1	12	51	20-Dec-05	30	Broadcast	25.10651	88.57577
96	Chadpur	Joypurhat Sadar	Joypurhat	2	2	1	12	51	24-Nov-05	20	Line	25.095	88.57468
97	Dholahar	Joypurhat Sadar	Joypurhat	2	2	1	12	51	23-Nov-05	25	Bed planting	25.10353	88.51851
98	Dholahar	Joypurhat Sadar	Joypurhat	2	2	1	12	51	24-Dec-05	50	Broadcast	25.10102	88.57662
99	Dholahar	Joypurhat Sadar	Joypurhat	2	2	1	12	51	29-Nov-05	30	Line	25.1115	88.57784
100	Bhatkowta	Joypurhat Sadar	Joypurhat	2	2	1	12	51	23-Nov-05	20	Line	25.09505	88.57947
101	Chadpur	Joypurhat Sadar	Joypurhat	2	2	1	12	51	6-Jan-06	20	Line		
102	Melonda	Shahjadpur	Sirajganj	2	2	1	12	51	4-Dec-05	7	Broadcast	24.06633	89.33795
103	Melonda	Shahjadpur	Sirajganj						29-Nov-05	13	Line & Broadcast	24.06954	89.33802
104	Melonda	Shahjadpur	Sirajganj	2	2	1	12	51	25-Nov-05	20	Broadcast	24.07005	89.34087
105	Melonda	Shahjadpur	Sirajganj	2	1	1	12	51	4-Dec-05	16	Line	24.06903	89.33724
106	Melonda	Shahjadpur	Sirajganj	3	1	1	12	51	25-Nov-05	22	Broadcast	24.06932	89.33946
107	Melonda	Shahjadpur	Sirajganj	2	2	1	12	51	25-Nov-05	20	Broadcast	24.06926	89.34509
108	Melonda	Shahjadpur	Sirajganj	2	2	1	12	51	2-Dec-05	20	Broadcast	24.06645	89.33797
109	Melonda	Shahjadpur	Sirajganj	2	1	1	12	51	9-Dec-05	20	Broadcast	24.06916	89.34048
110		Shahjadpur	Sirajganj	2	2	1	12	51	18-Nov-05	18	Broadcast	24.08424	89.35151
111		Shahjadpur	Sirajganj	2	2	1	12	51	20-Nov-05	19	Broadcast	24.084	89.35142
112	Shahjadpur	Shahjadpur	Sirajganj	2	2	1	12	51	23-Nov-05	10	Line	24.0969	89.3511
113	Shahjadpur	Shahjadpur	Sirajganj	3	1	1	12	51	22-Nov-05	10	Line	24.09789	89.35077
114	Shahjadpur	Shahjadpur	Sirajganj	2	2	1	12	51	20-Nov-05	20	Line & Broadcast	24.09785	89.35173
115	Shahjadpur	Shahjadpur	Sirajganj	2	2	1	12	51	9-Dec-05	20	Line	24.09787	89.35206
116	Shahjadpur	Shahjadpur	Sirajganj	2	2	1	12	51	20-Nov-05	18	Line	24.09715	89.35118
117		Shahjadpur	Sirajganj	3	1	1	12	51	25-Nov-05	20	Broadcast		

Household number	Post Office	Upazila	District	# of participants		Materials distributed			Planting date	Area (dec) planted	Method of seeding	Plot Location	
				Male	Female	Manual	Seed (kg)	Fertilizer (kg)				Longitudes	Latitudes
1	9	10	11	12	13	14	15	16	17	18	19	20	21
78	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	18-Dec-05	20	Line		
79	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	25-Dec-05	20	Broadcast	25.1087	89.07461
80	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	8-Dec-05	20	Line & Broadcast	25.10869	89.07246
81	Shalaipur	Pachbibi	Joypurhat	3	1	1	12	51	28-Dec-06	20	Bed planting		
82	Shalaipur	Pachbibi	Joypurhat	3	1	1	12	51	5-Dec-05	20	Broadcast	25.11198	89.06844
83	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	9-Dec-05	20	Broadcast	25.11077	89.0657
84	Shalaipur	Pachbibi	Joypurhat	2	2	1	12	51	25-Nov-05	20	Bed planting		
85		Pachbibi	Joypurhat						25-Nov-05	20	Bed planting	25.10958	89.06653
86	Baniapara	Joypurhat Sadar	Joypurhat	2	2	1	12	51	24-Nov-05	20	Line	25.05468	89.04886
87	Puronopoil	Joypurhat Sadar	Joypurhat	2	2	1	12	51	17-Nov-05	20	Line	25.09226	89.01805
88	Khanjanpur	Joypurhat Sadar	Joypurhat	2	2	1	12	51	24-Jan-06	20	Broadcast	25.06183	89.5976
89	Joypurhat	Joypurhat Sadar	Joypurhat	3		1	12	51	15-Jan-06	20	Broadcast	25.09929	89.0329
90	Belamola	Joypurhat Sadar	Joypurhat	2	2	1	12	51	25-Nov-05	20	Line	25.07521	89.01425
91	Janail	Joypurhat Sadar	Joypurhat	2	2	1	12	51	15-Jan-06	10	Line	25.05774	89.0275
92	Baniapara	Joypurhat Sadar	Joypurhat	4		1	12	51	29-Nov-05	25	Broadcast	25.08869	89.02568
93a		Joypurhat Sadar	Joypurhat						1-Dec-05	20	Line	25.05958	89.02363
94		Joypurhat Sadar	Joypurhat						20-Nov-05	28	Broadcast	25.05413	89.04027
95	Dholahar	Joypurhat Sadar	Joypurhat	2	2	1	12	51	20-Dec-05	30	Broadcast	25.10651	88.57577
96	Chadpur	Joypurhat Sadar	Joypurhat	2	2	1	12	51	24-Nov-05	20	Line	25.095	88.57468
97	Dholahar	Joypurhat Sadar	Joypurhat	2	2	1	12	51	23-Nov-05	25	Bed planting	25.10353	88.51851
98	Dholahar	Joypurhat Sadar	Joypurhat	2	2	1	12	51	24-Dec-05	50	Broadcast	25.10102	88.57662
99	Dholahar	Joypurhat Sadar	Joypurhat	2	2	1	12	51	29-Nov-05	30	Line	25.1115	88.57784
100	Bhatkowta	Joypurhat Sadar	Joypurhat	2	2	1	12	51	23-Nov-05	20	Line	25.09505	88.57947
101	Chadpur	Joypurhat Sadar	Joypurhat	2	2	1	12	51	6-Jan-06	20	Line		
102	Melonda	Shahjadpur	Sirajganj	2	2	1	12	51	4-Dec-05	7	Broadcast	24.06633	89.33795
103	Melonda	Shahjadpur	Sirajganj						29-Nov-05	13	Line & Broadcast	24.06954	89.33802
104	Melonda	Shahjadpur	Sirajganj	2	2	1	12	51	25-Nov-05	20	Broadcast	24.07005	89.34087
105	Melonda	Shahjadpur	Sirajganj	2	1	1	12	51	4-Dec-05	16	Line	24.06903	89.33724
106	Melonda	Shahjadpur	Sirajganj	3	1	1	12	51	25-Nov-05	22	Broadcast	24.06932	89.33946
107	Melonda	Shahjadpur	Sirajganj	2	2	1	12	51	25-Nov-05	20	Broadcast	24.06926	89.34509
108	Melonda	Shahjadpur	Sirajganj	2	2	1	12	51	2-Dec-05	20	Broadcast	24.06645	89.33797
109	Melonda	Shahjadpur	Sirajganj	2	1	1	12	51	9-Dec-05	20	Broadcast	24.06916	89.34048
110		Shahjadpur	Sirajganj	2	2	1	12	51	18-Nov-05	18	Broadcast	24.08424	89.35151
111		Shahjadpur	Sirajganj	2	2	1	12	51	20-Nov-05	19	Broadcast	24.084	89.35142
112	Shahjadpur	Shahjadpur	Sirajganj	2	2	1	12	51	23-Nov-05	10	Line	24.0969	89.3511
113	Shahjadpur	Shahjadpur	Sirajganj	3	1	1	12	51	22-Nov-05	10	Line	24.09789	89.35077
114	Shahjadpur	Shahjadpur	Sirajganj	2	2	1	12	51	20-Nov-05	20	Line & Broadcast	24.09785	89.35173
115	Shahjadpur	Shahjadpur	Sirajganj	2	2	1	12	51	9-Dec-05	20	Line	24.09787	89.35206
116	Shahjadpur	Shahjadpur	Sirajganj	2	2	1	12	51	20-Nov-05	18	Line	24.09715	89.35118
117		Shahjadpur	Sirajganj	3	1	1	12	51	25-Nov-05	20	Broadcast		

Household number	Post Office	Upazila	District	# of participants		Materials distributed			Planting date	Area (dec) planted	Method of seeding	Plot Location	
				Male	Female	Manual	Seed (kg)	Fertilizer (kg)				Longitudes	Latitudes
1	9	10	11	12	13	14	15	16	17	18	19	20	21
158	Ekdanta	Atghoria	Pabna	2	2	1	12	51	10-Dec-05	20	Line	24.03557	89.18723
159	Ekdanta	Atghoria	Pabna	2	2	1	12	51	6-Dec-05	22	Line	24.0357	89.18745
160	Dawria	Ishurdi	Pabna	3		1	12	51	30-Nov-05	20	Line	24.06109	89.08594
161	Dawria	Ishurdi	Pabna	2	2	1	12	51	30-Nov-05	20	Line	24.08173	89.07046
162	Dawria	Ishurdi	Pabna	3	1	1	12	51	30-Dec-05	17	Line	24.09368	89.05646
163	Dawria	Ishurdi	Pabna	3	1	1	12	51	5-Dec-05	20	Line	24.07425	89.07598
164	Muladuli	Ishurdi	Pabna	2	2	1	12	51	30-Dec-05	26	Line	24.09559	89.08914
165	Lokinura	Ishurdi	Pabna	2		1	12	51	22-Nov-05	33	Broadcast	24.02824	89.03883
166	Dawria	Ishurdi	Pabna	3	1	1	12	51	4-Dec-05	20	Line	24.07753	89.08079
167	Ishurdi	Ishurdi	Pabna	3	1	1	12	51	11-Nov-05	20	Line	24.07813	89.0466
168	Dhanbaria	Ishurdi	Pabna	2	2	1	12	51	3-Dec-05	18	Line	24.09149	89.01703
169	Ishurdi	Ishurdi	Pabna	2	2	1	12	51	30-Nov-05	20	Line	24.08858	89.02281
170	Ishurdi	Ishurdi	Pabna	2	2	1	12	51	22-Nov-05	22	Line	24.08075	89.04861
171	Pakshi	Ishurdi	Pabna	2	2	1	12	51	21-Nov-05	15	Line	24.06406	89.03226
172	Ishurdi	Ishurdi	Pabna	1	3	1	12	51	11-Nov-05	18	Line	24.08368	89.02823
173	Ishurdi	Ishurdi	Pabna	2	2	1	12	51	7-Dec-05	20	Line	24.0714	89.0194
174	Goyeshpur	Pabna Sadar	Pabna	2	2	1	12	51	27-Nov-05	20	Line	24.02472	89.17779
175	Goyeshpur	Pabna Sadar	Pabna	2	2	1	12	51	24-Nov-05	18	Line	24.03266	89.17301
176	Goyeshpur	Pabna Sadar	Pabna	2	2	1	12	51	10-Dec-05	20	Line	24.03188	89.1792
177	Goyeshpur	Pabna Sadar	Pabna	2	2	1	12	51	29-Nov-05	20	Line & Broadcast	24.02688	89.1799
178	Goyeshpur	Pabna Sadar	Pabna	2	2	1	12	51	24-Nov-05	20	Line	24.03104	89.18521
179	Goyeshpur	Pabna Sadar	Pabna	2	2	1	12	51	11-Nov-05	20	Line	24.03082	89.17447
180	Pabna Cadet College	Pabna Sadar	Pabna	2	2	1	12	51	16-Dec-05	20	Broadcast	24.01726	89.17702
181	Pabna	Pabna Sadar	Pabna	2	2	1	12	51	10-Dec-05	40	Broadcast	23.59915	89.11798
182	Pabna	Pabna Sadar	Pabna	3	1	1	12	51	27-Dec-05	20	Broadcast	24.00514	89.13342
183	Pabna	Pabna Sadar	Pabna	2	2	1	12	51	30-Nov-05	25	Broadcast	24.00138	89.13005
184	Pabna	Pabna Sadar	Pabna	2	2	1	12	51	3-Dec-05	20	Line	24.00804	89.13306
185	Pabna	Pabna Sadar	Pabna	2	2	1	12	51	12-Dec-05	12	Line	24.00855	89.13327
186	Pabna	Pabna Sadar	Pabna	2	2	1	12	51	12-Dec-05	25	Line	24.00027	89.13098
187	Pabna	Pabna Sadar	Pabna	2	2	1	12	51	4-Dec-05	20	Line	23.59434	89.13071

Annexure 2: List of the farm families, inputs distribution, fodder-feed-food maize planted

HH no.	Session no.	Training venue	Name of trainer	Organization of trainer	Name of household head	Father of household head
1	2	3	4	5	6	7
1	1	Jaigirhat	Md. Chowdhuri	DLS	Md. Motiobur Rahman	Late Moulovi Elahi Box Mondal
2	1	Jaigirhat	Md. Chowdhuri	DLS	Md. Mamun	Md. Mosharraf Hossain
3	1	Jaigirhat	Md. Chowdhuri	DLS	Md. Rawshan Ali	Late Akkas Ali Mondal
4	1	Jaigirhat	Md. Chowdhuri	DLS	Md. Abdur Rahman	Abdul Gaffar
5	1	Jaigirhat	Md. Chowdhuri	DLS	Abdur Rouf	Abdur Gaffar
6	1	Jaigirhat	Md. Chowdhuri	DLS	Md. Bulbul	Md. Nurul Islam
7	1	Jaigirhat	Md. Chowdhuri	DLS	Md. Nur Shahin	Nur Hossain
8	1	Jaigirhat	Md. Chowdhuri	DLS	Mohammad Ali Jinnah	
9	2	Boirati College	Md. Motaleb Mia	DLS	Md. Sajedur Rahman	Abdul Keyum
10	2	Boirati College	Md. Motaleb Mia	DLS	Md. Manik Mia	Late Rais Uddin
11	2	Boirati College	Md. Motaleb Mia	DLS	Binod Chandra Mohanto	Godadhor Mondol
12	2	Boirati College	Md. Motaleb Mia	DLS	Shah Alam	Abdul Hadi
13	2	Boirati College	Md. Motaleb Mia	DLS	Shahadad Hossain	Late Somser Uddin
14	2	Boirati College	Md. Motaleb Mia	DLS	Topon K. Sarker	Jetendra Nath Sarker
15	2	Boirati College	Md. Motaleb Mia	DLS	Poresh	Aradon Ch. Saha
16	2	Boirati College	Md. Motaleb Mia	DLS	Alamgir Hossain	Late Joydul Haque
17	3	Ramnathpur UP complex	Md. Mominur Islam	Milk Vita	Al Mahmud Hossain	Late Mahfil Uddin Pramanik
18	3	Ramnathpur UP complex	Md. Mominur Islam	Milk Vita	Md. Zamal Uddin	Md. Monir Uddin
19	3	Ramnathpur UP complex	Md. Mominur Islam	Milk Vita	Md. Robiur Islam	Tofazzel Hossain
20	3	Ramnathpur UP complex	Md. Mominur Islam	Milk Vita	Delwar Hossain	Late Nasimuddin
21	3	Ramnathpur UP complex	Md. Mominur Islam	Milk Vita	Jahangir Alam	Late Mannan Shah
22	3	Ramnathpur UP complex	Md. Mominur Islam	Milk Vita	Md. Omar Ali	Late Nazir Mamud
23	3	Ramnathpur UP complex	Md. Mominur Islam	Milk Vita	Md. Nur Alam	Md. Answar Ali
24	3	Ramnathpur UP complex	Md. Mominur Islam	Milk Vita	Md. Tazuddin	Late Mokbul
25	4	Modhupur Ali Amin School	Md. Abdur Rahman	DLS	Md. Morshed Ali	Md. Yeakub Ali
26	4	Modhupur Ali Amin School	Md. Abdur Rahman	DLS	Md. Liakot Ali	Yeakub Ali
27	4	Modhupur Ali Amin School	Md. Abdur Rahman	DLS	Md. Razu Mia	Late Kafiluddin
28	4	Modhupur Ali Amin School	Md. Abdur Rahman	DLS	Belal Hossain	Nurul Ali
29	4	Modhupur Ali Amin School	Md. Abdur Rahman	DLS	Md. Mozammel Haque	Late Kalu Pramanik
30	4	Modhupur Ali Amin School	Md. Abdur Rahman	DLS	Md. Mohsin Ali	Md. Mobarak Hossain
31	4	Modhupur Ali Amin School	Md. Abdur Rahman	DLS	Monsor Ali	Akash Ali
32	4	Modhupur Ali Amin School	Md. Abdur Rahman	DLS	Khoda Baksh	Late Sohiruddin
33	5	Mahiganj Satmatha	Md. Shahidul Islam	DLS	Alhaj Md. Fazlul Haque	Late Samiruddin
34	5	Mahiganj Satmatha	Md. Shahidul Islam	DLS	Dr. Md. Mahfuzur Rahman	Late Hafizur Rahman
35	5	Mahiganj Satmatha	Md. Shahidul Islam	DLS	Md. Wazed Ali	Abdus Sattar
36	5	Mahiganj Satmatha	Md. Shahidul Islam	DLS	Md. Zahirul Haque	Shirajuddin

HH no.	Session no.	Training venue	Name of trainer	Organizatio n of trainer	Name of household head	Father of household head
37	5	Mahiganj Satmatha	Md. Shahidul Islam	DLS	Md. Jalal Mia	Late Nawab Ali
38	5	Mahiganj Satmatha	Md. Shahidul Islam	DLS	Md. Anisar	Md. Abdur Rahman
39	5	Mahiganj Satmatha	Md. Shahidul Islam	DLS	Md. Tazul Islam	Akarat Ali
40	5	Mahiganj Satmatha	Md. Shahidul Islam	DLS	Md. Mohammed Ali	Md. Ansar Ali
41	6	Roghubazar	Md. Ziaul Karim	DLS	Md. Abdul Rashid	Mohammad Ali Sarker
42	6	Roghubazar	Md. Ziaul Karim	DLS	Md. Abdul Latif	Md. Abbas Ali
43	6	Roghubazar	Md. Ziaul Karim	DLS	Md. Motiar Rahman	Late Yeasin Ali
44	6	Roghubazar	Md. Ziaul Karim	DLS	Md. Fazlul Haque	Late Abul Hossain
45	6	Roghubazar	Md. Ziaul Karim	DLS	Md. Osman Goni	Late Monsur Ali
46	6	Roghubazar	Md. Ziaul Karim	DLS	Md. Abdul Razzaque	Late Abdul Rahim
47	6	Roghubazar	Md. Ziaul Karim	DLS	Badsha Miah	Late Yeakub Ali
48	6	Roghubazar	Md. Ziaul Karim	DLS	Ferdous Alam (Mukul)	Late Siddik Hossain
49	7	Motraz Unnayan Club	Md. Alim	BRAC	Sochin Kumar	Horilal Chandra
50	7	Motraz Unnayan Club	Md. Alim	BRAC	Feroz Hossain	Amzad Hossain
51	7	Motraz Unnayan Club	Md. Alim	BRAC	Siddiqur Rahman	Hossain Ali
52	7	Motraz Unnayan Club	Md. Alim	BRAC	Amzad Hossain	Mansur Ali
53	7	Motraz Unnayan Club	Md. Alim	BRAC	Nur Hossain Tutul	Alhaj Nur Mohan
54	7	Motraz Unnayan Club	Md. Alim	BRAC	Sr. Shovaram	Late Horidash
55	7	Motraz Unnayan Club	Md. Alim	BRAC	Md. Moklesur Rahman (Wahe	Esar Uddin
56	7	Motraz Unnayan Club	Md. Alim	BRAC	Zoibor Ali	Basiruddin
57	8	Sorali Adil	Abdur Rouf	DLS	Md. Jomrud Hasan	Late Altab Hossain
58	8	Sorali Adil	Abdur Rouf	DLS	Md. Helal	Roichuddin
59	8	Sorali Adil	Abdur Rouf	DLS	Md. Anamul Haque	Late Joynul Haque
60	8	Sorali Adil	Abdur Rouf	DLS	Ali Hossain	Late Ainul Haque
61	8	Sorali Adil	Abdur Rouf	DLS	Md. Samsuddin	Md. Sayed Ali
62	8	Sorali Adil	Abdur Rouf	DLS	Md. Zakaria Hossain	Kamaluddin Mondal
63	8	Sorali Adil	Abdur Rouf	DLS	Md. Daraz Uddin	Late Shafitullah
64	8	Sorali Adil	Abdur Rouf	DLS	Shireen Akter	Abdul Hakim
65	9	Pachbibi BRAC Office	H. M. Alim Hossain	BRAC	Shakawat Hossain	Keyser Rahman
66	9	Pachbibi BRAC Office	H. M. Alim Hossain	BRAC	Ruzaul Karim	Alhaj Omar Ali Mondal
67	9	Pachbibi BRAC Office	H. M. Alim Hossain	BRAC	Sr. Badesh Hasda	Gonesh Hasda
68	9	Pachbibi BRAC Office	H. M. Alim Hossain	BRAC	Mizanur Rahman	Afsar Ali Mondal
69	9	Pachbibi BRAC Office	H. M. Alim Hossain	BRAC	Zahangir Alam	Azibor Rahman Sarder
70	9	Pachbibi BRAC Office	H. M. Alim Hossain	BRAC	Mr. Kenedi	Yusuf Ali
71	9	Pachbibi BRAC Office	H. M. Alim Hossain	BRAC	Md. Razu Ahmed	Md. Alauddin
72	9	Pachbibi BRAC Office	H. M. Alim Hossain	BRAC	Sr. Monil Soren	Sr. Ramu Soren
73	10	Shalaipur	Afazuddin	DLS	Sr. Palash Chandra	Late Alul Chandra

HH no.	Session no.	Training venue	Name of trainer	Organization of trainer	Name of household head	Father of household head
74	10	Shalaipur	Md. Abdul Rouf Sarker	DLS	Md. Belal Hossain	Late Abdus Satter
75	10	Shalaipur	Md. Abdul Rouf Sarker	DLS	Sr. Nripen Chandra Nath	Khitish Chandra
76	10	Shalaipur	Md. Abdul Rouf Sarker	DLS	Md. Lokman Hossain	Late Shukur Ali
77	10	Shalaipur	Afazuddin	DLS	Abu Soyed Sanowar	Late Tairuddin
78	10	Shalaipur	Md. Abdul Rouf Sarker	DLS	Nirmal Chandra Mondal	Late Norendra Nath Mondal
79	10	Shalaipur	Md. Abdul Rouf Sarker	DLS	Md. Mozammel	Late Tomizuddin
80	10	Shalaipur		DLS	Alhaj Toslimuddin	Late Baheruddin
81	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Md. Fazlur Rahman	Late Mayezuddin
82	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Md. Ruhul Amin Sarkar	Md. Abdul Motaleb Sarker
83	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Md. Rabbi	Abdul Kuddus Mondal
84	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Delwar Hossain Bablu	Late Poran Uddin Ahmed
85	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Ms. Lutfun Bewa	Late Bachhu Mia Mondal
86	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Md. Nazrul Islam	Late Milton Mondal
87	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Afsar Ali	Late Hazrot Ali
88	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Md. Rezaul Karim	Late A. Quddus
89	11	JU parishad Auditorium	Md. Akteruzzaman	DLS	Abu Erfan Ujjal	Late A. Hamid
90	12	Bhatkowta Primary School	Md. Zahidul Kamal	DLS	Harun Ur Rashid	Naya Mia Mondal
91	12	Bhatkowta Primary School	Md. Zahidul Kamal	DLS	Md. Khaza Golam Mawla	Md. Khaza Golam Mostafa
92	12	Bhatkowta Primary School	Md. Zahidul Kamal	DLS	Nasiruddin	Late Shahiruddin
93	12	Bhatkowta Primary School	Md. Zahidul Kamal	DLS	Dewan Zahangir	Toffezzel Hossain
94	12	Bhatkowta Primary School	Md. Zahidul Kamal	DLS	Md. Rustam Ali	Md. Mofizuddin
95	12	Bhatkowta Primary School	Md. Zahidul Kamal	DLS	Md. Masudur Rahman	Md. Habibur Rahman
96	12	Bhatkowta Primary School	Md. Zahidul Kamal	DLS	Md. Haider Ali	Haresuddin
97	13	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	Md. Abdullah Al Mamun	Late Joynal Abedin Munshi
98	13	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	Md. Jalal Uddin Pramanik	Late Kashem Pramanik
99	13	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	Md. Kiamuddin Sarker	Late Abdur Rahman Sarker
100	13	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	Md. Afzal Hossain	Md. Mozibor Pramanik
101	13	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	Md. Altab Hossain	Md. Sokir Uddin Munshi
102	13	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	Md. Azmat Ali	Late Inu Fakir
103	13	Khamar Shanila Samity Office	Md. Alauddin	Milk Vita	Md. Abu Ayub	Md. Wahed Ali Pramanik
104	14	Mudla	Md. Amir Hossain	Milk Vita	Md. Aminul Hossain	Late Haji Mozibor Master
105	14	Mudla	Md. Amir Hossain	Milk Vita	Md. Fazlu Khan	Late Hazi Samsul Alam
106	14	Mudla	Md. Amir Hossain	Milk Vita	Md. Alimuddin Fakir	Haji Abdul Kashem
107	14	Mudla	Md. Amir Hossain	Milk Vita	Md. Mokter Sarder	Md. Mohez Sarder
108	14	Mudla	Md. Amir Hossain	Milk Vita	Md. Tipu Sultan	
109	14	Mudla	Md. Amir Hossain	Milk Vita	Md. Baktear Sarder	Md. Harun Rashid
110	15	Nukali Pra S. Office	Md. Jahangir Alam	Milk Vita	Md. Zahirul Islam	Md. Nakir Uddin

HH no.	Session no.	Training venue	Name of trainer	Organization of trainer	Name of household head	Father of household head
111	15	Nukali Pra S. Office	Md. Jahangir Alam	Milk Vita	Md. Amod Ali	Md. A. Wahab
112	15	Nukali Pra S. Office	Md. Jahangir Alam	Milk Vita	Md. Rafiqul Islam	Late Haji A. Rahman Khan
113	15	Nukali Pra S. Office	Md. Jahangir Alam	Milk Vita	Md. Abdul Alim	Late Osin Sarker
114	15	Nukali Pra S. Office	Md. Jahangir Alam	Milk Vita	Md. Abu Sama	Late Jabbar
115	15	Nukali Pra S. Office	Md. Jahangir Alam	Milk Vita	Md. Abdul Wahab Pramanik	Late Kaser Ali
116	15	Nukali Pra S. Office	Md. Jahangir Alam	Milk Vita	Md. Sirajul Islam	Haji Md. Korban Ali
117	16	Patgari Pra Ma Office	Md. Mukul Hossain	Milk Vita	Md. Jakir Hossain	Alhaj Md. Riazuddin Fakir
118	16	Patgari Pra Ma Office	Md. Mukul Hossain	Milk Vita	Md. Mizanur Rahman (Sowpo	Md. Mohsin Molla
119	16	Patgari Pra Ma Office	Md. Mukul Hossain	Milk Vita	Md. Abdul Razzaque Molla	Late Intaz Molla
120	16	Patgari Pra Ma Office	Md. Mukul Hossain	Milk Vita	Md. Abdus Salam	Md. Azizul
121	16	Patgari Pra Ma Office	Md. Mukul Hossain	Milk Vita	Hozrot Ali	Late Gofur Sarder
122	16	Patgari Pra Ma Office	Md. Mukul Hossain	Milk Vita	Md. Answar Ali	Md. Shuklal Sarder
123	16	Patgari Pra Ma Office	Md. Mukul Hossain	Milk Vita	Ishaque	Azizul Khan
124	17	Selonda Pra S Office	Md. Aminul Islam	Milk Vita	Alhaj Akbar Ali Sarder	Late Abdul Karim
125	17	Selonda Pra S Office	Md. Aminul Islam	Milk Vita	Md. Shawkat Hossain	Md. Hanif Sarder
126	17	Selonda Pra S Office	Md. Aminul Islam	Milk Vita	Md. Abul Kalam Azad	Late Manik Sarder
127	17	Selonda Pra S Office	Md. Aminul Islam	Milk Vita	Md. Abdus Sabur	Late Osman Goni
128	17	Selonda Pra S Office	Md. Aminul Islam	Milk Vita	Md. Altab Hossain	Md. Kobak Sarder
129	17	Selonda Pra S Office	Md. Aminul Islam	Milk Vita	Md. Answar Ali Sarder	Late Mati Sarder
130	17	Selonda Pra S Office	Md. Aminul Islam	Milk Vita	Md. Nazimuddin	Late Leraz Sarder
131	18	Boro Narinda Pra S Office	Md. Marufur Rahman	Milk Vita	Md. Anwar Hossain	Late Monser Pramanik
132	18	Boro Narinda Pra S Office	Md. Marufur Rahman	Milk Vita	Md. Yunus Ali	Late Hasim Sarder
133	18	Boro Narinda Pra S Office	Md. Marufur Rahman	Milk Vita	Md. Abul Kalam Mondal	Late Abdur Rahman Mondal
134	18	Boro Narinda Pra S Office	Md. Marufur Rahman	Milk Vita	Md. Atwar Molla	Late Taizal Molla
135	18	Boro Narinda Pra S Office	Md. Marufur Rahman	Milk Vita	Md. Iqbal Hossain	Md. Akram Hossain
136	18	Boro Narinda Pra S Office	Md. Marufur Rahman	Milk Vita	Md. Saidul Islam	Late Alhaj Abu Taher Pramanik
137	18	Boro Narinda Pra S Office	Md. Marufur Rahman	Milk Vita	Md. Azizur Rahman	Late Bholauddin Sarker
138	18	Boro Narinda Pra S Office	Md. Marufur Rahman	Milk Vita	Md. Barek Hossain	Md. Korob Ali
139	19	Upazila Livestock Office	Md. Nawshar Ali	DLS	Md. Abdul Latif	Md. Harun Ur Rashid Sun
140	19	Upazila Livestock Office	Md. Nawshar Ali	DLS	Md. Abdul Wahab	Late Abu Taher Ali
141	19	Upazila Livestock Office	Md. Nawshar Ali	DLS	Md. Motahar Hossain	Md. Mozibur Rahman
142	19	Upazila Livestock Office	Md. Nawshar Ali	DLS	Md. Fakrul Islam	Late Yeasmin Ali Khan
143	19	Upazila Livestock Office	Md. Nawshar Ali	DLS	Md. Atiar Rahman	Md. Mozibor Rahman
144	19	Upazila Livestock Office	Md. Nawshar Ali	DLS	Ms. Farida Begum	Late Sobhan Ali
145	19	Upazila Livestock Office	Md. Nawshar Ali	DLS	Md. Kutubuddin	Md. Goni Joarder
146	20	Gopalpur Primary School	Md. Asaduzzaman	DLS	Md. Azizur Rahman	Late Abdus Satter
147	20	Gopalpur Primary School	Md. Asaduzzaman	DLS	Md. Riaz Molla	Md. Imam Molla

HH no.	Session no.	Training venue	Name of trainer	Organization of trainer	Name of household head	Father of household head
148	20	Gopalpur Primary School	Md. Asaduzzaman	DLS	Md. Motin Sarder	Late Foyez Sarder
149	20	Gopalpur Primary School	Md. Asaduzzaman	DLS	Md. Habibur Mondal	Md. Montin Mondal
150	20	Gopalpur Primary School	Md. Asaduzzaman	DLS	Md. Shahidul Islam	Late Solaiman Biswas
151	20	Gopalpur Primary School	Md. Asaduzzaman	DLS	Md. Abdus Sobhan Molla	Late Foyezuddin Molla
152	20	Gopalpur Primary School	Md. Asaduzzaman	DLS	Md. Baki Billah	Late Taizuddin Molla
153	21	Ishurdi Upazila Agricultural Nursery	Md. Sharifuddin	DLS	Md. Amzad Dewan	Md. Amser Dewan
154	21	Ishurdi Upazila Agricultural Nursery	Md. Sharifuddin	DLS	Md. Abdul Jabbar	Late Samsuddin
155	21	Ishurdi Upazila Agricultural Nursery	Md. Sharifuddin	DLS	Md. Ashraful	Late Jaminuddin
156	21	Ishurdi Upazila Agricultural Nursery	Md. Sharifuddin	DLS	Md. Mizanur Rahman	Alhaj Rawshan Ali Khan
157	21	Ishurdi Upazila Agricultural Nursery	Md. Sharifuddin	DLS	Saidul Islam	Late Riazuddin Sarker
158	21	Ishurdi Upazila Agricultural Nursery	Md. Sharifuddin	DLS	Md. Amirul Islam	Late Sabiruddin Pramanik
159	21	Ishurdi Upazila Agricultural Nursery	Md. Sharifuddin	DLS	Md. Abdul Bashar Siddik	Alhaj Alimuddin
160	22	Ishurdi Upazila Agricultural Nursery	Md. Motiar Rahman	DLS	Md. Sohrabuddin	Late Toziruddin Pramanik
161	22	Ishurdi Upazila Agricultural Nursery	Md. Motiar Rahman	DLS	Md. Sanwar Hossain	Naharuddin
162	22	Ishurdi Upazila Agricultural Nursery	Md. Motiar Rahman	DLS	Md. Mamunur Rashid	Joynal Abedin
163	22	Ishurdi Upazila Agricultural Nursery	Md. Motiar Rahman	DLS	Md. Ismail Hossain	Late Samsuddin Pramanik
164	22	Ishurdi Upazila Agricultural Nursery	Md. Motiar Rahman	DLS	Md. Ataul Haque	Late Waser Ali
165	22	Ishurdi Upazila Agricultural Nursery	Md. Motiar Rahman	DLS	Md. Abdul Mannan	Late Moyen Uddin Pramanik
166	22	Ishurdi Upazila Agricultural Nursery	Md. Motiar Rahman	DLS	Md. Motiur Rahman	Taheruddin
167	23	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	Md. Fazlul Haque	Late Zafar Ali Seikh
168	23	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	Md. Idris Ali	Late Bosharat Ali
169	23	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	Md. Lokman Hossain	Late Zobed Ali Mollah
170	23	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	Md. Shahidullah Miah	Late Goyher Ali Pramanik
171	23	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	Md. Ziaunnobi	Dr. Shafiunnobi
172	23	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	Md. Motiar Rahman	Late Md. Rahmat Ullah Seikh
173	23	Goyeshpur Union Parishad	Md. Fazlul Haque	DLS	Nasiruddin	Late Borkotullah Khan
174	24	Pabna DLS Office	Mozammel Hossain	DLS	Md. Akaluttala	Md. Khalilur Rahman
175	24	Pabna DLS Office	Mozammel Hossain	DLS	Abdul Awal	Late Haji Abu Taher
176	24	Pabna DLS Office	Mozammel Hossain	DLS	Md. Waziuddin	Late Abdul Jabbar
177	24	Pabna DLS Office	Mozammel Hossain	DLS	Md. Salim Reza	Late Haji Rajab Ali
178	24	Pabna DLS Office	Mozammel Hossain	DLS	Md. Ronju	Late Haji Rajab Ali
179	24	Pabna DLS Office	Mozammel Hossain	DLS	Abdul Goni Babu	Late Izahan Ali Khan
180	24	Pabna DLS Office	Mozammel Hossain	DLS	Md. Millon	Md. Uklil Pramanik

HH no.	Village	Post Office	Upazila	District	Date of training	No. of male participants	No. of female participants	No. of manual distributed	Seed (kg)	Fertilizer (kg)
1	8	9	10	11	12	13	14	15	16	17
1	Batogon Durgapur	Jaigirhat	Mithapukur	Rangpur	18-Apr-06	1	2	1	2	61.5
2	Batogon Durgapur	Jaigirhat	Mithapukur	Rangpur	18-Apr-06	2	2	1	2	61.5
3	Batogon Durgapur	Jaigirhat	Mithapukur	Rangpur	18-Apr-06	3	0	1	2	61.5
4	Kafrikhal	Kafrikhal	Mithapukur	Rangpur	18-Apr-06	2	0	1	2	61.5
5	Kafrikhal	Kafrikhal	Mithapukur	Rangpur	18-Apr-06	2	2	1	2	61.5
6	Betason Durgapur	Jaigirhat	Mithapukur	Rangpur	18-Apr-06	2	0	1	2	61.5
7	Nichintapur	Jaigirhat	Mithapukur	Rangpur	18-Apr-06	2	2	1	2	61.5
8	Monolong Hat		Mithapukur	Rangpur	18-Apr-06	2	0	1	2	61.5
9	Seru Danga	Seru Danga	Mithapukur	Rangpur	18-Apr-06	2	2	1	4	61.5
10	Sothibari Horipur	Sothibari	Mithapukur	Rangpur	18-Apr-06	1	3	1	2	61.5
11	Putimari	Nankor Bazar	Mithapukur	Rangpur	18-Apr-06	1	3	1	2	61.5
12	Bojruk Nurpur	Deulpur	Mithapukur	Rangpur	18-Apr-06	2	2	1	2	61.5
13	B. Da. Para/Serudanga	Mithapukur	Mithapukur	Rangpur	18-Apr-06	2	1	1	2	61.5
14	Sothibari Sarkerpara	Sothibari	Mithapukur	Rangpur	18-Apr-06	2	2	1	2	61.5
15	Muradpur	Sothibari	Mithapukur	Rangpur	18-Apr-06	2	2	1	2	61.5
16	Rotia	Boiratihat	Mithapukur	Rangpur	18-Apr-06	1	1	1	2	61.5
17	Ramkrishnapur	Rahmatpur	Badarganj	Rangpur	17-Apr-06	1		1	4	61.5
18	Mirapara	Badarganj	Badarganj	Rangpur	17-Apr-06	3	1	1	4	61.5
19	Dokhin Moksedpur	Rahmatpur	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
20	Dokhin Moksedpur	Rahmatpur	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
21	Badarganj	Badarganj	Badarganj	Rangpur	17-Apr-06	1		1	4	61.5
22	Mirapara	Rahmatpur	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
23	Mirapara	Rahmatpur	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
24	Bazarpara	Bishimpur	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
25	Shekherhat	Shekherhat	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
26	Baniapara	Mominpur	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
27	Uttar Bawchand	Kazirhat	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
28	Munshipara	Badarganj	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
29	Uttar Bawchand	Kazirhat	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
30	Masterpara	Kazirhat	Badarganj	Rangpur	17-Apr-06	4		1	4	61.5
31	Kutipara	Boshirhat	Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
32	Votemaripara		Badarganj	Rangpur	17-Apr-06	2	2	1	4	61.5
33	Baharkasna	New Sahebgar	Rangpur Sadar	Rangpur	16-Apr-06	4		1	4	61.5
34	Khashbag	Mahiganj	Rangpur Sadar	Rangpur	16-Apr-06	2	2	1	4	61.5
35	Nasnia	Mahiganj	Rangpur Sadar	Rangpur	16-Apr-06	2	1	1	4	61.5
36	Purba Kashbari	Mahiganj	Rangpur Sadar	Rangpur	16-Apr-06	2	2	1	4	61.5

HH no.	Village	Post Office	Upazila	District	Date of training	No. of male participants	No. of female participants	No. of manual distributed	Seed (kg)	Fertilizer (kg)
37	Birbhadra	Mahiganj	Rangpur Sadar	Rangpur	16-Apr-06	2	2	1	4	61.5
38	Poschim Kashbari	Mahigonj	Rangpur Sadar	Rangpur	16-Apr-06	2	.	1	4	61.5
39	Shatmatha	Mahiganj	Rangpur Sadar	Rangpur	16-Apr-06	1	.	1	4	61.5
40	Bakatari		Rangpur Sadar	Rangpur	16-Apr-06	1	.	1	4	61.5
41	Ashratpur Biniapara	Cadet College	Rangpur Sadar	Rangpur	16-Apr-06	2	.	1	4	61.5
42	Razu Kha	Azizullah	Rangpur Sadar	Rangpur	16-Apr-06	2	.	1	4	61.5
43	Razu Kha	Azizullah	Rangpur Sadar	Rangpur	16-Apr-06	2	1	1	4	61.5
44	Dakkhin Bokchi	Azizullah	Rangpur Sadar	Rangpur	16-Apr-06	2	2	1	4	61.5
45	Dakkhin Bokchi	Azizullah	Rangpur Sadar	Rangpur	16-Apr-06	2	2	1	4	61.5
46	Azizullah	Azizullah	Rangpur Sadar	Rangpur	16-Apr-06	2	1	1	4	61.5
47	Telipara	Azizullah	Rangpur Sadar	Rangpur	16-Apr-06	2	.	1	4	61.5
48	Ashratpur	Cadet College	Rangpur Sadar	Rangpur	16-Apr-06	2	2	1	4	61.5
49	Pachgachi	Bindhara	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
50	Pachgachi	Bindhara	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
51	Sonapar	Bindhara	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
52	Pachgachi	Bindhara	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
53	Pachgachi	Bindhara	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
54	Pachgachi	Bindhara	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
55	Pachgachi	Bindhara	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
56	Pachgachi	Bindhara	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
57	Berakhali	Norail	Pachbibi	Joypurhat	10-Apr-06	1	2	1	4	61.5
58	Pachbibi	Pachbibi	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
59	Modipur	Birnagar	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
60	Mohipur	Birnagar	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
61	Mohammadpur	Ghorail	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
62	Horenda	Kusumbag	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
63	Nandail	Ghorail	Pachbibi	Joypurhat	10-Apr-06	2	0	1	4	61.5
64	Gopalpur	Pachbibi	Pachbibi	Joypurhat	10-Apr-06	2	2	1	4	61.5
65	Arji Patapoka	Pachbibi	Pachbibi	Joypurhat	9-Apr-06	2	2	1	4	61.5
66	Pachgachi	Pachbibi	Pachbibi	Joypurhat	9-Apr-06	2	2	1	4	61.5
67	Pachgachi	Pachbibi	Pachbibi	Joypurhat	9-Apr-06	2	2	1	4	61.5
68	Pachgachi	Pachbibi	Pachbibi	Joypurhat	9-Apr-06	2	2	1	4	61.5
69	Sita	Pachbibi	Pachbibi	Joypurhat	9-Apr-06	3	2	1	4	61.5
70	Maloncha	Pachbibi	Pachbibi	Joypurhat	9-Apr-06	2	2	1	4	61.5
71	Khash Baguri	Pachbibi	Pachbibi	Joypurhat	9-Apr-06	2	2	1	4	61.5
72	Sita	Pachbibi	Pachbibi	Joypurhat	9-Apr-06	2	2	1	4	61.5
73	Ronihari	Shalaipur	Pachbibi	Joypurhat	8-Apr-06	2	2	1	4	61.5

HH no.	Village	Post Office	Upazila	District	Date of training	No. of male participants	No. of female participants	No. of manual distributed	Seed (kg)	Fertilizer (kg)
74	Derkhonda	Birnagar	Pachbibi	Joypurhat	8-Apr-06	2	2	1	4	61.5
75	Birnagar	Birnagar	Pachbibi	Joypurhat	8-Apr-06	2	1	1	4	61.5
76	Runihari	Shalaipur	Pachbibi	Joypurhat	8-Apr-06	2	2	1	4	61.5
77	Runihari	Shalaipur	Pachbibi	Joypurhat	8-Apr-06	1	1	1	4	61.5
78	Runihari	Shalaipur	Pachbibi	Joypurhat	8-Apr-06	2	2	1	4	61.5
79	Kuwarpur	Shalaipur	Pachbibi	Joypurhat	8-Apr-06	2	2	1	4	61.5
80	Dev Konda	Birnagar	Pachbibi	Joypurhat	8-Apr-06	2	.	1	4	61.5
81	Pachur Chack	Baniapara	Joypurhat Sadar	Joypurhat	9-Apr-06	1	2	1	4	61.5
82	Parbatta	Puronopoil	Joypurhat Sadar	Joypurhat	9-Apr-06	2	.	1	4	61.5
83	Khanjanpur	Khanjanpur	Joypurhat Sadar	Joypurhat	9-Apr-06	2	1	1	4	61.5
84	Aramnagar	Joypurhat	Joypurhat Sadar	Joypurhat	9-Apr-06	2	1	1	4	61.5
85	Paschim Payalia	Belamola	Joypurhat Sadar	Joypurhat	9-Apr-06	1	2	1	4	61.5
86	Bamon Kanda	Janail	Joypurhat Sadar	Joypurhat	9-Apr-06	2	2	1	4	61.5
87	Paschim Parulia	Baniapara	Joypurhat Sadar	Joypurhat	9-Apr-06	2	2	1	4	61.5
88	Nishir More		Joypurhat Sadar	Joypurhat	9-Apr-06	2	2	1	4	61.5
89	Porana poil		Joypurhat Sadar	Joypurhat	9-Apr-06	2	1	1	4	61.5
90	Dholahar	Dholahar	Joypurhat Sadar	Joypurhat	8-Apr-06	1	2	1	4	61.5
91	Chadpur	Chadpur	Joypurhat Sadar	Joypurhat	8-Apr-06	2	1	1	4	61.5
92	Madhinagar	Dholahar	Joypurhat Sadar	Joypurhat	8-Apr-06	2	2	1	4	61.5
93	Ram Nagar	Dholahar	Joypurhat Sadar	Joypurhat	8-Apr-06	2	1	1	4	61.5
94	Uttar Shekhpur	Dholahar	Joypurhat Sadar	Joypurhat	8-Apr-06	2	2	1	4	61.5
95	Modhupur	Bhatkowta	Joypurhat Sadar	Joypurhat	8-Apr-06	2	1	1	4	61.5
96	Atthowka	Chadpur	Joypurhat Sadar	Joypurhat	8-Apr-06	2	2	1	4	61.5
97	Khamar Shanila	Melonda	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
98	Khamar Shanila	Melonda	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
99	Khamar Shanila	Melonda	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
100	Khamar Shanila	Melonda	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
101	Khamar Shanila	Melonda	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
102	Khamar Shanila	Melonda	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
103	Chhoto Binnadair	Melonda	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
104	Nokoli		Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
105	Nokoli		Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
106	Madla	Shahjadpur	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
107	Madla	Shahjadpur	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
108	Madla	Shahjadpur	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
109	Madla	Shahjadpur	Shahjadpur	Sirajganj	4-Apr-06	2	2	1	4	61.5
110	Nokoli		Shahjadpur	Sirajganj	2-Apr-06	2	2	1	4	61.5

HH no.	Village	Post Office	Upazila	District	Date of training	No. of male participants	No. of female participants	No. of manual distributed	Seed (kg)	Fertilizer (kg)
111	Nokoli		Shahjadpur	Sirajganj	2-Apr-06	2	2	1	4	61.5
112			Shahjadpur	Sirajganj	2-Apr-06	2	2	1	4	61.5
113	Nokoli		Shahjadpur	Sirajganj	2-Apr-06	2	2	1	4	61.5
114	Nokoli		Shahjadpur	Sirajganj	2-Apr-06	2	2	1	4	61.5
115	Nokoli		Shahjadpur	Sirajganj	2-Apr-06	2	2	1	4	61.5
116	Nokoli		Shahjadpur	Sirajganj	2-Apr-06	2	2	1	4	61.5
117	Patgari	Bera Sonatola	Sathia	Pabna	2-Apr-06	2	2	1	4	61.5
118	Patgari	Bera Sonatola	Sathia	Pabna	2-Apr-06	2	2	1	4	61.5
119	Patgari	Bera Sonatola	Sathia	Pabna	2-Apr-06	2	2	1	4	61.5
120	Patgari	Bera Sonatola	Sathia	Pabna	2-Apr-06	2	2	1	4	61.5
121	Patgari	Bera Sonatola	Sathia	Pabna	2-Apr-06	2	2	1	4	61.5
122	Patgari	Bera Sonatola	Sathia	Pabna	2-Apr-06	2	2	1	4	61.5
123	Patgari	Bera Sonatola	Sathia	Pabna	2-Apr-06	2	2	1	4	61.5
124	Selonda	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
125	Selonda	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
126	Selonda	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
127	Selonda	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
128	Selonda	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
129	Selonda	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
130	Selonda	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
131	Khidirgram	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
132	Atia Para	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
133	Khidirgram	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
134	Khidirgram	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
135	Khidirgram	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
136	Khidirgram	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
137	Khidirgram	Melonda	Sathia	Pabna	3-Apr-06	2	1	1	4	61.5
138	Khidirgram	Melonda	Sathia	Pabna	3-Apr-06	2	2	1	4	61.5
139	Srikantapur	Debuttar	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
140	Srikantapur	Debuttar	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
141	Srikantapur	Debuttar	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
142	Srikantapur	Debuttar	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
143	Radhakantapur	Debuttar	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
144	Natadaha	Debuttar	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
145	Hapania	Beruwan	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
146	Gopalpur	Ekdanta	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
147	Chak Gopalpur	Ekdanta	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5

HH no.	Village	Post Office	Upazila	District	Date of training	No. of male participants	No. of female participants	No. of manual distributed	Seed (kg)	Fertilizer (kg)
148	Chak Gopalpur	Ekdanta	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
149	Chawkibari	Ekdanta	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
150	Chawkibari	Ekdanta	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
151	Gopalpur	Ekdanta	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
152	Gopalpur	Ekdanta	Atghoria	Pabna	4-Apr-06	2	2	1	4	61.5
153	Dawria	Dawria	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
154	Bash Hasna	Dawria	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
155	Arkandi	Dawria	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
156	Dawria	Dawria	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
157	Monshidpur	Dasuria	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
158	Barampur	Lokinura	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
159	Dawria Bazar	Dawria	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
160	Mowripara	Ishurdi	Ishurdi	Pabna	6-Apr-06	1	.	1	4	61.5
161	Gopalpur	Dhanbaria	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
162	Airport	Ishurdi	Ishurdi	Pabna	6-Apr-06	2	1	1	4	61.5
163	Naricha	Ishurdi	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
164	Baghail Uttar para	Pakshi	Ishurdi	Pabna	6-Apr-06	2	2	1	4	61.5
165	Gokulnagar	Ishurdi	Ishurdi	Pabna	6-Apr-06	1	.	1	4	61.5
166	Baghail Kolpara	Ishurdi	Ishurdi	Pabna	6-Apr-06	1	2	1	4	61.5
167	Goyeshpur	Goyeshpur	Pabna Sadar	Pabna	4-Apr-06	2	2	1	4	61.5
168	Rahimpur	Goyeshpur	Pabna Sadar	Pabna	4-Apr-06	2	2	1	4	61.5
169	Commillee	Goyeshpur	Pabna Sadar	Pabna	4-Apr-06	2	2	1	4	61.5
170	Goyeshpur	Goyeshpur	Pabna Sadar	Pabna	4-Apr-06	2	2	1	4	61.5
171	Commillee	Goyeshpur	Pabna Sadar	Pabna	4-Apr-06	2	2	1	4	61.5
172	Rahimpur	Goyeshpur	Pabna Sadar	Pabna	4-Apr-06	2	2	1	4	61.5
173	Rahimpur	Goyeshpur	Pabna Sadar	Pabna	4-Apr-06	2	2	1	4	61.5
174	Nazirpur	Pabna	Pabna Sadar	Pabna	5-Apr-06	2	2	1	4	61.5
175	Charabot tol	Pabna	Pabna Sadar	Pabna	5-Apr-06	2	2	1	4	61.5
176	Satiani	Pabna	Pabna Sadar	Pabna	5-Apr-06	2	2	1	4	61.5
177	Patkiabari	Pabna	Pabna Sadar	Pabna	5-Apr-06	2	2	1	4	61.5
178	Patkiabari	Pabna	Pabna Sadar	Pabna	5-Apr-06	2	2	1	4	61.5
179	Akha	Pabna	Pabna Sadar	Pabna	5-Apr-06	2	2	1	4	61.5
180	Nazirpur	Pabna	Pabna Sadar	Pabna	5-Apr-06	2	2	1	4	61.5

Bangladesh Livestock Research Institute
Savar, Dhaka-1341.

Base line information on feed resources availability and dairy cattle production in some selected areas of Bangladesh.

1. Name of the household (HH) head: ..... Father/Husband Name: ----------
..... Village: ..... Upazilla ..... Dist: .....

2. Educational/qualification of the farmers (put √ mark)

Illiterate	Signature only	<Class 5	<SSC	<HSC	<Degree

3. Name of households member

	Male	Female	Total
Adult – earn income			
Adult – not earn income			
Children (up to 16 years)			

4. Land holdings:

Owned Land	Decimal
Homestead	
Cultivated	
Pond	
Other	
Total	
Leased land	
Fixed rent/(contract)	
Share crop in (Borga)	
Mortage in (bonkor newer)	
Less rent/s-crop/mortage out	
Net leased	
Total cultivated land	

5. Land ownership within household

Decimal	Male	Female	Joint
Owned by			
Leased/Mortages in by			

6. Livestock related information

a. Livestock populations

Type	Number	
	Local	Crossbred
Dry cows		
Milk cow		
Buffalo cow		
Sheep and goats		
Ox		
Bullock		
Yearling bull (1-2 Yrs)		
Heifer (1-2 yrs.)		
Female calf		
Chicken		
Ducks		

b. Information on milk production and feed supply lactation

Types/breed	No	Daily milk production	Lactation period	Daily feed supply (kg)		
				Straw	Grasses	Concentrate
Local cow						
Crossbred						
Others						

7. Economics of Dairying

a. Year of establishment of dairy farming .....
b. Source of Financing: ..... Loan .....
c. Changes in dairy farming for last five years.

Character	2001	2002	2003	2004	2005
Total number of cattle					
Number of dairy animal					
Total milk production (litre/day)					
Price of milk (Tk./litre)					

D. Have you received any incentive from the Government: Yes ..... No .....

If yes, ... Year .....

8. Information on milk marketing

a. Own consumption and sale

Types	Amount (litre/month)	Price (Tk./litre)
Neighbours		
Nearest market		
Bepari		
Sweet shop		
Hotel/Restaurant		
Own consumption		
Others		
Total		

Mustard oil cake					
Til oil cake					
Khasari bran					
Pulse bran					
Gram					
Feed additives					
Others					

c. Do you cultivate fodder? Yes/No.
If yes, then how many decimal of land you cultivate : ..... decimal

d. What type of fodder you cultivate? Napier/German/Jower/Matikalai/Khasari/others.
e. Seasonal availability of green grass? Summer/Raining/Winter/Round the year.
f. Scarcity of fodder in which season? Summer/Raining/Winter/Round the year.
g. Water sources fed to the cattle? Small ditch/Pond/Wheel/Tube-well
h. Fodder utilization: (Put √ mark)

☐ Cattle feeds ☐ For sale ☐ Other

i. Preservation of grasses/Green forages:

j. Do you preserve the grasses : Yes/No. If yes, How many ton/yr. .....

10. Improved packages and Technologies:

a. Do you have any training on modern Animal Husbandry Practices? Yes/No
If yes, from where you got trained .....

b. Do you use the following technologies/packages

Name of technology/package	First time got information	Mentioned the year when you have used first	How long you are using this technology	Using at present (Y/N)	Future use (Y/N)
Urea molasses straw					
Straw preservation at wet season					
Urea molasses block					
Mixed cropping Maize+cowpea					
Algae					
Preservation technique of green forage					
Beef fattening					
Others					

11. Wastes disposal
a. Amount of animal waste

Number of Animal	Prodn. of cow dung (kg/day)	Residual feeds (kg/day)

b. Do you have any chilling plant in your locality: Yes/No

If yes, How far from your farm: .....

c. Do you prepare any milk products: Yes .... No .....
If yes ..... Mention type: Butter/Ghee/Sweet/Dohi

d. In which season demand of milk is more?
Summer/winter/Rainy/Round the year

f. Do you face any problem in marketing of milk?
Yes / No
If yes ..... Mention the causes: .....

8. Management of Dairy cows
   a. Management of dairy cows. Range system/stall feeding/mixed system (Range/stall feeding)
   b. Breeding of dairy cows. Natural/A.I.
   c. Type of shed. Ton/Brick/Straw/Stover
   d. Do you have any disposal pit . Yes/No
   e. Who do the following activities:

Types of work	Male (% of work)	Female (% of work)
Collection cow dung and cleaning		
Cleaning of shed		
Cutting of straw/grasses		
Feeding and watering		
Milking of dairy cows		
Selling of milk		

9. Information on feeds and feeding

a. Information on types of roughages supplied to the cattle:

Type of feed	Own	Season	Buy	
	Amount (kg)		Amount (kg/year)	Price/kg
Rice straw				
Wheat straw				
Green grass				
Dry grass (hay)				

b. Type of concentrate feed available/buy

Feed	Own production (kg/year.)	Buy			
		Source	Season	Amount (kg/month)	Price/kg
Rice bran					
Wheat bran					
Wheat crushed					
Maize					
Broken Rice					
Molasses					

b. Usages of Animal wastes

Types of wastes	No uses	Sale	Own land	Bio-gase prodn.	Usages as fuel
Cow dung as such					
Urine					
Cow dung + urine					
Feed residual					

c. What is the price of cow dung? (Tk/ton) .....
d. Yearly how many tons of cow dung you sale .....
e. How many tons you use in your own .....

12. Information animal diseases:

a. How many animals were died in different diseases during last year?

Type	Anthrax	HS	BQ	FMD	Diarrhea	Tympanitis	Dystokia	Malnutrition
Milch cows								
Dry cows								
Pregnant cows								
Heifer								
Calf								

b. Do you use vaccine regularly for animals : Yes/No
If yes, which vaccine? FMD/ Anthrax/ HS/BQ/Others

c. Sources of vaccine use. Govt. vet. hospital/ NGO/ Private dispensary.
d. Availability of vaccine at the time of need. Yes/No
e. Do you use anthelmentics to your cattle . Yes/No.
f. In which season diseases are more prevailing . Summer/ Winter/ Rainy/----------
g. Which animals are more susceptible diseases. Local/ Crossbred.

13. Problems of fodder cultivation and others (If any)

Date ..... Signature of field investigator

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